INITIAL STUDY/
MITIGATED NEGATIVE DECLARATION

CASA DE VILLA APARTMENT COMPLEX PROJECT

SELMA,CALIFORNIA

LSA

January 2024

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MITIGATED NEGATIVE DECLARATION

CASA DE VILLA APARTMENT COMPLEX PROJECT

SELMA, CALIFORNIA

Submitted to:

City of Selma
1710 Tucker Street
Selma, California 93662

Prepared by:

LSA
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Project No. CVN2201

LSA

January 2024

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LIST OF ABBREVIATIONS AND ACRONYMS

µg/m^3	micrograms per cubic meter
AAQS	ambient air quality standards
AB	Assembly Bill
ADA	Americans with Disabilities
AFY	acre-feet per year
BMPs	best management practices
CAA	Clean Air Act
CAL FIRE	California Department of Forestry and Fire Protection
Cal Water	California Water Service Company
CalEPA	California Environmental Protection Agency
CALGreen	California Green Building Standards Code
California Register	California Register of Historical Resources
Caltrans	California Department of Transportation
CARB	California Air Resources Board
CASQA	California Stormwater Quality Association
CCR	California Code of Regulations
CDFW	California Department of Fish and Wildlife
CEC	California Energy Commission
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
CH_4	methane
City	City of Selma
CNDDB	California Natural Diversity Database
CNEL	Community Noise Equivalent Level
CNPS	California Native Plant Society
CO	carbon monoxide
CO_2	carbon dioxide
CO_2e	carbon dioxide equivalent
COG Guidelines	Fresno County SB 743 Implementation Regional Guidelines

County	County of Fresno
CRPR	California Rare Plant Ranks
dB	decibels
dBA	A-weighted decibels
DOC	California Department of Conservation
DPM	diesel exhaust particulate matter
DTSC	California Department of Toxic Substances Control
EIR	Environmental Impact Report
EO	Executive Order
EPA	United States Environmental Protection Agency
EVC	electric vehicle charging
FEMA	Federal Emergency Management Agency
FHWA	Federal Highway Administration
FMMP	Farmland Mapping and Monitoring Program
Fresno COG	Fresno Council of Governments
FTA	Federal Transit Administration
GAMAQI	Guidance for Assessing and Mitigating Air Quality Impacts
GHG	greenhouse gas
GPCD	gallons per capita per day
GSA	Central Kings Groundwater Sustainability Agency
GWP	global warming potential
HCP	Habitat Conservation Plan
in/sec	inches per second
IPaC	Information for Planning and Conservation
IS/MND	Initial Study/Mitigated Negative Declaration
ITE	Institute of Transportation Engineers
L_{dn}	day-night average noise level
L_{eq}	equivalent continuous sound level
L_{max}	maximum instantaneous noise level
LOS	level of service
LRA	Local Responsibility Area

MBTA	Migratory Bird Treaty Act
MG	million gallons
MS4	Municipal Separate Storm Sewer Systems
N_2O	nitrous oxide
NAHC	Native American Heritage Commission
NCCP	Natural Communities Conservation Plan
NO_2	nitrogen dioxide
NO_X	nitrous oxides
NPDES	National Pollutant Discharge Elimination System
O_3	ozone
OPR	Office of Planning and Research
OSHA	Occupational Safety and Health Administration
Pb	lead
PG&E	Pacific Gas and Electric Co.
PM_{10}	particulate matter less than 10 microns in size
$PM_{2.5}$	particulate matter less than 2.5 microns in size
ppb	parts per billion
PPV	peak particle velocity
PRC	Public Resources Code
Project	Casa De Villa Apartment Complex Project
RMS	root-mean-square
ROGs	reactive organic gases
RPA	Registered Professional Archaeologist
RTP/SCS	Regional Transportation Plan/Sustainable Communities Strategy
RWQCB	Regional Water Quality Control Board
SB	Senate Bill
SFD	Selma Fire Department
SGMA	Sustainable Groundwater Management Act
SJVAB	Joaquin Valley Air Basin
SJVAPCD	San Joaquin Valley Air Pollution Control District
SKF CSD	Selma-Kingsburg-Fowler County Sanitation District

SLF	Sacred Lands File
SO_2	sulfur dioxide
SPAL	Small Project Analysis Level
SPD	Selma Police Department
SR-180	State Route 180
SR-43	State Route 43
SSJVIC	Southern San Joaquin Valley Information Center
SUSD	Selma Unified School District
SWPPP	Stormwater Pollution Prevention Plan
SWRCB	State Water Resources Control Board
TACs	toxic air contaminants
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey
UWMP	Urban Water Management Plan
VdB	vibration velocity decibels
VHFHSZ	very high fire hazard severity zone
VMT	vehicle miles traveled
ZE	zero emission

1.0 PROJECT INFORMATION

1. Project Title

Casa De Villa Apartment Complex Project (project)

2. Lead Agency Name and Address

City of Selma
1710 Tucker Street
Selma, CA 93662

3. Contact Person and Phone Number

Trevor Stearns, City Planner
(559) 891-2209

4. Project Location

Southwest Corner of Nebraska Avenue and Thompson Avenue
Assessor Parcel Number 390-030-71

5. Project Sponsor's Name and Address

Nick Sahota
Central Valley Engineering & Surveying, Inc.
2511 Logan Street
Selma, CA 93662

6. General Plan Designation

Medium Low Density (MLD) Residential

7. Zoning

One-Family Zone (R-1-7)

8. Description of Project

The proposed project would consist of the removal of existing residential and associated outbuilding structures from the 3.29-acre site, and the construction of 40 multifamily residential units and a future construction of 3,000-square-foot commercial development. The project would require a rezoning of the project site from a One-Family Zone (R-1-7) to a Multiple-Family Zone (R-3) and a Central Commercial Zone (C-2), as well as a General Plan Amendment from Medium Low Density Residential to High Density Residential and Community Commercial. The project would require approval of a General Plan Amendment, a Zone Change, and a Site Plan Review.

Project Site. The 3.29-acre project site is located at the southwest corner of Nebraska Avenue and Thompson Avenue in Selma, California as shown on Figure 1-1. The project site is primarily vacant, with the exception of an existing residential unit and associated outbuildings on the eastern portion of the site. The project site is surrounded by Nebraska Avenue and a City of Selma dog park to the north, single-family residential uses to the south, residential and commercial uses to the east, and residential uses to the west. Figure 1-2 shows the project site and surrounding land uses.

Project Characteristics. The proposed project would include two phases. Phase 1 would consist of the construction of five, two-story multifamily residential buildings totaling approximately 28,155 square feet. The proposed residential buildings would include 40 multifamily units that would each be two-bedroom, two-bathroom units. Additionally, Phase 1 would include the following improvements: a total of 83 parking spaces, including 35 uncovered parking spaces, 44 covered parking spaces, two Americans with Disabilities Act (ADA) compliant parking spaces and 3 electric vehicle charging (EVC) parking spaces; four bicycle parking spaces; open space and common areas with picnic and play facilities; approximately 36,516 square feet of landscaped areas; and the construction of trash enclosures designed pursuant to City of Selma (City) standards.

Phase 2 of the proposed project would include the future construction of a 3,000-square-foot commercial development on the northeast corner of the project site, as well as associated parking, landscaping, trash enclosures, and vehicle and pedestrian infrastructure. The commercial uses would include medical/dental offices, general offices, or a laundromat. Figure 1-3 shows the site plan of the proposed project.

The proposed project would comply with the latest California Green Building Standards Code (CALGreen) building measures and Title 24, California Code of Regulations standards.

Access and Circulation. Access to the residential portion of the project site would be provided by one 25-foot-wide gated ingress and egress driveway along the western portion of the project's frontage with Nebraska Avenue, and access to the commercial development on site would be provided by two 25-foot-wide ingress and egress driveways along the eastern portion of the project's frontage with Nebraska Avenue. Vehicle circulation within the project site would occur through a network of 25-foot-wide internal driveways. Pedestrian circulation would occur through a proposed 10-foot-wide pedestrian sidewalk and pedestrian access pathways along the project frontage with Nebraska Avenue as well as through internal pathways and walkways on the project site.

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FIGURE 1-1

0 600 1200
FEET

SOURCE: ESRI StreetMap, 2023

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Casa De Villa Apartment Complex Project

Regional and Local Context

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LEGEND

Project Site

FIGURE 1-2

N

0 125 250

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SOURCE: Google Earth 2023

Casa De Villa Apartment Complex Project

Project Site and Surrounding Land Uses

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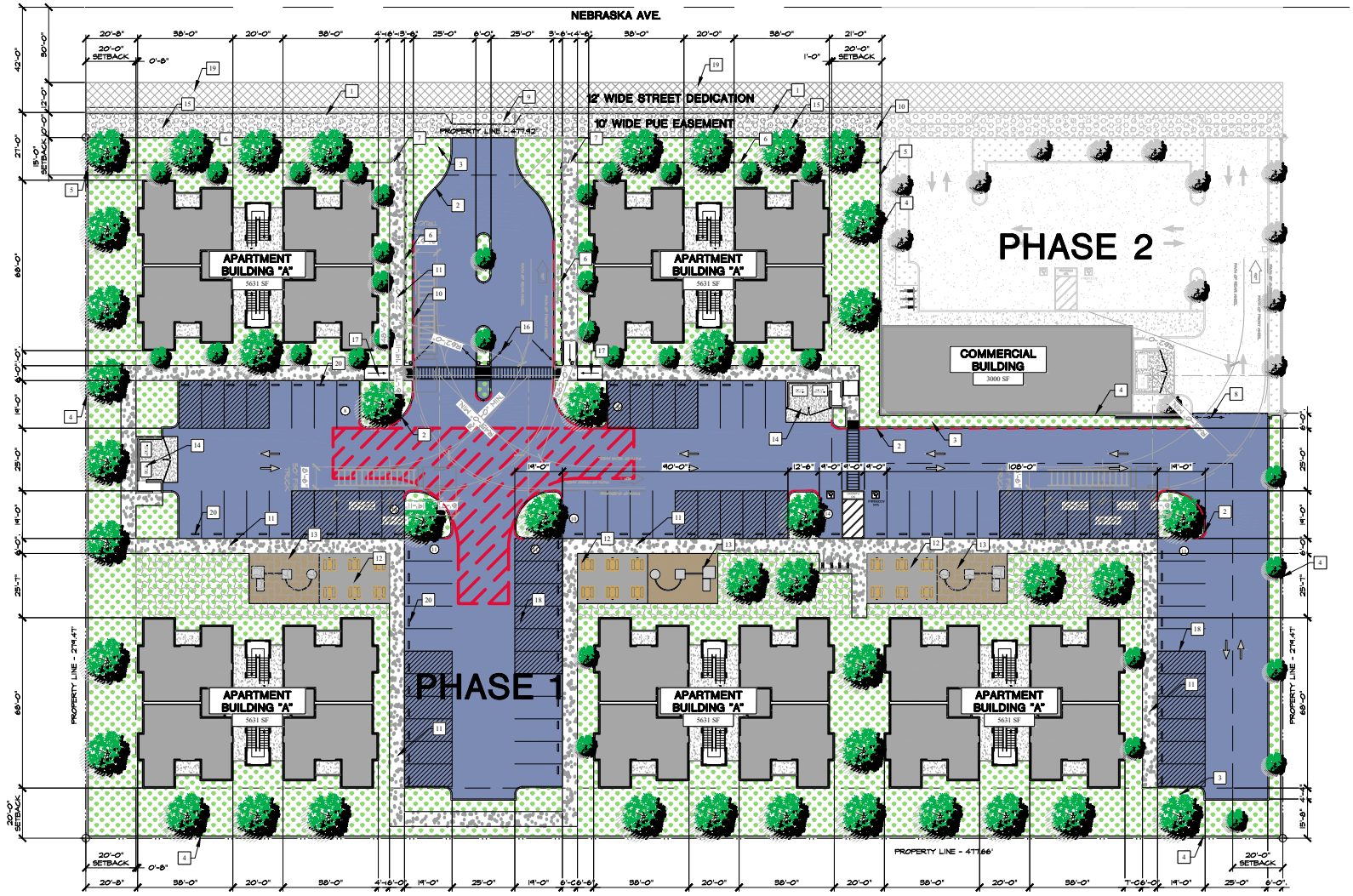

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FIGURE 1-3

0 40 80

FEET

SOURCE: CVEAS

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Casa De Villa Apartment Complex Project

Site Plan

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The proposed commercial and residential uses on the project site would be separated by a 6-foot-high block wall to be constructed per City standards around the western and southern boundaries of the commercial development. However, a gated emergency access driveway would be constructed in the southern boundary of the commercial development to provide access to emergency vehicles entering the site through the commercial development's driveways. Additionally, the 6-foot-high block wall would also be installed along the western, southern, and eastern boundaries of the project site, a 6-foot-high wrought iron fence with 6-foot-high wrought iron sliding gates would be installed along pedestrian entrances, and a swinging wrought iron gate would be installed along the vehicular access driveway along the residential development's frontage with Nebraska Avenue.

Utilities and Infrastructure. Water supply for the proposed project would be provided by the Selma District of California Water Service (Cal Water). The proposed project would connect to existing service infrastructure along Nebraska Avenue.

Wastewater sewage services for the proposed project would be provided by the Selma-Kingsburg-Fowler County Sanitation District (SKF CSD) by connecting to the existing service infrastructure along Nebraska Avenue.

The City would provide stormwater management services to the project site. The proposed project would include the construction of a new curb and gutter along the residential development's frontage to Nebraska Avenue to match the existing curb and gutter along the commercial development's frontage to Nebraska Avenue. Stormwater from the project site would be collected through surface and subsurface drainage infrastructure on site towards proposed and existing stormwater collection and drainage infrastructure along Nebraska Avenue.

Access for emergency response services including fire, police, and medical would be provided through the three proposed driveways along Nebraska Avenue. The gated access driveway on the western portion of the project site would include an emergency key vault (i.e., Knox Box) to facilitate access to the project site by emergency response vehicles. Additionally, a dedicated emergency access way would be located on the southern boundary of the proposed commercial development to allow access to emergency vehicles accessing the project site through the two proposed driveways on the eastern portion of the site. A fire sprinkler and fire alarm system would be installed on proposed buildings on site. Dedicated fire lanes and turnarounds with an appropriate centerline turning radius would also be provided pursuant to requirements of the Selma Fire Department (SFD).

Solid waste collection for the project would be managed by Waste Management, which maintains all solid waste collection in Selma.

Electricity and natural gas services for the project would be supplied by Pacific Gas and Electric (PG&E) through connections to existing service lines.

Project Construction. Construction of the proposed project is anticipated to occur in two phases occurring over a total 36-month period starting June 2024 and ending June 2027. Phase 1 would include the construction of the residential uses and would occur for 24 months. The future Phase 2 would include the construction of the commercial uses and would occur for 12 months. The proposed project would include the demolition of the existing residential unit and associated out buildings, which would generate approximately two tons of demolition waste. In addition, the proposed project would include not require any soil import/export.

9. Surrounding Land Uses and Setting

The 3.29-acre project site is located in Selma, on the southwest corner of Nebraska Avenue and Thompson Avenue. The project site is surrounded by a City of Selma dog park to the north, residential uses to the south, residential and commercial uses to the east, and residential uses to the west.

10. Other Public Agencies Whose Approval is Required (e.g., permits, financial approval, or participation agreements)

- City of Selma – Rezoning and General Plan Amendment
- San Joaquin Valley Air Pollution Control District (SJVAPCD)
- State Water Resources Control Board (SWRCB) National Pollutant Discharge Elimination System (NPDES) General Permit (with requisite Storm Water Pollution Prevention Plan, Conceptual Storm Water Pollution Prevention Plan, and Permanent Control Measures)
- Cal Water – water service connection
- SKF CSD – wastewater sewage service connection

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

In compliance with Assembly Bill (AB) 52 and Senate Bill (SB) 18, on April 13, 2023, the City sent letters regarding the proposed project to Native American tribes traditionally and culturally affiliated with the project area based on a list of contacts provided by the Native American Heritage Commission (NAHC). None of the contacted tribes requested consultation within the 90-day consultation period beginning April 13, 2023 and ending July 12, 2023. As such, AB 52 and SB 18 requirements for the proposed project have been fulfilled.

2.0 ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist in Chapter 3.0.

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

2.1 DETERMINATION

On the basis of this initial evaluation:

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

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

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

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

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

Signature _____ Date _____

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3.0 CEQA ENVIRONMENTAL CHECKLIST

3.1 AESTHETICS

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

3.1.1 Impact Analysis

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

Less Than Significant Impact. A scenic vista is generally defined as a public vantage point with an expansive view of a significant landscape feature. In Selma, views of open space, agricultural land, and distant views of the Sierra Nevada Mountains are considered scenic. The project site is located in a developed area of the city, bounded by Nebraska Avenue and a City of Selma dog park to the north, residential uses to the south, residential and commercial uses to the east, and residential uses to the west. The project site is primarily vacant, with the exception of an existing residential unit and associated outbuildings on the eastern portion of the site. The project does not contain or is located in the vicinity of potentially scenic vistas. Additionally, there are no significant trees, rock outcroppings, and/or historic buildings located on the project site that have been identified as important scenic resources. Further, the proposed residential and commercial uses of the project site would be similar in size and scale to similar uses in the project vicinity, including existing residential uses west of the site and existing commercial uses east of the site. As such, the proposed project would not introduce oversized elements that could obstruct distant views of the Sierra Nevada Mountains and foothills. Therefore, the proposed project would not have a substantial effect on scenic vistas in the vicinity of the project site, and the impact would be less than significant.

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

No Impact. According to the California Department of Transportation (Caltrans) mapping of State Scenic Highways[1], there are no State-designated or eligible for designation scenic highways in or near Selma. The nearest designated State Scenic Highway is State Route 180 (SR-180), located approximately 14.86 miles northeast of the project site. No officially designated or eligible State Scenic Highways are located within or in the immediate vicinity of the project site. Therefore, the proposed project would not impact a designated or eligible State Scenic Highway or impact scenic resources located within the highway segments or its viewshed. Therefore, no impact on scenic resources within a State Scenic Highway would occur as a result of the proposed project.

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

Less Than Significant Impact. The project site is located in an urbanized area and is primarily vacant, with the exception of an existing residential unit and associated outbuildings that would be removed as part of the project. The proposed project would consist of the construction of 40 multifamily residential units and a 3,000-square-foot commercial development. The project site is bounded by Nebraska Avenue and a City of Selma dog park to the north, residential uses to the south, residential and commercial uses to the east, and residential uses to the west. The project would rezone the project site from One-Family Zone (R-1-7) to Multiple-Family Zone (R-3) and Central Commercial Zone (C-2) and change the site's General Plan land use designation from Medium Low Density Residential to High Density Residential and Community Commercial. The proposed residential and commercial uses would be developed pursuant to design requirements for the site's proposed zoning and General Plan land use designation. Additionally, the proposed residential and commercial uses of the project site would be similar to existing uses in the vicinity of the project site, including the residential uses west of the site and commercial uses east of the site. In addition, the proposed project would be constructed to be consistent in size and scale to similar uses in the vicinity of the project site. Therefore, although the character of the project site would change from mostly vacant to urban, the proposed project would not substantially degrade the visual character or quality of the project site and its surroundings. This impact would be less than significant.

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

Less Than Significant with Mitigation Incorporated. The project site is located in an urbanized area, which is subject to preexisting exterior lighting from surrounding development and existing street lighting. The proposed project would introduce new sources of light and glare into the project site and vicinity in the form of new windows and exterior safety and security lighting. However, new

[1] California Department of Transportation (Caltrans). State Scenic Highways. Website: https://dot.ca.gov/programs/design/lap-landscape-architecture-and-community-livability/lap-liv-i-scenic-highways (accessed August 2023).

sources of light and glare associated with the proposed project would not be substantial in the context of existing lighting sources. In addition, daytime glare would not be substantial because no highly reflective glass elements or building material are proposed as part of the project.

In addition, compliance with California Building Code (Title 24, California Code of Regulations) standards would reduce potential light and glare impacts from the project. The project would also be designed according to City of Selma (City) zoning-specific requirements, which require outdoor lighting to be hooded and directed downward and would be subject to the City's Site Plan Review process, which would ensure compliance with City lighting requirements. Furthermore, pursuant to Mitigation Measure 3.1.3.1 of the City's General Plan Environmental Impact Report (EIR), Mitigation Measure AES-1 would be required to ensure shielding mechanisms are provided to direct light away from adjacent uses and ensure that the proposed project's lighting system does not create a substantial new source of light by imposing a cap on the intensity of lighting systems. Implementation of State and local policies and standards, as well as Mitigation Measure AES-1, would reduce impacts associated with light and glare. Additionally, the new sources of light and glare introduced by the proposed project would be comparable to the existing light and glare emitted by residential and commercial uses located in the vicinity of the project site. Therefore, the adverse impacts related to light and glare resulting from the proposed project would be less than significant.

Mitigation Measure AES-1 Exterior lighting for the project shall be shielded to prevent line of sight visibility of the light source from adjacent properties. In addition, the project shall result in no more than 0.25 foot-candle or equal measurement of errant light impacts to adjacent properties. The City's Planning Official shall require a photometric analysis of the project where necessary to demonstrate compliance with this requirement.

3.2 AGRICULTURE AND FORESTRY RESOURCES

In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the State's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment Project, and the forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board (CARB).

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☐	☒
b. Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☒
c. Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?	☐	☐	☐	☒
d. Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒
e. Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	☐	☐	☐	☒

3.2.1 Impact Analysis

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

No Impact. The project site is located within an urbanized area of Selma. There are no agricultural uses located within or adjacent to the project site. Additionally, the project site is classified as "Urban and Built-Up Land" by the California Department of Conservation (DOC) Farmland Mapping and Monitoring Program (FMMP)[2]. Therefore, development of the proposed project would not convert agricultural land to a non-agricultural use. The proposed project would result in no impact

[2] California Department of Conservation (DOC). 2018. California Important Farmland Finder. Website: https://maps.conservation.ca.gov/DLRP/CIFF/ (accessed June 2023).

to the conversion of Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to a non-agricultural use.

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

No Impact. The project site is designated Medium Low Density Residential and zoned within the City's One-Family Zone (R-1-7) district. The project site is not subject to a Williamson Act contract. Therefore, development of the proposed project would not conflict with existing zoning for agricultural use or a Williamson Act contract and there would be no impact.

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

No Impact. As identified above, the project site is designated Medium Low Density Residential and zoned within the City's One-Family Zone (R-1-7) district. The proposed project would not conflict with the existing zoning for, or cause rezoning of, forest land or conversion of forest land to non-forest uses. Therefore, the proposed project would have no impact to existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code [PRC] Section 12220(g)), timberland (as defined by PRC 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 forestland to non-forest use?

No Impact. Please refer to Response 3.2.1.c above. The proposed project would not convert forest land to non-forest use and would result in no impact to the loss or conversion of forest land to a 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 or conversion of forest land to non-forest use?

No Impact. Please refer to Responses 3.2.1.a and 3.2.1.c above. The project site is located within an existing urban environment and would not result in the conversion of farmland to non-agricultural uses or forest land to non-forest uses. Therefore, no impact to 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 would occur.

3.3 AIR QUALITY

Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations.

	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?	☐	☒	☐	☐
b. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?	☐	☒	☐	☐
c. Expose sensitive receptors to substantial pollutant concentrations?	☐	☒	☐	☐
d. Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	☐	☐	☒	☐

3.3.1 Impact Analysis

The following discussion is based on the findings of the Air Quality Analysis [3] prepared for the proposed project, which is included in Appendix A.

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

Less Than Significant with Mitigation Incorporated. The City of Selma is part of the San Joaquin Valley Air Basin (SJVAB), which is within the jurisdiction of the San Joaquin Valley Air Pollution Control District (SJVAPCD). The SJVAPCD is responsible for air quality regulation within the eight-county San Joaquin Valley region.

Both the State of California (State) and the federal government have established health-based ambient air quality standards (AAQS) for six criteria air pollutants: carbon monoxide (CO), ozone (O_3), nitrogen dioxide (NO_2), sulfur dioxide (SO_2), lead (Pb), particulate matter less than 2.5 microns in size ($PM_{2.5}$), and particulate matter less than 10 microns in size (PM_{10}). The SJVAB is designated as nonattainment for O_3 and $PM_{2.5}$ for federal standards and nonattainment for O_3, PM_{10}, and $PM_{2.5}$ for State standards.

The California Environmental Quality Act (CEQA) requires that certain proposed projects be analyzed for consistency with the applicable air quality plan. An air quality plan describes air pollution control strategies to be implemented by a city, county, or region classified as a non-attainment area. The main purpose of the air quality plan is to bring the area into compliance with the requirements of the federal and State air quality standards. To bring the SJVAB into attainment, the SJVAPCD adopted the 2022 Plan for the 2015 8-Hour Ozone Standard in December 2022 to satisfy Clean Air

[3] LSA Associates, Inc. 2022a. Air Quality Analysis Memorandum for the Casa De Villa Apartments Project. May 6.

Act (CAA) requirements and ensure attainment of the 75 parts per billion (ppb) 8-hour ozone standard.

To assure the SJVAB's continued attainment of the United States Environmental Protection Agency (EPA) PM_{10} standard, the SJVAPCD adopted the 2007 PM_{10} Maintenance Plan in September 2007. SJVAPCD Regulation VIII (Fugitive PM_{10} Prohibitions) is designed to reduce PM_{10} emissions generated by human activity. The SJVAPCD adopted the 2018 Plan for the 1997, 2006, and 2012 $PM_{2.5}$ Standard to address the EPA federal annual $PM_{2.5}$ standard of 12 micrograms per cubic meter ($\mu g/m^3$) established in 2012.

For a project to be consistent with SJVAPCD air quality plans, the pollutants emitted from a project should not exceed the SJVAPCD emission thresholds or cause a significant impact on air quality. In addition, emission reductions achieved through implementation of offset requirements are a major component of the SJVAPCD air quality plans. As discussed below, construction of the proposed project would not result in the generation of criteria air pollutants that would exceed SJVAPCD thresholds of significance. Implementation of Mitigation Measure AIR-1 would further reduce construction dust impacts. Operational emissions associated with the proposed project would also not exceed SJVAPCD established significance thresholds. Therefore, the proposed project would not conflict with or obstruct implementation of SJVAPCD air quality plans. Therefore, impacts would be less than significant with implementation of Mitigation Measure AIR-1.

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

Less Than Significant with Mitigation Incorporated. The SJVAB is designated as non-attainment for O_3 and $PM_{2.5}$ for federal standards and non-attainment for O_3, PM_{10}, and $PM_{2.5}$ for State standards. The SJVAPCD's nonattainment status is attributed to the region's development history. Past, present, and future development projects contribute to the region's adverse air quality impacts on a cumulative basis. By its very nature, air pollution is largely a cumulative impact. No single project is sufficient in size to, by itself, result in nonattainment of AAQS. Instead, a project's individual emissions contribute to existing cumulatively significant adverse air quality impacts. If a project's contribution to the cumulative impact is considerable, then the project's impact on air quality would be considered significant.

In developing thresholds of significance for air pollutants, the SJVAPCD considered the emission levels for which a project's individual emissions would be cumulatively considerable. If a project exceeds the identified significance thresholds, its emissions would be cumulatively considerable, resulting in significant adverse air quality impacts to the region's existing air quality conditions. The following analysis assesses the potential project-level construction- and operation-related air quality impacts.

Construction Emissions. During construction, short-term degradation of air quality may occur due to the release of particulate emissions generated by grading, paving, building, and other activities. Emissions from construction equipment are also anticipated and would include CO, nitrous oxides

(NO_X), reactive organic gases (ROGs), directly emitted particulate matter ($PM_{2.5}$ and PM_{10}), and toxic air contaminants (TACs) such as diesel exhaust particulate matter (DPM).

Project construction activities would include site preparation, grading, building, paving, and architectural coating activities. Construction-related effects on air quality from the proposed project would be greatest during the grading phase due to the large disturbance of soils. If not properly controlled, these activities would temporarily generate particulate emissions. Sources of fugitive dust would include disturbed soils at the construction site. Unless properly controlled, vehicles leaving the site would deposit dirt and mud on local streets, which could be an additional source of airborne dust after it dries. PM_{10} emissions would vary from day to day, depending on the nature and magnitude of construction activity and local weather conditions. PM_{10} emissions would depend on soil moisture, silt content of soil, wind speed, and the amount of operating equipment. Larger dust particles would settle near the source, while fine particles would be dispersed over greater distances from the construction site.

Water or other soil stabilizers can be used to control dust, resulting in emission reductions of 50 percent or more. The SJVAPCD has implemented Regulation VIII measures for reducing fugitive dust emissions (PM_{10}). With the implementation of Regulation VIII measures, fugitive dust emissions from construction activities would not result in adverse air quality impacts.

In addition to dust-related PM_{10} emissions, heavy trucks and construction equipment powered by gasoline and diesel engines would generate CO, SO_2, NO_X, ROGs, and some soot particulate ($PM_{2.5}$ and PM_{10}) in exhaust emissions. If construction activities were to increase traffic congestion in the area, CO and other emissions from traffic would increase slightly while those vehicles idle in traffic. These emissions would be temporary in nature and limited to the immediate area surrounding the construction site.

The SJVAPCD has developed screening criteria in the SJVAPD's Small Project Analysis Level (SPAL) to provide lead agencies with a conservative indication of whether the proposed project would result in potentially significant air quality impacts. If all of the screening criteria are met by a proposed project, then the lead agency would not need to perform a detailed air quality assessment of the proposed project's emissions. These screening levels are generally representative without any form of mitigation measures taken into consideration. In addition, the screening criteria do not account for project design features, attributes, or local development requirements that could also result in lower emissions.

For mid-rise apartment residential land uses, the SJVAPCD screening size is 225 units, and for medical office building uses, the SJVAPCD screening size is 68,000 square feet. The proposed project would develop 40 multifamily residential units and a 3,000-square-foot commercial development, which would include medical/dental offices, general offices, or a laundromat. Therefore, based on the SJVAPCD's screening criteria, construction activities associated with the proposed project are not anticipated to exceed established thresholds. In addition, the SJVAPCD has implemented Regulation VIII measures for dust control during construction. Implementation of Mitigation Measure AIR-1 would ensure that the proposed project complies with Regulation VIII.

Mitigation Measure AIR-1

Consistent with San Joaquin Valley Air Pollution Control District (SJVAPCD) Regulation VIII (Fugitive PM_{10} Prohibitions), the following controls are required to be included as specifications for the proposed project and implemented at the construction site:

- All disturbed areas, including storage piles, which are not being actively utilized for construction purposes, shall be effectively stabilized from dust emissions using water or chemical stabilizers/suppressants and covered with a tarp or other suitable cover or vegetative ground cover.
- All on-site unpaved roads and off-site unpaved access roads shall be effectively stabilized of dust emissions using water or chemical stabilizers/suppressants.
- All land clearing, grubbing, scraping, excavation, land leveling, grading, cut and fill, and demolition activities shall be effectively controlled of fugitive dust emissions utilizing application of water or by presoaking.
- When materials are transported off site, all material shall be covered, or effectively wetted to limit visible dust emissions, and at least 6 inches of freeboard space from the top of the container shall be maintained.
- All operations shall limit or expeditiously remove the accumulation of mud or dirt from adjacent public streets at the end of each workday. (The use of dry rotary brushes is expressly prohibited except where preceded or accompanied by sufficient wetting to limit the visible dust emissions. Use of blower devices is expressly forbidden.)
- Following the addition of materials to, or the removal of materials from, the surface of outdoor storage piles, said piles shall be effectively stabilized of fugitive dust emissions utilizing sufficient water or chemical stabilizers/suppressants.

Construction emissions associated with the proposed project would be less than significant with implementation of Mitigation Measure AIR-1. Therefore, construction of the proposed project would not result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in nonattainment under an applicable federal or State AAQS.

Long-Term Operational Emissions. Long-term air pollutant emission impacts are typically associated with mobile sources (e.g., vehicle trips), energy sources (e.g., electricity and natural gas), and area sources (e.g., architectural coatings and the use of landscape maintenance equipment) related to the proposed project.

PM_{10} emissions result from running exhaust, tire and brake wear, and the entrainment of dust into the atmosphere from vehicles traveling on paved roadways. Entrainment of PM_{10} occurs when vehicle tires pulverize small rocks and pavement, and the vehicle wakes generate airborne dust. The contribution of tire and brake wear is small compared to the other particulate matter emission processes. Gasoline-powered engines have small rates of particulate matter emissions compared with diesel-powered vehicles.

Energy source emissions result from activities in buildings for which electricity and natural gas are used. The quantity of emissions is the product of usage intensity (i.e., the amount of electricity or natural gas) and the emission factor of the fuel source. The primary sources of energy demand for the proposed project would include building mechanical systems (e.g., heating and air conditioning), lighting, and plug-in electronics (e.g., refrigerators or computers). Greater building or appliance efficiency reduces the amount of energy for a given activity and thus lowers the resultant emissions. The emission factor is determined by the fuel source (with cleaner energy sources like renewable energy) producing fewer emissions than conventional sources. As discussed in the methodology section above, the proposed project would comply with current Title 24 PRC requirements.

Typically, area source emissions consist of direct sources of air emissions located at the project site, including architectural coatings and the use of landscape maintenance equipment. Area source emissions associated with the project would include emissions from the use of landscaping equipment.

As discussed above, the SJVAPCD has developed screening criteria to determine whether a project requires an analysis of project-generated criteria air pollutants. If all the screening criteria are met by a proposed project, then the lead agency does not need to perform a detailed air quality assessment. According to the SJVAPCD's Guidance for Assessing and Mitigating Air Quality Impacts (GAMAQI), an air quality analysis should be prepared for a multi-use project if its combined trip generation rate exceeds the lowest applicable trip threshold.

For mid-rise apartment residential land uses, the SJVAPCD screening size criteria for pollutants are 225 units and 800 average daily vehicle trips. For medical office building uses, the SJVAPCD screening size criteria are 68,000 square feet and 1,000 average daily vehicle trips. The proposed project would develop 40 multifamily residential units and a 3,000-square-foot commercial development, which would include medical/dental offices, general offices, or a laundromat. Based on trip generation rates identified in the project's Traffic Study[4], the proposed project would generate a total of 378 average daily trips, including 270 average daily trips associated with the residential uses and 108 average daily trips associated with the commercial uses. Therefore, based on the SJVAPCD's screening criteria, the project is well below the size and trip generation estimate that would warrant a detailed analysis. Therefore, operational activities associated with the proposed project are not anticipated to exceed established thresholds. Operation of the proposed project would not result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in nonattainment under an applicable federal or State AAQS.

[4] Peters Engineering Group. 2023. *Traffic Study – Casa De Villa Project*. July 21.

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

Less Than Significant with Mitigation Incorporated. Sensitive receptors are defined as people who have an increased sensitivity to air pollution or environmental contaminants. Sensitive receptor locations include schools, parks and playgrounds, daycare centers, nursing homes, hospitals, and residential dwelling units. The closest sensitive receptors to the project site include single-family residences located adjacent to the southern border of the project site and an apartment complex located adjacent to the western border of the project site.

Construction of the proposed project may expose surrounding sensitive receptors to airborne particulates, as well as a small quantity of construction equipment pollutants (i.e., usually diesel-fueled vehicles and equipment). However, construction contractors would be required to implement Mitigation Measure AIR-1 (described above). Project construction pollutant emissions would be below the SJVAPCD significance thresholds, and with implementation of Mitigation Measure AIR-1, emissions would be further reduced. Once the project is constructed, it would not be a source of substantial pollutant emissions. Therefore, sensitive receptors are not expected to be exposed to substantial pollutant concentrations during project construction and operation. As a result, impacts would be less than significant with incorporation of Mitigation Measure AIR-1.

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

Less Than Significant Impact. The SJVAPCD addresses odor criteria in its GAMAQI. Rather than an established rule or standard regarding odor emissions, the SJVAPCD has a nuisance rule: “Any project with the potential to frequently expose members of the public to objectionable odors should be deemed to have a significant impact.”

During project construction, some odors may be present due to diesel exhaust. However, these odors would be temporary and limited to the construction period. The proposed project would not include any activities or operations that would generate objectionable odors and, once operational, the project would not be a source of odors. Therefore, the proposed project would not result in other emissions (such as those leading to odors) adversely affecting a substantial number of people. Impacts would be less than significant.

3.4 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 Game or U.S. Fish and Wildlife Service?	☐	☒	☐	☐
b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☐	☐	☒
c. Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☐	☐	☒
d. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☒	☐	☐
e. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☒	☐
f. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	☒

3.4.1 Impact Analysis

The following discussion is based on the findings of the Biological Resources Assessment[5] prepared for the proposed project. The Biological Resources Assessment is included as Appendix B.

Methods. A literature review and records search were conducted on March 28, 2022, to identify the existence and potential for occurrence of sensitive or special-status plant and animal species in the vicinity of the project site. Federal and State lists of sensitive species were also examined. Current electronic database records reviewed included the following:

- **California Natural Diversity Database (CNDDB) Information**, which is administered by the California Department of Fish and Wildlife (CDFW), was reviewed to determine sensitive plant and animal species as well as sensitive natural communities that occur in the project vicinity. Records from nine United States Geological Survey (USGS) quadrangles surrounding the project

[5] LSA Associates, Inc. 2022b. Draft Biological Resources Assessment, Casa De Villa Apartment Complex Project, Fresno County, California. May.

site (*Fresno South, Malaga, Conejo, Caruthers, Raisin, Kearney Park, Herndon, Fresno North,* and *Clovis*) were obtained from this database to inform the field survey.

- **California Native Plant Society's (CNPS) Electronic Inventory of Rare and Endangered Vascular Plants** utilizes four specific categories or "lists" of sensitive plant species to assist with the conservation of rare or endangered botanical resources. All of the plants constituting California Rare Plant Ranks (CRPR) 1A, 1B, 2A, and 2B are intended to meet the status definitions of "threatened" or "endangered" in the California Endangered Species Act (CESA) and the California Fish and Game Code and are considered by CNPS to be eligible for State listing. At the discretion of the CEQA lead agency, impacts to these species may be analyzed as such, pursuant to *State CEQA Guidelines* Sections 15125(c) and 15380. Plants in Rank 3 (limited information; review list), Rank 4 (limited distribution; watch list), or that are considered Locally Unusual and Significant may be analyzed under CEQA if there is sufficient information to assess potential significant impacts. Records from the nine USGS quadrangles surrounding the project site were obtained from this database to inform the field survey.

- **United States Fish and Wildlife Service's (USFWS) Information for Planning and Conservation (IPaC) Online System** lists all proposed, candidate, threatened, and endangered species managed by the Endangered Species Program of the USFWS that have the potential to occur on or near a particular site. This database also lists all known critical habitats, national wildlife refuges, and migratory birds that could potentially be impacted by activities from a proposed project. An IPaC Trust Resource Report[6] was generated for the project area.

- **Designated and Proposed USFWS Critical Habitat Polygons** were reviewed to determine whether critical habitat has been designated or proposed within or in the vicinity of the project site.[7]

- **The USFWS National Wetlands Inventory** was reviewed to determine whether any wetlands or surface waters of the United States have been previously identified in the survey area.[8]

- **eBird** is a real-time, online checklist program launched in 2002 by the Cornell Lab of Ornithology and National Audubon Society. It provides rich data sources for basic information on bird abundance and distribution at a variety of spatial and temporal scales. In March 2022, eBird occurrence records within the project site and a 5-mile radius around the project site were reviewed.[9]

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6 United States Fish and Wildlife Service (USFWS). 2022a. Environmental Conservation Online System (ECOS). Information for Planning and Conservation (IPaC) Trust Resources Report. March 2020. Website: http://ecos.fws.gov/ecp/.

7 United States Fish and Wildlife Service (USFWS). 2022b. USFWS Critical Habitat Polygons. Website: http://ecos.fws.gov/crithab/ (accessed March 2022).

8 United States Fish and Wildlife Service (USFWS). 2022c. USFWS National Wetlands Inventory (NWI), Online Mapper Tool. Available at: https://www.fws.gov/wetlands/data/mapper.html

9 eBird. 2022. Species occurrence records for Burrowing Owl (*Athene cunicularia*). eBird, Cornell Lab of Ornithology, Ithaca, New York. Website: http://www.ebird.org (accessed March 28, 2022).

In addition to the databases listed above, historic and current aerial imagery, existing environmental reports for developments in the project vicinity, and local land use policies related to biological resources were reviewed.

Field Survey. A general biological survey of the project site was conducted by LSA Biologist Kelly McDonald on March 29, 2022. The project site was surveyed on foot, and all biological resources observed were noted and mapped.

Results. The project site consists of a flat area supporting nonnative grassland and two buildings. Ruderal and nonnative grassland vegetation existing on the site appears to be regularly maintained. There are several small trees of heaven (*Ailanthus altissima*, a nonnative species) and one valley oak (*Quercus lobata)* within the project site. Much of the soil and vegetation within the project site is disturbed from tilling and agriculture practices. Worn foot paths, litter, and trampling are evident throughout the project site.

Habitat within the project site is considered low quality with respect to most of the special-status animal species identified during the literature review, and the project site is not expected to support any special-status plant species (refer to Appendix B). Wildlife species observed during the March 2022 field survey include northern mockingbird (*Mimus polyglottos*) and European starling (*Sturnus vulgaris,* a nonnative species). A complete list of animal species observed can be found in Appendix B.

No riparian habitat exists in the project site or on adjacent parcels, and there are no depressional wetlands (e.g., vernal pools) or natural drainage features within the project site. The project site does not serve as a wildlife nursery or as a wildlife migration corridor. Further details regarding specific biological resources are provided in the following subsections.

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

Less Than Significant with Mitigation Incorporated. Special-status plant and wildlife species and the corresponding status of each that were identified as potentially occurring in the vicinity of the project were evaluated based on the literature review and field survey of the project site.

Special-Status Natural Communities. The project site does not contain any special-status natural communities and such habitats would not be impacted by the proposed project.

Special-Status Plants. No special-status plant species are expected to occur within the project site or to be adversely affected by the proposed project.

Special-Status Animals. While no special-status animal species (or signs of such species) were observed on site during the March 2022 survey, several gopher (or vole) burrows were observed within the project site; however, the site lacks California ground squirrel (*Otospermophilus beecheyi*) burrows, which are more commonly used (and more suitable habitat) by burrowing owl. As such the

likelihood of occurrence is minimal. Burrowing owls could utilize debris piles and remnant structures located within the site; however, none of the gopher (or vole) burrows observed on the project site exhibited features typical of occupied burrowing owl burrows at the time of the survey, although there is some potential for use by these species in the future. Potentially significant direct and indirect impacts, including mortality, harassment, or other forms of incidental take, could occur if construction-related ground disturbance occurs in or around an occupied burrow.

No other special-status species were determined to have a moderate or high probability of occurrence on the project site (refer to Appendix B). The removal of the disturbed annual grassland habitat documented on the project site is not anticipated to substantially impact the population sizes of any special-status animal species given the context and setting of the project site and additional habitats for such species in the project vicinity.

While suitable habitat for shrub and tree nesting birds is very limited on the project site (only one mature valley oak tree and several small immature trees of heaven occur within the site limits), the project site and immediate surroundings that could be subjected to indirect disturbances during construction do contain suitable nesting habitat for a variety of tree and ground-nesting birds and for other birds that could nest in the annual herbaceous vegetation. Nesting birds are protected under the California Department of Fish and Wildlife Code. Construction activities that occur during the nesting bird season (typically February 15 through September 15) have potential to result in the direct or indirect take of nesting birds.

If unmitigated or avoided, these potential direct and indirect impacts on special-status wildlife species and nesting birds could be considered potentially significant. However, implementation of Mitigation Measures BIO-1 and BIO-2, as summarized below, would effectively mitigate any impacts on special-status wildlife species to less than significant levels.

Mitigation Measure BIO-1 A preconstruction clearance survey shall be prepared for burrowing owl no more than 30 calendar days prior to initiation of project activities by a qualified biologist. All survey results must be delivered to the City of Selma. If an active burrowing owl burrow is found within the project site, the applicant must coordinate with the California Department of Fish and Wildlife (CDFW) to obtain applicable agency approval/direction prior to any ground disturbance activities on the site. Specific avoidance, den excavation, passive relocation, and compensatory mitigation activities shall be performed as required by the CDFW. If no active burrowing owl burrows are identified, project activities may proceed as planned following the preconstruction survey.

Mitigation Measure BIO-2 If vegetation removal, construction, or grading activities are planned to occur within the active nesting bird season (February 15 through September 15), a qualified biologist shall conduct a preconstruction nesting bird survey no more than 5 days prior to the start of such activities. The nesting bird survey shall include the project site and areas immediately adjacent to the site that could

potentially be affected by project-related activities such as noise, vibration, increased human activity, and dust, etc. For any active nest(s) identified, the qualified biologist shall establish an appropriate buffer zone around the active nest(s). The appropriate buffer shall be determined by the qualified biologist based on species, location, and the nature of the proposed activities. Project activities shall be avoided within the buffer zone until the nest is deemed no longer active by the qualified biologist. Documentation of all survey results shall be provided to the City of Selma.

Critical Habitat. The project would not result in any impacts to critical habitat, and no additional mitigation is required.

Summary. No special-status plant or animal species would be impacted by the proposed project. However, the proposed project has potential to impact nesting birds, which are protected under the Migratory Bird Treaty Act (MBTA) and California Fish and Game Code. With implementation of Mitigation Measures BIO-1 and BIO-2, impacts on nesting birds would be avoided and the project would not 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 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, regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?

No Impact. Habitat values of the urban site have been severely diminished due to historical and ongoing anthropogenic disturbances. No riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulation by the CDFW or USFWS is present on the site. Designated critical habitat, sensitive natural communities, and other sensitive habitats are absent from the project site and adjacent lands. Therefore, implementation of the proposed project would have no impact related to 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 CDFW or USFWS.

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

No Impact. No aquatic resources occur within the project site, or within the vicinity of the project site. As a result, no impact would occur related to a substantial adverse effect on State or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.

d. 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?

Less Than Significant with Mitigation Incorporated. The wildlife species that occur in the project vicinity are adapted to the urban-wildland interface, and the project would not introduce new effects to the area. The noise, vibration, light, dust, or human disturbance within construction areas would only temporarily deter wildlife from using areas in the immediate vicinity of construction activities. These indirect effects could temporarily alter migration behaviors, territories, or foraging habitats in select areas. However, because these are temporary effects, it is likely that wildlife already living and moving in close proximity to urban development would alter their normal functions for the duration of the project construction and then re-establish these functions once all temporary construction effects have been removed. The proposed project would not place any permanent barriers within any known wildlife movement corridors or interfere with habitat connectivity. This impact would be less than significant.

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

Less Than Significant Impact. As described in the Biological Resources Assessment (provided in Appendix B), the project would not conflict with any local policies or ordinances protecting biological resources. The proposed project would be required to comply with local policies from the City of Selma General Plan, as well as Section 9-4-5 of the Selma Municipal Code, which outlines procedures for tree removal. As such, the proposed project would not conflict with any of the existing ordinances, and impacts would be less than significant.

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?

No Impact. The City of Selma and Fresno County currently do not have a regional Natural Communities Conservation Plan (NCCP) or Habitat Conservation Plan (HCP). Therefore, the project would not conflict with the provisions of any adopted local, regional, or State conservation plan. The proposed project would have no impact relating to the provisions of an adopted HCP, NCCP, or other approved local, regional, or State HCP.

3.5 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 pursuant to §15064.5?	☐	☒	☐	☐
b. Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	☐	☒	☐	☐
c. Disturb any human remains, including those interred outside of formal cemeteries?	☐	☒	☐	☐

3.5.1 Impact Analysis

The following discussion is based on the findings of the Phase I Archaeological Survey Study[10] (Archeological Survey Study) prepared for the proposed project, included in Appendix C. The Archaeological Survey Study consisted of background research and a field survey conducted by LSA Associate/Senior Cultural Resources Manager Kerrie Collison, M.A., Registered Professional Archaeologist (RPA) 28731436. The following discussion summarizes the study and results.

Southern San Joaquin Valley Information Center. A records search of the project site and a 0.5-mile search radius was conducted on April 4, 2022, by Jeremy E. David, Assistant Coordinator at the Southern San Joaquin Valley Information Center (SSJVIC) of the California Historical Resources Information System at California State University, Bakersfield (SSJVIC Records Search File No. 22-128). The records search results indicate that no previous cultural resources studies have included a portion of the project site, and five previous cultural resources studies have included a portion of the 0.5-mile radius of the project site. These five studies consisted of four archaeological surveys and one literature search. As indicated by previous studies, no cultural resources have been recorded within the project site, and four non-archaeological cultural resources have been recorded within 0.5 mile of the project site.

Native American Heritage Commission. On March 23, 2022, LSA submitted a request to the NAHC to request a review of the Sacred Lands File (SLF) for the presence of Native American cultural resources that might be impacted by the proposed project. The NAHC maintains the SLF database and is the official State repository of Native American sacred-site location records in California. On May 25, 2022, Cameron Vela, Cultural Resources Analyst, provided a response and indicated that the SLF search results were negative. However, the absence of specific site information in the SLF does not indicate the absence of cultural resources in the project area. As such, the NAHC provided a list of Native American tribes to contact who may also have knowledge of cultural resources in the project area and could supply additional information.

[10] LSA Associates, Inc. 2023. Phase I Archaeological Survey Study for the Casa De Villa Apartment Complex Project in Selma, Fresno County, California. October 17.

Aerial Photographs and Maps. Aerial photographs and historical maps that include the project site were also reviewed to assess the presence of potentially historical resources.[11] Review of aerial photographs dating as far back as 1924 depicted a building in the project site. Due to poor quality of available images, the date of demolition of the 1924 building cannot be determined.

Field Survey. On April 14, 2022, LSA archaeologist Kerrie Collison conducted a pedestrian field survey of the entire project site by walking transects spaced 5 meters apart. A trowel was occasionally used to expose subsurface sediments to check subsurface sediment characteristics. Where present, rodent burrowing holes and rodent dirt aprons were also examined for indications of archaeological deposits and/or human remains. The field survey did not identify any cultural resources in the project site.

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

Less Than Significant with Mitigation Incorporated. A historical resource defined by CEQA includes one or more of the following criteria: (1) the resource is listed, or found eligible for listing in, the California Register of Historical Resources (California Register); (2) listed in a local register of historical resources as defined by PRC Section 5020.1(k); (3) identified as significant in a historical resources survey meeting the requirements of PRC Section 5024.1(g); or (4) determined to be a historical resource by the project's lead agency (PRC Section 21084.1; *State CEQA Guidelines* Section 15064.(a)).

Under CEQA, historical resources include built-environment resources and archaeological sites. As discussed in the Archaeological Survey Study, no historical resources have been identified on the project site. However, the Archaeological Survey Study identified that the 1924 map depicted a building in the project site and found that it may have previously been demolished. Based on information provided by the City of Selma and a review of building permits, the on-site building was originally constructed in 1896 but was demolished in 2012 due to a total loss from a fire and rebuilt in 2012. As such, the on-site buildings are not older than 50 years and would not require further evaluation.

In addition, as discussed in the Archaeological Survey Study, subsurface historic-period archaeological deposits associated with the building may still exist within the project site. The project site has historically undergone mechanical discing since prior to 1962, which may have destroyed any previously present surficial archaeological resources. However, the subsurface sediments of the project site date to a time period that includes human occupation of the region, and sediments below disturbance associated with the mechanical discing (estimated at 18 inches below surface) could contain intact archaeological deposits.

For the above reasons, there is a potential for unknown subsurface historic-period and/or prehistoric resources within the project site. In the event that unknown resources are discovered during project construction, existing federal, State, and local laws and regulations would require

[11] National Environmental Title Research (NETR). n.d. Historic Aerials. Website: http://www.historicaerials.com (accessed April 13, 2022).

construction activities to cease until such artifacts are properly examined and determined not to be of significance by a qualified professional. Additionally, implementation of Mitigation Measure CUL-1, described in Response 3.5.b below, would require consultation with a qualified archaeologist to assess if the discovered resource qualifies as a historical resource and to identify appropriate mitigation measures, if applicable. Therefore, potential impacts related to a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5 would be less than significant with mitigation.

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

Less Than Significant with Mitigation Incorporated. According to *State CEQA Guidelines* Section 15064.5(c)(1), "When a project will impact an archaeological site, a lead agency shall first determine whether the site is an historical resource." Those archaeological sites that do not qualify as historical resources shall be assessed to determine if they qualify as "unique archaeological resources" (California PRC Section 21083.2).

No archaeological resources have been identified on the project site. However, as discussed above, due to the building depicted on the 1924 aerial photograph of the site, it is possible that subsurface historic-period archaeological deposits associated with this 1924 building may still exist within the project site. Mitigation Measure CUL-1 requires archaeological monitoring during ground-disturbing activities, and that if unknown archaeological resources are discovered during construction of the proposed project, work in the area would halt and a qualified archaeologist would be consulted. Therefore, adherence to the requirements in Mitigation Measure CUL-1 would reduce potential impacts to archaeological resources to less than significant.

Mitigation Measure CUL-1 The Project Applicant shall hire a qualified professional archaeologist to monitor all project-related ground-disturbing activities. In the event that buried archaeological resources (historic or prehistoric) are discovered, the monitoring archaeologist shall stop construction in the immediate vicinity of the find and contact a professional qualified archaeologist for consultation to determine whether the resource requires further study. The qualified archaeologist shall make recommendations to the City on the measures that shall be implemented to protect the discovered resources, including but not limited to excavation of the finds and evaluation of the finds in accordance with *State CEQA Guidelines* Section 15064.5. If the resources are determined to be unique prehistoric archaeological resources as defined under Section 15064.5 of the *State CEQA Guidelines*, mitigation measures shall be identified by the monitor and recommended to the lead agency. Appropriate measures for significant resources could include avoidance or capping, incorporation of the site in green space, parks, or open space, or data recovery excavations of the finds. No further construction activities shall occur in the area of the discovery until the lead agency approves the measures to protect

these resources. Any archaeological artifacts recovered as a result of mitigation shall be provided to a City-approved institution or person who is capable of providing long-term preservation to allow future scientific study.

Monitoring should take place on a full-time basis during all ground-disturbing activities until the qualified archaeologist, based on the archaeological monitor's observations, is satisfied there is little likelihood of encountering archaeological deposits. Upon completion of monitoring activities, the qualified archaeologist should prepare a report to document the methods and results of monitoring activities. The final version of this report should be submitted to the Southern San Joaquin Valley Information Center (SSJVIC).

Adherence to the requirements in Mitigation Measure CUL-1 would reduce potential impacts to a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5 to less than significant with mitigation.

c. Would the project disturb any humans remains, including those interred outside of formal cemeteries?

Less Than Significant with Mitigation Incorporated. Although no such remains have been identified within the project site, there is a possibility of encountering such remains, either in isolation or with prehistoric archaeological deposits. Disturbance of human remains interred outside of formal cemeteries would result in a significant impact. If human remains are identified during project construction, Section 7050.5 of the California Health and Safety Code and PRC Section 5097.98 shall apply, as appropriate. Mitigation Measure CUL-2 requires adherence to Section 7050.5 of the California Health and Safety Code and PRC Section 5097.98. With implementation of Mitigation Measure CUL-2, potential impacts related to the potential to disturb any human remains, including those interred outside of formal cemeteries, would be less than significant with mitigation.

Mitigation Measure CUL-2

In the event that human remains are unearthed during excavation and grading activities of any future development project, all activity shall cease immediately. Pursuant to Health and Safety Code (HSC) Section 7050.5, no further disturbance shall occur until the County Coroner has made the necessary findings as to origin and disposition pursuant to Public Resources Code (PRC) Section 5097.98(a). If the remains are determined to be of Native American descent, the coroner shall within 24 hours notify the Native American Heritage Commission (NAHC). The NAHC shall then contact the Most Likely Descendant (MLD) of the deceased Native American, who shall then serve as the consultant on how to proceed with the remains. Pursuant to PRC Section 5097.98(b), upon the discovery of Native American remains, the landowner shall ensure that the immediate vicinity, according to generally accepted

cultural or archaeological standards or practices, where the Native American human remains are located is not damaged or disturbed by further development activity until the landowner has discussed and conferred with the MLDs regarding their recommendations, if applicable, taking into account the possibility of multiple human remains. The landowner shall discuss and confer with the MLDs all reasonable options regarding the MLDs' preferences for treatment.

3.6 ENERGY

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a. Result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources during project construction or operation?	☐	☐	☒	☐
b. Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	☐	☐	☒	☐

3.6.1 Impact Analysis

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

Less Than Significant Impact. This analysis evaluates energy consumption for both construction and operation of the proposed project, including diesel fuel use for construction off-road equipment.

Construction. Construction of the proposed project would require the use of energy to fuel construction equipment and vehicles. All or most of this energy would be derived from non-renewable resources. Construction activities are not anticipated to result in an inefficient use of energy because gasoline and diesel fuel would be supplied by construction contractors who would conserve the use of their supplies to minimize their costs on the project. Energy usage on the project area during construction would be temporary in nature and would be relatively small in comparison to the State's available energy sources. As such, construction energy usage would be less than significant.

Operation. Typically, energy consumption is associated with fuel used for vehicle trips, and electricity and natural gas use. The proposed new development would be constructed using energy-efficient modern building materials and construction practices, and the proposed project also would use new modern appliances and equipment in accordance with the Appliance Efficiency Regulations (Title 20, California Code of Regulations [CCR] Sections 1601 through 1608). The expected energy consumption during construction and operation of the proposed project would be consistent with typical usage rates for residential and commercial uses; however, energy consumption is largely a function of personal choice and the physical structure and layout of buildings. It can be assumed that implementation of the proposed project would result in additional energy demand in Selma; however, since the proposed project would be located in a primarily developed urban area, the proposed project would not result in wasteful, inefficient, or unnecessary consumption of energy resources during project construction or operation. Impacts would be less than significant.

b. Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

Less Than Significant Impact. In 2002, the Legislature passed SB 1389, which required the California Energy Commission (CEC) to develop an integrated energy plan every 2 years for electricity, natural

gas, and transportation fuels for the California Energy Policy Report. The plan calls for the State to assist in the transformation of the transportation system to improve air quality, reduce congestion, and increase the efficient use of fuel supplies with the least environmental and energy costs. To further this policy, the plan identifies a number of strategies, including assistance to public agencies and fleet operators in implementing incentive programs for zero emission (ZE) vehicles and their infrastructure needs, and encouragement of urban designs that reduce vehicle miles traveled (VMT) and accommodate pedestrian and bicycle access.

The most recently CEC-adopted energy report is the 2023 Integrated Energy Policy Report,[12] which provides the results of the CEC's assessments of a variety of energy issues facing California. As indicated above, energy usage on the project area during construction would be temporary in nature. In addition, once operational, the proposed project would not generate energy usage. Because California's energy conservation planning actions are conducted at a regional level, and because the project's total impact on regional energy supplies would be minor, the proposed project would not conflict with or obstruct California's energy conservation plans as described in the CEC's 2023 Integrated Energy Policy Report. Additionally, as demonstrated above, the proposed project would not result in the inefficient, wasteful, and unnecessary consumption of energy. Potential impacts related to conflict with or obstruction of a State or local plan for renewable energy or energy efficiency would be less than significant.

[12] California Energy Commission (CEC). 2023. 2023 Integrated Energy Policy Report. Docket No. 23-IEPR-01.

3.7 GEOLOGY AND SOILS

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

3.7.1 Impact Analysis

a. Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:

i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.

Less Than Significant Impact. Fault ruptures are generally expected to occur along active fault traces that have exhibited signs of recent geological movement (i.e., in the last 11,000 years). The Alquist-Priolo Earthquake Fault Zones delineate areas around active faults with potential surface fault rupture hazards that would require specific geological investigations prior to approval of certain kinds of development within the delineated area. The project site is not located within an Alquist-Priolo Earthquake Fault Zone. In addition, no known active or potentially active faults or fault traces are located in the project vicinity. The closest active faults are the Nunez Fault, located approximately 51.2 miles southwest from the project site, and the San Andreas Fault, located approximately 64.3 miles southwest from the project site. Due to the

distance of these known faults, no people or structures would be exposed to potential substantial adverse effects, including the risk of loss, injury, or death from the rupture of a known earthquake fault as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map.[13] Therefore, potential impacts related to fault rupture would be less than significant.

ii. Strong seismic ground shaking?

Less Than Significant Impact. The proposed project is located in the City of Selma, which is an area that consists of mostly flat topography within the Central Valley and has low ground-shaking potential due to its distance from active faults. Major seismic activity along the nearby Nunez Fault, San Andreas Fault, or other associated faults could affect the project site through seismic ground shaking. Strong seismic ground shaking could potentially cause structural damage to the proposed project. However, due to the distance of the project site to the known active faults, hazards due to ground shaking would be minimal. In addition, compliance with the California Building Code (Title 24 CCR) would ensure that geotechnical design of the proposed project would reduce potential impacts related to seismic ground shaking to less than significant.

iii. Seismic-related ground failure, including liquefaction?

Less Than Significant Impact. Soil liquefaction is a phenomenon primarily associated with saturated soil layers located close to the ground surface. During ground shaking, these soils lose strength and acquire "mobility" sufficient to permit both horizontal and vertical movements. Soils that are most susceptible to liquefaction are clean, loose, uniformly graded, saturated, fine-grained sands that lie relatively close to the ground surface. However, loose sands that contain a significant amount of fines (silt and clay) may also liquefy. Based on the predicted seismic accelerations and soil and groundwater conditions typically encountered in the region,[14] general liquefaction potential is low in Selma. Furthermore, compliance with the California Building Code would ensure that potential impacts associated with seismic-related ground failure would be less than significant.

iv. Landslides?

Less Than Significant Impact. Landslides typically occur in areas that experience ground shaking, are typically wet, and/or have steep slopes. The proposed project is located in Selma, which is an area that consists mostly of flat topography within the Central Valley and has low ground shaking potential due to its distance from active faults. Additionally, the project site is not located next to any hills, rivers, creeks, or unlined canals that could increase the risk of

[13] California Department of Conservation. 2021. EQ Zapp: California Earthquake Hazards Zone Application. Website: https://www.conservation.ca.gov/cgs/geohazards/eq-zapp (accessed June 2023).

[14] County of Fresno. 2000. Fresno County General Plan, Background Report. pp. 9-6 – 9-10. October 3. Website: https://www.fresnocountyca.gov/files/sharedassets/county/vision-files/files/8398-background_report_june04.pdf (accessed June 2023).

landslides. Therefore, the potential for the proposed project to expose people or structures to risk as a result of landslides would be less than significant.

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

Less Than Significant Impact. Grading and earthmoving during project construction has the potential to result in erosion and loss of topsoil. Exposed soils could be entrained in stormwater runoff and transported off the project site. However, this impact would be reduced to a less than significant level through compliance with water quality control measures, which include preparation of a Stormwater Pollution Prevention Plan (SWPPP) (refer to Section 3.10, Hydrology and Water Quality). Although designed primarily to protect stormwater quality, the SWPPP would incorporate Best Management Practices (BMPs) to minimize erosion during construction. Additional details regarding the SWPPP are provided in Section 3.10, Hydrology and Water Quality. This impact would be less than significant.

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

Less Than Significant Impact. As described in Response 3.7.1.a, soils on the project site would not be subject to liquefaction, lateral spreading, or landslides. Additionally, the proposed project would be required to conform with the California Building Code, which would reduce risks related to unstable soils. Therefore, the proposed project would have a less than significant impact related to unstable soils.

d. Would the project be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?

Less Than Significant Impact. Expansive soils are characterized by the potential for shrinking and swelling as the moisture content of the soil decreases and increases, respectively. Shrink-swell potential is influenced by the amount and type of clay minerals present and can be measured by the percent change of the soil volume. The project site contains Delhi sand and Delhi loamy sand, both soils with low clay contents and low shrink-swell potential.[15] Compliance with California Building Code requirements would ensure the implementation of design features that would reduce potential impacts related to expansive soils to a less than significant level. As such, the risk of expansive soil affecting the proposed project is considered low and would represent a less than significant impact.

[15] Natural Resources Conservation Service. n.d. Web Soil Survey. Website: https://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx (accessed June 2023).

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

No Impact. Wastewater sewage services for the proposed project would be provided by the Selma-Kingsburg-Fowler County Sanitation District (SKF CSD). The proposed project would connect to existing service infrastructure along Nebraska Avenue. Development of the proposed project would not involve the use of septic tanks or alternative wastewater disposal systems. The proposed project would be required to pay applicable service connection fees as required by the service provider. Therefore, the proposed project would have no impact related to the use of septic tanks or alternative wastewater disposal systems.

f. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

Less Than Significant with Mitigation Incorporated. Paleontological resources are afforded protection under *State CEQA Guidelines*, Appendix G. The *State CEQA Guidelines* indicate that a project would have a significant impact on paleontological resources if it would disturb or destroy a unique paleontological resource or site, or a unique geologic feature. PRC Section 5097.5 also specifies that the unauthorized removal or damage of paleontological remains is a misdemeanor. California Penal Code Section 622.5 also sets penalties for removal or damage of paleontological resources.

No paleontological resources or unique geological features are known to exist within or near the project site, and the proposed project is not expected to alter or destroy a paleontological resource, site, or unique geologic feature. Additionally, the project site has been partially developed, and the vacant portion of the site is disturbed due to periodical vegetation control tilling. Although the project site has been previously disturbed, it is possible that paleontological resources could be inadvertently or accidentally discovered within the project site during construction activities. Mitigation Measure GEO-1 would serve to protect the accidental discovery of paleontological resources. As such, a less than significant impact with mitigation would occur.

Mitigation Measure GEO-1 If any potentially significant paleontological resources are discovered during grading activities, all construction activities shall stop within 50 feet of the find and a certified professional paleontologist shall provide recommendations and mitigation measures to protect the resource.

If a potentially significant resource is encountered, then the qualified professional paleontologist, the City of Selma, and the Project Applicant shall arrange for either (1) total avoidance of the resource or (2) test excavations to evaluate eligibility and, if eligible, total data recovery. The determination shall be formally documented in writing and submitted to the City of Selma as verification that the provisions for managing unanticipated discoveries have been met.

3.8 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 an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☒	☐

3.8.1 Impact Analysis

The following discussion is based on the findings of the Air Quality Analysis [16] prepared for the proposed project, which is included in Appendix A.

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

Less Than Significant Impact. Greenhouse gas emissions (GHGs) are present in the atmosphere naturally, and are released by natural sources, or are formed from secondary reactions taking place in the atmosphere. However, over the last 200 years, human activities have caused substantial quantities of GHGs to be released into the atmosphere. These extra emissions are increasing GHG concentrations in the atmosphere, and enhancing the natural greenhouse effect, which is believed to be causing global climate change. The gases that are widely seen as the principal contributors to human-induced global climate change are:

- Carbon dioxide (CO_2)
- Methane (CH_4)
- Nitrous oxide (N_2O)
- Hydrofluorocarbons
- Perfluorocarbons
- Sulfur hexafluoride

Certain gases, such as water vapor, are short-lived in the atmosphere. Others remain in the atmosphere for significant periods of time, contributing to climate change in the long term. Water vapor is excluded from the list of GHGs above because it is short-lived in the atmosphere and its atmospheric concentrations are largely determined by natural processes, such as oceanic evaporation.

These gases vary considerably in terms of global warming potential (GWP), which is a concept developed to compare the ability of each GHG to trap heat in the atmosphere relative to another

[16] LSA Associates, Inc. 2022a. Air Quality Analysis Memorandum for the Casa De Villa Apartments Project. May 6.

gas. GWP is based on several factors, including the relative effectiveness of a gas to absorb infrared radiation and the length of time that the gas remains in the atmosphere ("atmospheric lifetime").

The GWP of each gas is measured relative to CO_2, the most abundant GHG. The definition of GWP for a particular GHG is the ratio of heat trapped by one unit mass of the GHG to the ratio of heat trapped by one unit mass of CO_2 over a specified time period. GHG emissions are typically measured in terms of pounds or tons of "CO_2 equivalents" (CO_2e).

This section discusses the proposed project's potential impacts related to the release of GHG emissions for both construction and project operation.

Construction GHG Emissions. Construction activities, such as site preparation, site grading, on-site heavy-duty construction vehicles, equipment hauling materials to and from the project site, and motor vehicles transporting the construction crew would produce combustion emissions from various sources. During construction of the proposed project, GHGs would be emitted through the operation of construction equipment and from worker and builder supply vendor vehicles, each of which typically uses fossil-based fuels to operate. The combustion of fossil-based fuels creates GHGs such as CO_2, CH_4, and N_2O. Furthermore, CH_4 is emitted during the fueling of heavy equipment. Exhaust emissions from on-site construction activities would vary daily as construction activity levels change.

As discussed above, the SJVAPCD has developed screening criteria to determine whether a project requires an analysis of project-generated criteria air pollutants. If all the screening criteria are met by a proposed project, then the lead agency does not need to perform a detailed air quality assessment. For mid-rise apartment residential land uses, the SJVAPCD screening size is 225 units. For medical office building uses, the SJVAPCD screening size is 68,000 square feet. The proposed project would develop 40 multifamily units and a 3,000-square-foot commercial development, which would include medical/dental offices, general offices, or a laundromat. Therefore, based on the SJVAPCD's screening criteria, construction activities associated with the proposed project are not anticipated to result in substantial GHG emissions during construction.

Operational GHG Emissions. Long-term GHG emissions are typically generated from mobile sources (e.g., cars, trucks, and buses), area sources (e.g., maintenance activities and landscaping), indirect emissions from sources associated with energy consumption, waste sources (landfill and waste disposal), and water sources (water supply and conveyance, treatment, and distribution). Mobile-source GHG emissions would include project-generated vehicle trips to and from the project. Area-source emissions would be associated with activities such as landscaping and maintenance on the project site. Energy source emissions would be generated at off-site utility providers as a result of increased electricity demand generated by the project. Waste source emissions generated by the proposed project include energy generated by a landfill and other methods of disposal related to transporting and managing project-generated waste. In addition, water source emissions associated with the proposed project are generated by water supply and conveyance, water treatment, water distribution, and wastewater treatment.

As mentioned previously, for mid-rise apartment residential land uses, the SJVAPCD screening size is 225 units and 800 average daily vehicle trips, and for medical office building uses, the SJVAPCD

screening size is 68,000 square feet and 1,000 average daily vehicle trips. The proposed project would develop 40 multifamily units and a 3,000-square-foot commercial development, which would include medical/dental offices, general offices, or a laundromat. Based on trip generation rates identified in the project's Traffic Study, the proposed project would generate a total of 378 average daily trips, including 270 average daily trips associated with the residential uses and 108 average daily trips associated with the commercial uses.[17] Therefore, based on the SJVAPCD's screening criteria, operational activities associated with the proposed project would not generate significant GHG emissions that would have a significant effect on the environment. Impacts would be less than significant.

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

Less Than Significant Impact. Absent a local or regional Climate Action Plan, the proposed project was analyzed for consistency with the goals of the Scoping Plan, Executive Order (EO) B-30-15, Senate Bill (SB) 32, and Assembly Bill (AB) 197.

EO B-30-15 added the immediate target of reducing GHG emissions to 40 percent below 1990 levels by 2030. SB 32 affirms the importance of addressing climate change by codifying into statute the GHG emission reductions target of at least 40 percent below 1990 levels by 2030 contained in EO B-30-15. The CARB released the 2017 Scoping Plan,[18] to reflect the 2030 target set by EO B-30-15 and codified by SB 32. SB 32 builds on AB 32 and keeps us on the path toward achieving the State's 2050 objective of reducing emissions to 80 percent below 1990 levels. The companion bill to SB 32, AB 197, provides additional direction to the CARB related to the adoption of strategies to reduce GHG emissions. Additional direction in AB 197 intended to provide easier public access to air emissions data that are collected by CARB was posted in December 2016.

The 2022 Scoping Plan[19] assesses progress toward the statutory 2030 target, while laying out a path to achieving carbon neutrality no later than 2045. The 2022 Scoping Plan focuses on outcomes needed to achieve carbon neutrality by assessing paths for clean technology, energy deployment, natural and working lands, and others, and is designed to meet the State's long-term climate objectives and support a range of economic, environmental, energy security, environmental justice, and public health priorities.

The 2022 Scoping Plan focuses on building clean energy production and distribution infrastructure for a carbon-neutral future, including transitioning existing energy production and transmission infrastructure to produce zero-carbon electricity and hydrogen, and utilizing biogas resulting from wildfire management or landfill and dairy operations, among other substitutes. The 2022 Scoping Plan states that in almost all sectors, electrification will play an important role. The 2022 Scoping Plan evaluates clean energy and technology options and the transition away from fossil fuels, including adding four times the solar and wind capacity by 2045 and about 1,700 times the amount

17 Peters Engineering Group. 2023. Traffic Study – Casa De Villa Project. July 21.
18 California Air Resources Board (CARB). 2017. California's 2017 Climate Change Scoping Plan. November.
19 California Air Resources Board (CARB). 2022. 2022 Scoping Plan for Achieving Carbon Neutrality. December.

of current hydrogen supply. As discussed in the 2022 Scoping Plan, EO N-79-20 requires that all new passenger vehicles sold in California to be zero emission by 2035, and all other fleets will have transitioned to zero emission as fully possible by 2045, which will reduce the percentage of fossil fuel combustion vehicles.

Energy efficient measures are intended to maximize energy efficiency building and appliance standards, pursue additional efficiency efforts (including new technologies and new policy and implementation mechanisms), and pursue comparable investment in energy efficiency from all retail providers of electricity in California. Therefore, the energy measures would not be applicable to the proposed project. However, these measures are designed to expand the use of green building practices to reduce the carbon footprint of California's new and existing inventory of buildings. The proposed project would comply with the latest Title 24 CCR standards, established by the CEC and the City's current building code, regarding energy conservation and green building standards. As such, the proposed project would not conflict with the energy measures included in the 2022 Scoping Plan.

Water conservation and efficiency measures are intended to continue efficiency programs and use cleaner energy sources to move and treat water. Increasing the efficiency of water transport and reducing water use would reduce GHG emissions. As noted above, the project would comply with the California Green Building Standards Code (CALGreen) and Title 24 CCR, which includes a variety of different measures, including reduction of wastewater and water use. In addition, the proposed project would include low flow toilets, faucets, and drip irrigation. Therefore, the proposed project would not conflict with any of the water conservation and efficiency measures.

The goal of transportation and motor vehicle measures is to develop regional GHG emissions reduction targets for passenger vehicles. The second phase of the Pavley standards will reduce GHG emissions from new cars by 34 percent from 2016 levels by 2025, resulting in a 3 percent decrease in average vehicle emissions for all current vehicles. Specific regional emission targets for transportation emissions would not directly apply to the proposed project. However, vehicles traveling to the project site would comply with the Pavley II (LEV III) Advanced Clean Cars Program. Therefore, the proposed project would not conflict with the identified transportation and motor vehicle measures.

Therefore, the proposed project would comply with existing State regulations adopted to achieve the overall GHG emissions reduction goals identified in EO B-30-15, SB 32, and AB 197 and would be consistent with applicable plans and programs designed to reduce GHG emissions. Therefore, the proposed project would not conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of GHGs, and impacts would be less than significant.

3.9 HAZARDS AND HAZARDOUS MATERIALS

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☒	☐
b. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☐	☒	☐
c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☒	☐
d. Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☐	☒
e. For a project located within an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?	☐	☐	☒	☐
f. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☒	☐
g. Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	☐	☐	☒	☐

3.9.1 Impact Analysis

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

Less Than Significant Impact. Construction activities associated with the proposed project would involve the use of limited amounts of potentially hazardous materials, including but not limited to, solvents, paints, fuels, oils, and transmission fluids. However, all materials used during construction would be contained, stored, and handled in compliance with applicable standards and regulations established by the California Department of Toxic Substances Control (DTSC), the EPA, and the Occupational Safety and Health Administration (OSHA). The proposed project would construct 40 multifamily residential units and a 3,000-square-foot commercial development on the project site. Project operation would involve the use of small quantities of commercially available hazardous materials (e.g., paint, cleaning supplies) that could be potentially hazardous if handled improperly or ingested. However, these products are not considered acutely hazardous and are not generally considered unsafe. All storage, handling, and disposal of hazardous materials during project construction and operation would comply with applicable standards and regulations, including Selma General Plan Policy 4.38:

> **Policy 4.38:** To coordinate and cooperate with other local, state, and federal agencies with expertise and responsibility for all aspects of hazardous wastes.

As a result, the proposed project would not create significant hazards to the public or environment through the transport, use, or disposal of hazardous materials, and a less than significant impact would occur.

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

Less Than Significant Impact. See Response 3.9.1.a above. The proposed project would not use substantial amounts hazardous materials, the release of which would result in a significant hazard to the public or the environment. Additionally, the proposed project would include demolition of an existing residential unit and associated outbuildings. Demolition of the existing structures would comply with applicable DTSC, EPA, and OSHA regulations to address potential impacts related to asbestos exposure and release as well as with local regulations such as Selma General Plan Policy 4.38 (included in Response 3.9.1.a), which requires cooperation with local, State, and federal agencies for hazardous waste management.

As a result, the proposed project would not create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment, and impacts would be less than significant.

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

Less Than Significant Impact. The closest existing schools to the project site are Washington Elementary School, located approximately 0.2 mile northeast of the project site, and Eric White Elementary School, located approximately 0.25 mile northwest from the project site. As previously stated, the proposed project would not result in the use or emission of substantial quantities of hazardous materials that would pose a human or environmental health risk. In addition, all hazardous materials within the project site would be handled, stored, and disposed of in accordance with applicable standards and regulations. Therefore, because the proposed project would not result in the emission of hazardous materials or acutely hazardous substances, the impact would be less than significant.

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

No Impact. According to the DTSC EnviroStor database,[20] the project site is not located on a federal superfund site, State response site, voluntary cleanup site, school cleanup site, evaluation site,

[20] California Department of Toxic Substances Control (DTSC). 2023. EnviroStor. Website: http://www.envirostor.dtsc.ca.gov/?surl=lf8ae (accessed June 2023).

school investigation site, military evaluation site, tiered permit site, or corrective action site. The project site is not included on the list of hazardous materials sites compiled pursuant to Government Code Section 65962.5.[21] As a result, the proposed project would not create a significant hazard to the public or the environment, and there would be no impact.

e. Would the project be located within an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?

Less Than Significant Impact. The nearest airport to the project site includes the Selma Airport, which is located 2.15 miles northwest of the site. Additionally, the Reedley Municipal Airport is located approximately 12 miles northeast of the project site, and the Fresno Yosemite International Airport is located approximately 15 miles northwest of the project site. The nearest medical center helipad to the project site is located at the Fresno Community Regional Medical Center, approximately 15.5 miles northwest of the project site. The project site is not located within the airport land use plan for any airport.[22] Additionally, due to the distance between the project site and local airports and helipads, operations at these locations are not expected to pose a safety hazard for people residing or working in the project site. Therefore, the proposed project would not expose persons to airport-related hazards, and the potential impact would be less than significant.

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

Less Than Significant Impact. The California Emergency Services Act requires cities to prepare and maintain an Emergency Plan for natural, manmade, or war-caused emergencies that result in conditions of disaster or in extreme peril to life. The Selma General Plan includes goals and policies to establish and maintain a plan for responding to seismic disasters and for the provision of emergency services and policies to develop and adopt an Emergency Operations Plan. The proposed project would not result in any alterations of existing roadways that would permanently block the circulation of emergency response services or introduce elements that would conflict with the operations of a future Emergency Operations Plan. Additionally, emergency access to the project site would comply with City and Selma Fire Department (SFD) requirements. Therefore, the proposed project would not interfere with an emergency response plan or emergency evacuation plan in Selma, and this impact would be less than significant.

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

Less Than Significant Impact. Wildland fires occur in geographic areas that contain the types and conditions of vegetation, topography, weather, and structure density susceptible to risks associated

[21] California Environmental Protection Agency (CalEPA). 2018. Government Code Section 65962.5(a) Hazardous Waste and Substances Site List. Website: https://calepa.ca.gov/sitecleanup/corteselist/section-65962-5a/ (accessed June 2023).

[22] Fresno Council of Governments (Fresno COG). 2018. Fresno County Airport Land Use Compatibility Plan. December.

with uncontrolled fires that can be started by lightning, improperly managed campfires, cigarettes, sparks from automobiles, and other ignition sources. The project site is located in an area mapped as Local Responsibility Area (LRA) Unzoned, indicating that the area is urbanized and not susceptible to wildland conflagrations, and is not located within a very high fire hazard severity zone (VHFHSZ).[23] Therefore, the proposed project would not expose people or structures to a significant loss, injury, or death involving wildland fires, and the impact would be less than significant.

[23] California Department of Forestry and Fire Protection (CAL FIRE). 2022. Fresno County State Responsibility Area Fire Hazard Severity Zones. Website: https://osfm.fire.ca.gov/fire-hazard-severity-zones-maps-2022/ (accessed June 2023).

3.10 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 or otherwise substantially degrade surface or groundwater quality?	☐	☐	☒	☐
b. Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	☐	☐	☒	☐
c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:	☐	☐	☒	☐
i. Result in substantial erosion or siltation on- or off-site;	☐	☐	☒	☐
ii. Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;	☐	☐	☒	☐
iii. Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or	☐	☐	☒	☐
iv. Impede or redirect flood flows?	☐	☐	☐	☒
d. In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	☐	☐	☒	☐
e. Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	☐	☐	☒	☐

3.10.1 Impact Analysis

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

Less Than Significant Impact. The State Water Resources Control Board (SWRCB) and nine Regional Water Quality Control Boards (RWQCBs) regulate the water quality of surface water and groundwater throughout California. The proposed project is within the jurisdiction of the Central Valley RWQCB.

Construction. Pollutants of concern during construction include sediments, trash, petroleum products, concrete waste (dry and wet), sanitary waste, and chemicals. During project construction, there would be an increased potential to expose soils to wind and water erosion, which could result in temporary minimal increases in sediment load in nearby water bodies.

In compliance with the General Plan, any development project disturbing one or more acres of soil must obtain coverage under the General Permit for Discharges of Storm Water Associated with Construction Activity (Construction General Permit Order 2009-0009-DWQ). Construction activities subject to the Construction General Permit includes clearing, grading, and other ground-disturbing

activities such as stockpiling or excavation. The Construction General Permit requires development and implementation of a SWPPP.

A SWPPP includes features designed to eliminate contact of rainfall and stormwater runoff with sources of pollution that occur on construction sites, the main source being soil erosion resulting from unstabilized soils coming in contact with water and wind. These features are known as BMPs. Common BMPs to limit pollution in stormwater runoff from construction sites include maintaining or creating drainages to convey and direct surface runoff away from bare areas and installing physical barriers such as berms, silt fencing, waddles, straw bales, and gabions. Consistency with the Construction General Permit, including the SWPPP and BMPs, would ensure that project construction impacts on water quality would be less than significant.

Operation. Operation of the proposed project could result in surface water pollution associated with chemicals, liquid products, petroleum products (e.g., paints, solvents, and fuels), and waste that may be spilled or leaked and have the potential to be transported via runoff during periods of heavy precipitation into nearby water bodies.

Runoff from the project site would be directed towards drainage infrastructure located along Nebraska Avenue. Stormwater from the project site would be managed by the City. The City operates under the California Regional Water Quality Control Board Central Valley Regional National Pollutant Discharge Elimination System Permit and Waste Discharge Requirements General Permit for Storm Water Discharges from Small Municipal Separate Storm Sewer Systems (MS4) (Order No. 2013-0001-DWQ, as amended by Order WQ 2016-0069-EXEC; NPDES No. CAS000004). Consistent with the City's MS4 Permit, the project would implement water quality control BMPs consistent with requirements of the City and the California Stormwater Quality Association (CASQA) Best Management Practice Handbooks. Adherence to the City of Selma's MS4 Permit would reduce the potential for the discharge of pollutants during project operations, and impacts associated with the violation of water quality standards or waste discharge requirements would be less than significant.

Infiltration of stormwater could have the potential to affect groundwater quality. The majority of the project site would be impervious surface; therefore, it is not expected that stormwater would infiltrate during project operations. Because stormwater would be collected and diverted to the storm drain system, there is not a direct path for pollutants to reach groundwater. Therefore, project operations would not violate groundwater quality standards or waste discharge requirements, and impacts would be less than significant. Therefore, impacts associated with the proposed project would be less than significant.

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

Less Than Significant Impact. Selma underlies the Kings Subbasin, which is part of the greater San Joaquin Valley Groundwater Basin. Temporary dewatering from excavations could be necessary during construction. Construction-related dewatering would be temporary and limited to the area of excavations on the project site and would not substantially contribute to depletion of groundwater supplies. Operation of the project would not require groundwater extraction. Following project

implementation, there would be an increase in impervious surface area given that the project site would be mostly built out aside from landscaping along the perimeter of the project site and around the proposed residential and commercial buildings. An increase in impervious surface area decreases infiltration, which can decrease the amount of water that is able to recharge the aquifer/ groundwater. However, the stormwater from the project site would be collected and directed to the City's storm drain system, which includes infiltration facilities to replenish groundwater supplies in the basin. Therefore, the project would not impede the Central Valley RWQCB's ability to manage groundwater. Thus, this project would not substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that the project would impede sustainable management of the Kings Subbasin. Impacts would be less than significant.

Additionally, as discussed in the California Water Service (Cal Water) 2020 Urban Water Management Plan (UWMP), Selma District,[24] the City receives its water supply solely from groundwater. Historically, the groundwater supplies available to the Selma District from the underlying Kings Subbasin have always been sufficient to meet the Selma District's demands, and the Cal Water supply wells have not been depleted even during historical drought periods. In compliance with Sustainable Groundwater Management Act (SGMA) groundwater conservation requirements, the Selma District has developed integrated resource planning methods and prepared a portfolio of options to ensure long-term water reliability. Based on the maximum projected demand for the Selma District (i.e., 5,067 acre-feet per year [AFY] in 2045), the District would be able to cover projected water demands for the City even during multiple dry years. Therefore, the proposed project would not decrease groundwater supplies, interfere substantially with groundwater recharge, or impede sustainable groundwater management of the basin. The impact would be less than significant.

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

i. Result in substantial erosion or siltation on- or off-site;

Less Than Significant Impact. Construction of the proposed project would result in on-site grading that would expose native soils that could be subject to the effects associated with wind and water erosion unless adequate measures are taken to limit the transport of soils in surface water from the site to downstream locations.

Stormwater collection and disposal, and flood control for Selma is provided by the City. Stormwater from the project site would be directed through internal drainage infrastructure (e.g., manholes, culverts, catch basins) towards existing and proposed drainage infrastructure located along Nebraska Avenue. Stormwater from the project site would then be redirected towards the City's infiltration facilities.

[24] California Water Service (Cal Water). 2021. 2020 Urban Water Management Plan, Selma District. June. Website: https://www.calwater.com/docs/uwmp2020/SEL_2020_UWMP_FINAL.pdf (accessed June 2023).

As discussed previously, the Construction General Permit requires preparation of a SWPPP to identify construction BMPs to be implemented as part of the project to reduce impacts to water quality during construction, including those impacts associated with soil erosion and siltation. With compliance with the requirements in the Construction General Permit and implementation of the construction BMPs, construction impacts related to on- or off-site erosion or siltation would be less than significant.

Once operational, the proposed project would increase the amount of impervious surface on the project site, which would increase the volume of runoff during a storm that can more effectively transport sediments to receiving waters. The majority of the project site would be impervious surface area and not prone to on-site erosion or siltation because no exposed soil would be present in these areas. The remaining portion of the site would consist of pervious surface area, which would contain landscaping that would minimize on-site erosion and siltation by stabilizing the soil. Additionally, the Project Applicant would establish and maintain existing drainage patterns on the project site. Therefore, the proposed project would not alter the existing drainage pattern of the site or increase the rate or amount of surface runoff in a manner that would result in an impact related to substantial erosion or siltation either on site or off site. Impacts would be less than significant.

ii. Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;

Less Than Significant Impact. During construction, soil would be disturbed and compacted, and drainage patterns would be temporarily altered, which can increase the volume and velocity of stormwater runoff as well as increase the potential for localized flooding compared to existing conditions. As discussed above, the Construction General Permit requires the preparation of a SWPPP and implementation of construction BMPs to control and direct surface runoff on site. With adherence to the Construction General Permit, construction impacts related to altering the existing drainage pattern of the site or area or that increase the rate or amount of surface runoff in a manner that would result in flooding on site or off site would be less than significant.

While the project would permanently increase the impervious surface area in the project site, the project would be required to direct runoff towards existing and proposed drainage infrastructure along Nebraska Avenue. Proposed drainage infrastructure along Nebraska Avenue would be constructed per City standards as approved by the City Engineer. The Project Applicant would be required to pay applicable drainage fees to contribute to the City's storm drain fund, as described in Selma Municipal Code, Title IX, Chapter 9, which would be used for the acquisition or construction of planned drainage facilities. As such, the runoff from the project site would be able to be safely conveyed through proposed master plan drainage infrastructure on Nebraska Avenue. Additionally, the project would be required to maintain the existing drainage pattern of the site. Therefore, the project would not increase the rate or amount of surface runoff in a manner that would result in flooding either on site or off site, and impacts would be considered less than significant.

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

Less Than Significant Impact. During project construction, compliance with pre-existing regulatory requirements, including the Construction General Permit and implementation of a SWPPP, would reduce or eliminate the potential for project construction to cause substantial additional polluted runoff or runoff in excess of existing or planned stormwater drainage systems. Therefore, construction would not result in additional sources of polluted runoff to be discharged to the storm drain system, and impacts would be less than significant.

Once operational, the proposed project would result in an increase in impervious surfaces. However, compliance with existing regulatory requirements, including the MS4 Permit, would reduce or eliminate the potential for project operations to cause substantial additional polluted runoff or runoff in excess of existing or planned stormwater drainage systems. Additionally, pursuant to requirements of the Municipal Code, the Project Applicant would be required to pay a drainage fee to fund development of future drainage infrastructure in Selma. Therefore, project operations would not result in additional sources of polluted runoff to be discharged to the storm drain system, and impacts would be less than significant.

iv. Impede or redirect flood flows?

No Impact. The proposed project is not located within the 100-year flood hazard area as mapped by the Federal Emergency Management Agency (FEMA).[25] Therefore, the proposed project would not impede or redirect potential flood flows, and the proposed project would have no impact.

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

Less Than Significant Impact. The project site is not located in flood hazard, tsunami, or seiche zones. Refer to discussion 3.9.1.a in Section 3.9, Hazards and Hazardous Materials regarding the use of hazardous materials within the project site. As a result, a less than significant impact would occur related to the release of pollutants due to project inundation in flood hazard, tsunami, or seiche zones.

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

Less Than Significant Impact. Selma is located within the Kings Subbasin, which is part of the larger San Joaquin Valley Groundwater Basin. The planning documents regarding management of groundwater resources for Selma include Cal Water's Selma District 2020 UWMP, which promotes programs and policies to manage water supplies in Selma, including groundwater, and the Central

[25] Federal Emergency Management Agency (FEMA). 2020. FEMA Flood Map Service Center: Search By Address. Website: https://msc.fema.gov/portal/search?AddressQuery#searchresultsanchor (accessed June 2023).

Kings Groundwater Sustainability Agency (GSA) Groundwater Sustainability Plan[26], which establishes sustainability goals and measurable objectives to reduce and eventually eliminate systematic overdraft from the Kings Subbasin, and to ensure the long-term viability of groundwater resources. Because the project would not substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin, the proposed project would not conflict with or obstruct implementation of a sustainable groundwater management plan.

Additionally, the project falls within Central Valley RWQCB jurisdiction under the Water Quality Control Plan for the Tulare Lake Basin (Basin Plan)[27]. The Basin Plan addresses water quality concerns and identifies water quality objectives within the Tulare Lake Basin. As noted above, the proposed project would be required to adhere to National Pollutant Discharge Elimination System (NPDES) drainage control requirements during construction and operation as well as to MS4 Permit requirements for stormwater discharge into the Selma municipal system. The project would be required to comply with applicable federal, State, and local policies and requirements related to water quality control to ensure that Basin Plan goals are not obstructed. As a result, the proposed project would not conflict with the Basin Plan, the 2020 UWMP, or other water quality control plan or sustainable groundwater management plan. Impacts would be less than significant.

[26] Central Kings Groundwater Sustainability Agency. 2022. Groundwater Sustainability Plan in compliance with the Sustainable Groundwater Management Act. July 13. Website: https://ckgsa.org/groundwater-sustainability-plan/ (accessed June 2023).

[27] California Regional Water Quality Control Board, Central Valley Region. 2018. Water Quality Control Plan for the Tulare Lake Basin, Third Edition. May. Website: https://www.waterboards.ca.gov/centralvalley/water_issues/basin_plans/tularelakebp_201805.pdf (accessed June 2023).

3.11 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?	☐	☐	☐	☒
b. Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☒	☐

3.11.1 Impact Analysis

a. Would the project physically divide an established community?

No Impact. The physical division of an established community typically refers to the construction of a physical feature (e.g., an interstate highway or railroad tracks) or removal of a means of access (e.g., a local road or bridge) that would impair mobility within an existing community, or between a community and outlying areas. For instance, the construction of an interstate highway through an existing community may constrain travel from one side of the community to another; similarly, such construction may also impair travel to areas outside of the community.

The project site is located in a primarily developed area of Selma and is surrounded by Nebraska Avenue and a City of Selma dog park to the north, single-family residential uses to the south, residential and commercial uses to the east, and single-family and multi-family residential uses to the west. The proposed project would include the construction of 40 multifamily residential units and a 3,000-square-foot commercial development. The proposed project would not construct features that would physically divide an established community or remove means of access that would impair mobility in a community. Therefore, the proposed project would have no impact.

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

Less Than Significant Impact. The project site is designated Medium Low Density Residential in the City of Selma General Plan, which allows for a transition of housing types between higher density development and conventional single-family developments and is zoned within the One-Family Zone (R-1-7) district, which permits single-family dwellings and associated accessory buildings and structures. The project would require rezoning the project site from One-Family Zone (R-1-7) to Multiple-Family Zone (R-3) and Central Commercial Zone (C-2), and a General Plan Amendment from Medium Low Density Residential to High Density Residential and Community Commercial. The Project Applicant would need to submit a General Plan Amendment and Rezone application and comply with all of the City's associated requirements and fees. The impact of this land use change would be less than significant with implementation of the City's applicable requirements.

3.12 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?	☐	☐	☒	☐
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?	☐	☐	☒	☐

3.12.1 Impact Analysis

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?

Less Than Significant Impact. A review of the California Department of Conservation's Mines & Mineral Resource Related Data & Maps[28] indicates there are no known mineral resources in the Selma Planning Area. Additionally, the City of Selma General Plan does not identify mineral resource sites within the city. As such, the proposed project would not result in the loss of availability of known mineral resources, and impacts would be less than significant.

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?

Less Than Significant Impact. Please refer to Response 3.12.1.a. The proposed project would not result in the loss of availability of any known locally important mineral resource recovery sites. Therefore, the proposed project would have a less than significant impact.

[28] California Department of Conservation. n.d. DOC Maps: Mines and Mineral Resources. Website: https://maps.conservation.ca.gov/mineralresources/#datalist (accessed June 2023).

3.13 NOISE

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project result in:				
a. Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☒	☐	☐
b. Generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☒	☐
c. For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within 2 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?	☐	☐	☒	☐

3.13.1 Impact Analysis

a. Would the project result in generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

Less Than Significant with Mitigation Incorporated. Noise is usually defined as unwanted sound. Noise consists of any sound that may produce physiological or psychological damage and/or interfere with communication, work, rest, recreation, or sleep. Several noise measurement scales exist that are used to describe noise in a particular location. A decibel (dB) is a unit of measurement that indicates the relative intensity of a sound. Sound levels in dB are calculated on a logarithmic basis. An increase of 10 dB represents a 10-fold increase in acoustic energy, while 20 dB is 100 times more intense and 30 dB is 1,000 times more intense. Each 10 dB increase in sound level is perceived as approximately a doubling of loudness; and similarly, each 10 dB decrease in sound level is perceived as half as loud. Sound intensity is normally measured through the A-weighted sound level (dBA). This scale gives greater weight to the frequencies of sound to which the human ear is most sensitive. The A-weighted sound level is the basis for 24-hour sound measurements that better represent human sensitivity to sound at night.

As noise spreads from a source, it loses energy so that the farther away the noise receiver is from the noise source, the lower the perceived noise level would be. Geometric spreading causes the sound level to attenuate or be reduced, resulting in a 6 dB reduction in the noise level for each doubling of distance from a single point source of noise to the noise sensitive receptor of concern.

There are many ways to rate noise for various time periods, but an appropriate rating of ambient noise affecting humans also accounts for the annoying effects of sound. Equivalent continuous sound level (L_{eq}) is the total sound energy of time varying noise over a sample period. However, the predominant rating scales for human communities in the State of California are the L_{eq}, the Community Noise Equivalent Level (CNEL), and the day-night average noise level (L_{dn}) based on dBA.

CNEL is the time varying noise over a 24-hour period, with a 5 dBA weighting factor applied to the hourly L_{eq} for noises occurring from 7:00 p.m. to 10:00 p.m. (defined as relaxation hours) and 10 dBA weighting factor applied to noise occurring from 10:00 p.m. to 7:00 a.m. (defined as sleeping hours). L_{dn} is similar to the CNEL scale, but without the adjustment for events occurring during the evening relaxation hours. CNEL and L_{dn} are within 1 dBA of each other and are normally exchangeable. The noise adjustments are added to the noise events occurring during the more sensitive hours.

A project would have a significant noise effect if it would substantially increase the ambient noise levels for adjoining areas or conflict with adopted environmental plans and goals of applicable regulatory agencies, including, as appropriate, Selma.

The City of Selma addresses noise in the Noise Element of the General Plan[29] and in Title VI: Police Regulations, Chapter 17: Noise Regulations, of the Selma Municipal Code[30]. Listed below are objectives and policies related to noise that are presented in the Noise Element of the General Plan.

> **Policy 3.1:** It shall be deemed unlawful for any devices, appliances, equipment or vehicles on public or private property abutting noise sensitive land uses to operate between the weekday hours of 7:00 p.m. and 6:00 a.m. and between the weekend hours of 7:00 p.m. and 9:00 a.m.
>
> **Policy 3.2:** The City of Selma shall update its Noise Regulations (Title VI: Police Regulations, Chapter 17: Noise Regulations) to the following standards with regards to interior and exterior noise standards:

Exterior Noise Standards - Fixed Noise Level Standards, dBA		
Cumulative Number of minutes in any one-hour time period	Daytime 6 a.m. to 7 p.m.	Evening and Nightime 7 p.m. to 6 a.m.
30	50	45
15	55	50
5	60	55
1	65	60
0	70	65

Residential Interior Noise Standards Noise Level Standards, dBA		
Cumulative Number of minutes in any one-hour time period	Daytime 6 a.m. to 7 p.m.	Evening and Nightime 7 p.m. to 6 a.m.
5	45	35
1	50	40
0	55	45

> **Policy 3.3:** The City shall utilize the noise/land use compatibility standards in Figure 3-2 [of the General Plan] as a guide for future planning and development decisions.

[29] City of Selma. 2010. City of Selma General Plan Update 2035 General Plan Policies Statement. Website: https://cms9files.revize.com/selma/Document_Center/Department/Community%20development/Planning/General%20Plan%20And%20Planning%20Documents/General%20Plan/2035%20Selma%20General%20Plan%20-%20Policies%20Statement.pdf (accessed August 2023).

[30] City of Selma. 2023. City Code of Selma California. Website: https://codelibrary.amlegal.com/codes/selmaca/latest/selma_ca/0-0-0-11103 (accessed August 2023).

Policy 3.4: Areas within Selma shall be recognized as noise impacted if exposed to existing or projected future noise levels at the exterior of buildings in excess of 65 dB L_{dn} (or CNEL).

Policy 3.5: Noise sensitive land uses shall be discouraged in noise impacted areas unless effective mitigation measures are incorporated into the specific design of such projects to reduce exterior noise levels to 65 dB L_{dn} (or CNEL) or less and 45 dB L_{dn} (or CNEL) or less within interior living spaces.

Policy 3.6: The City shall enforce applicable State Noise Insulation Standards (California Administrative Code, Title 24) and Uniform Building Code (UBC) noise requirements.

Policy 3.7: Industrial, commercial or other noise generating land uses (including roadways, railroads, and airports) shall be discouraged if resulting noise levels will exceed 65 dB L_{dn} (or CNEL) at the boundary areas of planned or zoned noise sensitive land uses.

Policy 3.8: The City shall review all relevant development plans, programs and proposals to ensure their conformance with the policy framework outlined in this Noise Element.

Policy 3.9: The preferred method of noise control used is thoughtful site design. Secondarily, noise control should be achieved through the use of artificial noise barriers. Site and building design guidelines may include:

a. Noise sensitive land uses should not front onto the primary noise source. Where this is not possible, the narrow portion of the building should face the primary noise source, and the interior layout should locate the most sensitive areas away from the noise source by placing garages, storage facilities, carports or other such areas nearest the noise source.

b. Site design should permit noise to pass around or through a development. This can be achieved by placing the narrow or convex portion of the structure toward the primary noise source.

c. Commercial and industrial structures shall be designed so that any noise in excess of 65 dB L_{dn} (or CNEL) generated from the interior of the building is focused away from noise sensitive land uses.

d. Two story residential construction should be avoided, where possible, immediately adjacent to arterials or collectors unless adequate combinations of noise attenuation procedures are used.

e. When feasible, residential cul-de-sacs should be perpendicular to adjacent arterials or collectors.

f. Loading and unloading activities for commercial uses should be conducted in an enclosed loading dock, preferably with a positive seal between the loading dock and trucks.

Policy 3.10: Prior to the approval of a proposed development in a noise impacted area, or the development of an industrial, commercial or other noise generating land use in or near

an area containing existing or planned noise sensitive land uses, an acoustical analysis may be required if all of the following findings are made:

a. The existing or projected future noise exposure at the exterior of buildings which will contain noise sensitive uses or within proposed outdoor activity areas (patios, decks, backyards, pool areas, recreation areas, etc.) exceeds 65 dB L_{dn} (or CNEL).

b. Interior residential noise levels resulting from offsite noise are estimated to exceed 45 dBA.

c. Estimated or projected noise levels cannot be reduced to the noise exposure limitations specified in this Noise Element by the application of Standard Noise Reduction Methods.

Chapter 17: Noise Regulations, of the Selma Municipal Code establishes excessive noise guidelines and exemptions. Section 6-17-9 states that construction noise is exempted from City noise regulations provided such work takes place between the hours of 7:00 a.m. and 10:00 p.m. on any day.

Certain land uses are considered more sensitive to noise than others. Examples of these land uses include residential areas, educational facilities, hospitals, childcare facilities, and senior housing. The project site is surrounded by a mix of uses within a developed area of Selma, including residential, school, and industrial uses. The closest sensitive receptors to the project site include single-family residences located adjacent to the southern border of the project site and an apartment complex located adjacent to the western border of the project site.

The following sections describe how the short-term construction and long-term operational noise impacts of the proposed project would be less than significant with mitigation.

Short-Term (Construction) Noise Impacts. Project construction would result in short-term noise impacts on the nearby sensitive receptors. Maximum construction noise would be short term, generally intermittent depending on the construction phase, and variable depending on receiver distance from the active construction zone. The duration of noise impacts generally would be from 1 day to several days depending on the phase of construction. The level and types of noise impacts that would occur during construction are described below.

Short-term noise impacts would occur during grading and site preparation activities. Table A lists typical construction equipment noise levels (maximum instantaneous noise level [L_{max}]) recommended for noise impact assessments, based on a distance of 50 feet between the equipment and a noise receptor, obtained from the Federal Highway Administration (FHWA) Roadway Construction Noise Model. Construction-related short-term noise levels would be higher than existing ambient noise levels currently in the project area but would no longer occur once construction of the proposed project is completed.

Two types of short-term noise impacts could occur during construction of the proposed project. The first type involves construction crew commutes and the transport of construction equipment and materials to the project site, which would incrementally increase noise levels on roads leading to the

project site. As shown in Table A, there would be a relatively high single-event noise exposure potential at a maximum level of 84 dBA L_{max} with trucks passing at 50 feet.

The second type of short-term noise impact is related to noise generated during grading and construction on the project site. Construction is performed in discrete steps, or phases, each with its own mix of equipment and, consequently, its own noise characteristics. These various sequential phases would change the character of the noise generated on-site. Therefore, the noise levels vary as construction progresses. Despite the variety in the type and size of construction equipment, similarities in the dominant noise sources and patterns of operation allow construction-related noise ranges to be categorized by work phase.

Table A: Typical Construction Equipment Noise Levels

Equipment Description	Acoustical Usage Factor (%)	Maximum Noise Level (L_{max}) at 50 Feet[1]
Backhoes	40	80
Compactor (ground)	20	80
Compressor	40	80
Cranes	16	85
Dozers	40	85
Dump Trucks	40	84
Excavators	40	85
Flat Bed Trucks	40	84
Forklift	20	85
Front-end Loaders	40	80
Graders	40	85
Impact Pile Drivers	20	95
Jackhammers	20	85
Pick-up Truck	40	55
Pneumatic Tools	50	85
Pumps	50	77
Rock Drills	20	85
Rollers	20	85
Scrapers	40	85
Tractors	40	84
Welder	40	73

Source: Roadway Construction Noise Model (FHWA 2006).
Note: Noise levels reported in this table are rounded to the nearest whole number.
[1] Maximum noise levels were developed based on Spec 721.560 from the Central Artery/Tunnel (CA/T) program to be consistent with the City of Boston's Noise Code for the "Big Dig" project.
L_{max} = maximum instantaneous noise level

Table A lists maximum noise levels recommended for noise impact assessments for typical construction equipment, based on a distance of 50 feet between the equipment and a noise receptor. Typical noise levels range up to 88 dBA L_{max} at 50 feet during the noisiest construction phases. The preparation phase, which includes excavation and grading of the project site, tends to generate the highest noise levels because the noisiest construction equipment is earthmoving equipment. Earthmoving equipment includes excavating machinery such as backfillers, bulldozers, draglines, and front loaders. Earthmoving and compacting equipment includes compactors, scrapers, and graders. Typical operating cycles for these types of construction equipment may involve 1 or 2 minutes of full-power operation followed by 3 or 4 minutes at lower power settings.

Construction details (e.g., construction fleet activities) are not yet known; therefore, this analysis assumes that scrapers, bulldozers, and water trucks/pickup trucks would be operating simultaneously during construction of the proposed project. As discussed above, noise levels associated with this equipment operating simultaneously would be approximately 88 dBA L_{max} at 50 feet.

As noted above, the closest sensitive receptors to the proposed project include the single-family residences located immediately west of the project site and the single-family residential uses located immediately south of the project site. Based on building setbacks, the closest sensitive

receptors are the single-family residential buildings, which are approximately 20 feet from the project site's property line. Based on a reduction in noise of 6 dBA per doubling of distance, there would be in increase of approximately 8 dBA from the active construction area to the nearest residences. However, these residences have a wood fence, which would reduce noise levels by approximately 5 dBA. Therefore, the closest off-site sensitive receptors may be subject to short-term construction noise reaching 91 dBA L_{max} when construction is occurring. However, construction equipment would operate at various locations within the 3.29-acre project site and would only generate maximum noise levels when operations occur closest to the receptor.

Construction noise is permitted by the City when activities occur between the hours of hours of 7:00 a.m. and 10:00 p.m. In addition, Mitigation Measure NOI-1 would be required to limit construction activities to the permitted hours and would reduce potential construction period noise impacts for the indicated sensitive receptors to less than significant levels.

Mitigation Measure NOI-1 The project contractor shall implement the following measures during construction of the project:

- Equip all construction equipment, fixed or mobile, with properly operating and maintained mufflers consistent with manufacturers' standards.
- Place all stationary construction equipment so that emitted noise is directed away from sensitive receptors nearest the active project site.
- Locate equipment staging in areas that would create the greatest possible distance between construction-related noise sources and noise-sensitive receptors nearest the active project site during all construction activities.
- Ensure that all general construction-related activities are restricted to between the hours of 7:00 a.m. and 10:00 p.m.
- Designate a "disturbance coordinator" at the City of Selma who would be responsible for responding to any local complaints about construction noise. The disturbance coordinator would determine the cause of the noise complaint (e.g., starting too early, bad muffler) and would determine and implement reasonable measures warranted to correct the problem.

Implementation of Mitigation Measure NOI-1 would limit construction activities to the less noise-sensitive periods of the day and would reduce construction impacts to a level of less than significant with mitigation.

Long-Term Operational Noise Impacts. Motor vehicles with their distinctive noise characteristics are the dominant noise source in the project vicinity. The amount of noise varies according to many

factors, such as volume of traffic, vehicle mix (percentage of cars and trucks), average traffic speed, and distance from the observer. Implementation of the proposed project would result in new daily trips on local roadways in the project site vicinity. A characteristic of sound is that a doubling of a noise source is required in order to result in a perceptible (3 dBA or greater) increase in the resulting noise level.

As discussed below in Section 3.17, Transportation, the proposed project would generate approximately 378 daily trips. The adjacent Nebraska Avenue currently carries approximately 5,530 average daily trips.[31] Therefore, project daily trips would not result in a doubling of traffic volumes along any roadway segment in the project vicinity and would not result in a perceptible increase in traffic noise levels at receptors in the project vicinity.

In addition, with implementation of the proposed project, there would be an increase in activity at the project site. The project site itself is located in a developed area of Selma and bounded by Nebraska Avenue and a City of Selma dog park to the north, residential uses to the south, residential and commercial uses to the east, and residential uses to the west. Noise from the proposed project would be similar to existing conditions and would generally include noise from vehicles, air conditioner units, and other similar equipment. Due to its location near other residential and commercial land uses, it is not expected that the proposed project would result in a perceptible increase in noise to surrounding land uses. Therefore, it is not expected that the proposed project would substantially increase noise levels over existing conditions. Operation of the proposed project would result in similar noise levels as existing conditions and, therefore, it is not expected that the proposed project would substantially increase noise levels over existing conditions, and impacts would be less than significant.

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

Less Than Significant Impact. Vibration refers to groundborne noise and perceptible motion. Groundborne vibration is almost exclusively a concern inside buildings and is rarely perceived as a problem outdoors. Vibration energy propagates from a source, through intervening soil and rock layers, to the foundations of nearby buildings. The vibration then propagates from the foundation throughout the remainder of the structure. Building vibration may be perceived by the occupants as the motion of building surfaces, rattling of items on shelves or hanging on walls, or as a low-frequency rumbling noise. The rumbling noise is caused by the vibrating walls, floors, and ceilings radiating sound waves. Annoyance from vibration often occurs when the vibration exceeds the threshold of perception by 10 dB or less. This is an order of magnitude below the damage threshold for normal buildings.

Typical sources of groundborne vibration are construction activities (e.g., pavement breaking and operating heavy-duty earthmoving equipment), and occasional traffic on rough roads. In general, groundborne vibration from standard construction practices is only a potential issue when within 25 feet of sensitive uses. Groundborne vibration levels from construction activities very rarely reach levels that can damage structures; however, these levels are perceptible near the active

[31] Peters Engineering Group. 2023. Traffic Study – Casa De Villa Project. July 21

construction site. With the exception of old buildings built prior to the 1950s or buildings of historic significance, potential structural damage from heavy construction activities rarely occurs. When roadways are smooth, vibration from traffic (even heavy trucks) is rarely perceptible.

The streets surrounding the project area are paved, smooth, and unlikely to cause significant groundborne vibration. In addition, the rubber tires and suspension systems of buses and other on-road vehicles make it unusual for on-road vehicles to cause groundborne noise or vibration problems. It is, therefore, assumed that no such vehicular vibration impacts would occur and, therefore, no vibration impact analysis of on-road vehicles is necessary. Therefore, once constructed, the proposed project would not contain uses that would generate groundborne vibration. This impact would be less than significant.

Construction Vibration. Construction of the proposed project could result in the generation of groundborne vibration. This construction vibration impact analysis discusses the level of human annoyance using vibration levels in vibration velocity decibels (VdB) and will assess the potential for building damages using vibration levels in peak particle velocity (PPV) measured in inches per second (in/sec) because vibration levels calculated in root-mean-square (RMS) are best for characterizing human response to building vibration, while vibration level in PPV is best used to characterize potential for damage. The Federal Transit Administration (FTA) Transit Noise and Vibration Impact Assessment guidelines indicate that a vibration level up to 102 VdB (equivalent to 0.5 in/sec in PPV) is considered safe for buildings consisting of reinforced concrete, steel, or timber (no plaster), and would not result in any construction vibration damage. For a non-engineered timber and masonry building, the construction vibration damage criterion is 94 VdB (0.2 in/sec in PPV).

Table B shows the PPV and VdB values at 25 feet from a construction vibration source. As shown in Table B, bulldozers and other heavy-tracked construction equipment (except for pile drivers and vibratory rollers) generate approximately 87 VdB of groundborne vibration when measured at 25 feet, based on the Transit Noise and Vibration Impact Assessment. At this level, groundborne vibration would result in potential annoyance to residents and workers but would not cause any damage to the buildings.

Construction vibration, similar to vibration from other sources, would not have any significant effects on outdoor activities (e.g., those outside of residences and commercial/office buildings in the project vicinity). Outdoor site preparation for the proposed project is expected to include the use of bulldozers and loaded trucks. The greatest levels of vibration are anticipated to occur during the site preparation phase. All other phases are expected to result in lower vibration levels. The distance to the nearest buildings for vibration impact analysis is measured between the nearest off-site buildings and the project boundary (assuming the construction equipment would be used at or near the project boundary) because vibration impacts occur normally within the buildings. The formula for vibration transmission is provided below.

$$L_v dB\ (D) = L_v dB\ (25\ ft) - 30\ Log\ (D/25)$$

$$PPV_{equip} = PPV_{ref} \times (25/D)^{1.5}$$

Table B: Vibration Source Amplitudes for Construction Equipment

Equipment	Reference PPV/L_V at 25 feet	
	PPV (in/sec)	L_V (VdB)[1]
Pile Driver (Impact), Typical	0.644	104
Pile Driver (Sonic), Typical	0.170	93
Vibratory Roller	0.210	94
Hoe Ram	0.089	87
Large Bulldozer	0.089	87
Caisson Drilling	0.089	87
Loaded Trucks	0.076	86
Jackhammer	0.035	79
Small Bulldozer	0.003	58
Pile Driver (Impact), Typical	0.644	104

Source: Transit Noise and Vibration Impact Assessment (FTA 2018).
Note: Noise levels reported in this table are rounded to the nearest whole number.
[1] RMS vibration velocity in decibels (VdB) is 1 µin/sec.
µin/sec = micro-inches per second
FTA = Federal Transit Administration
in/sec = inches per second
L_V = velocity in decibels
PPV = peak particle velocity
RMS = root-mean-square
VdB = vibration velocity decibels

As shown in Table B, for typical construction activity, the equipment with the highest vibration generation potential is the large bulldozer, which would generate 87 VdB at 25 feet. As noted above, the closest sensitive receptors to the proposed project include the single-family residences located immediately west of the project site and the single-family residential uses located immediately south of the project site. Based on building setbacks, the closest building to the project site includes the single-family residence immediately west of the project site and the commercial construction east of the project site boundary. These receptors are approximately 20 feet from project construction activities. At 20 feet, these receptors would experience vibration levels of up to 90 VdB (0.124 PPV [in/sec]), which would not exceed the FTA threshold of 94 VdB (0.2 in/sec PPV) for non-engineered timber and masonry building damage when bulldozers and loaded trucks operate at or near the project construction boundary. Although construction vibration levels at surrounding uses would have the potential to result in annoyance, these vibration levels would no longer occur once construction of the project is completed and impacts would be considered less than significant.

c. For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within 2 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?

Less Than Significant Impact. The nearest airport to the project site includes the Selma Airport, which is located 2.15 miles northwest of the site. Additionally, the Reedley Municipal Airport is located approximately 12 miles northeast of the project site, and the Fresno Yosemite International Airport is located approximately 15 miles northwest of the project site. The nearest medical center helipad to the project site is located at the Fresno Community Regional Medical Center, approximately 15.5 miles northwest of the project site. The project site is not located within the

airport land use plan for any airport.[32] Additionally, due to the distance between the project site and local airports and helipads, project implementation would not expose people residing or working in the project area to excessive noise levels, and a less than significant impact would occur.

32 Fresno Council of Governments (Fresno COG). 2018. Fresno County Airport Land Use Compatibility Plan. December.

3.14 POPULATION AND HOUSING

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

3.14.1 Impact Analysis

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

Less Than Significant Impact. The project site is designated Medium Low Density Residential in the City of Selma General Plan, which allows for a transition of housing types between higher density development and conventional single-family developments and is zoned within the One-Family Zone (R-1-7) district, which permits single-family dwellings and associated accessory buildings and structures. The project would require rezoning the project site from One-Family Zone (R-1-7) to Multiple-Family Zone (R-3) and Central Commercial Zone (C-2), and a General Plan Amendment from Medium Low Density Residential to High Density Residential and Community Commercial. The project site currently has one residence, which would be removed.

Although the project site is currently zoned and designated for residential use, the proposed rezoning and General Plan Amendment would introduce higher-density residential uses on the site as well as commercial development. Therefore, implementation of the proposed project would potentially result in an increase in unplanned population growth in Selma.

The proposed project would introduce 40 residential units into the project site, which would increase population in the project site by approximately 136 residents.[33,34] The addition of 136 new residents represents approximately 0.6 percent of Selma's 2020 population of 24,674.[35] As such, population growth in the area as a result of residential land uses would be negligible.

[33] Based on an average of 3.40 persons per household in Selma as identified by the Census Bureau.
[34] United States Census Bureau. QuickFacts. Selma City, California. Website: https://www.census.gov/quickfacts/selmacitycalifornia (accessed June 2023).
[35] Ibid.

The proposed project would also include a 3,000-square-foot commercial development within the northeastern portion of the site proposed for rezoning to Central Commercial Zone (C-2). The commercial uses would include medical/dental offices, general offices, or a laundromat.

To determine if employment opportunities associated with the project would result in significant unplanned population growth, an analysis of the City's employment-to-household ratio was prepared. The 2022 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) prepared by the Fresno Council of Governments (Fresno COG) determined that a jurisdiction is considered housing rich if the employment-to-household ratio is less than 1.10 jobs for every household, and job rich if the ratio is above 1.30 jobs for every household.[36] The City of Selma had an employment-to-household ratio of 0.83 in 2020, indicating that the city is "job poor," and employment opportunities within the City's jurisdiction are likely to be occupied by residents of Selma.[37] As such, it is likely that employment opportunities produced by the proposed project would be taken by existing residents in the project area, and prospective employees would likely not need to move to Selma from adjacent jurisdictions. Therefore, unplanned population growth in the area as a result of the proposed commercial land uses would likely be negligible.

All of the required utilities' infrastructure, including sewer and water facilities and storm drains, exist in the immediate vicinity of the project site and would be extended to the project site. These existing utility and service systems have adequate capacity to serve the proposed project (refer to Section 3.19, Utilities and Service Systems, below). Therefore, the proposed project would not result in significant population growth as a result of project implementation. Impacts would be less than significant.

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

Less Than Significant Impact. The proposed project would include the removal of one existing residence and associated out buildings on the project site. The removal of these structures would not displace a substantial number of people or residences from the site. Furthermore, the proposed project would introduce 40 new residential units into the project site. Therefore, the proposed project would not displace a substantial number of existing people or housing, thereby requiring the construction of replacement housing. The impact would be less than significant.

[36] Fresno Council of Governments, 2022. Draft Program Environmental Impact Report for the 2022 Regional Transportation Plan and Sustainable Communities Strategy. Pg. 3-403. April 15.

[37] Fresno Council of Governments (Fresno COG). 2020. Fresno County 2019-2050 Growth Projections. Website: https://agendas.fresnocog.org/itemAttachments/604/Fresno_COG_2019_2050_Projections_Draft_Report_101920.pdf (accessed June 2023)

3.15 PUBLIC SERVICES

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a. Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
i. Fire protection?	☐	☐	☒	☐
ii. Police protection?	☐	☐	☒	☐
iii. Schools?	☐	☐	☒	☐
iv. Parks?	☐	☐	☒	☐
v. Other public facilities?	☐	☐	☒	☐

3.15.1 Impact Analysis

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

i. Fire protection?

Less Than Significant Impact. The SFD would provide fire protection services to the proposed project. The SFD operates out of two fire stations and provides service for a population of approximately 24,000 people. Staffing consists of 21 full-time personnel including the fire chief, fire marshal, and 19 firefighting personnel.[38] The nearest fire station to the site is Fire Station 1, which is located at 1927 West Front Street, approximately 0.6 mile northeast from the project site. Planned growth under the General Plan would increase calls for fire protection service in Selma. The proposed project would include the construction of 40 multifamily residential units and a 3,000-square-foot commercial development in the project site. The Project Applicant would need to submit a General Plan Amendment and rezone application and comply with all associated requirements and fees. The project would be consistent with the General Plan after implementation of the General Plan Amendment and rezoning requirements.

As discussed above in Section 3.14, Population and Housing, the proposed project would result in an incremental increase in the population of Selma; therefore, the project could incrementally increase the demand for fire protection services. However, the proposed project would be required to comply with all applicable codes for fire safety and emergency access.

[38] City of Selma. n.d. Fire. Welcome To The Selma Fire Department. Website: https://www.cityofselma.com/departments/fire/index.php (accessed June 2023).

In addition, the Project Applicant would be required to submit plans to the SFD for review and approval prior to the issuance of building permits to ensure the project would conform to applicable building codes. Furthermore, the Project Applicant would be required to pay a Development Impact Fee, pursuant to Title XII, Chapter 2 of the Selma Municipal Code, meant to mitigate unfavorable impacts to public facilities attributed to new development. This fee would cover the costs associated with construction of new fire service facilities needed in Selma.

The SFD would continue providing services to the project site and would not require additional firefighters to serve the proposed project. The construction of a new or expanded fire station would not be required. The proposed project would not result in a significant impact on the physical environment due to the incremental increase in demand for fire protection and life safety services. The incremental increase in demand for services is not expected to adversely affect existing responses times to the site or within the City. Therefore, construction and operation of the proposed project would have a less than significant impact on fire protection.

ii. Police protection?

Less Than Significant Impact. The Selma Police Department (SPD) would provide police protection services to the proposed project. The SPD serves a population of approximately 25,000 people and is staffed with 39 sworn officers and 13 non-sworn personnel. The SPD station is located at 2055 3rd Street, approximately 0.73 mile northeast from the project site. Planned growth under the General Plan would increase calls for police protection service in Selma. The Project Applicant would need to submit a General Plan Amendment and rezone application and comply with all associated requirements and fees. The project would be consistent with the General Plan after implementation of the General Plan Amendment and rezoning requirements.

The project could result in an incremental increase in the demand for police protection services. The Project Applicant would be required to pay a Development Impact Fee, pursuant to Title XII, Chapter 2 of the Selma Municipal Code, to account for the potential impacts to police protection services.

The SPD would continue to provide services to the project site and would not require additional officers to serve the project site. The construction of new or expanded police facilities would not be required. Therefore, the proposed project would not result in a substantial adverse impact associated with the provision of additional police facilities or services and impacts to police protection would represent a less than significant impact.

iii. Schools?

Less Than Significant Impact. The project site is located within the Selma Unified School District (SUSD). The SUSD serves a population of approximately 6,001 students from Transitional Kindergarten through 12th grade. The SUSD comprises 11 school sites, including 8 elementary

schools, 1 middle school, 1 high school, and 1 alternative school campus.[39] Planned growth under the General Plan would increase demand for school services. The Project Applicant would need to submit a General Plan Amendment and rezone application and comply with all associated requirements and fees. The project would be consistent with growth under the General Plan after implementation of the General Plan Amendment and rezoning requirements.

The proposed project would increase the demand for school services in the vicinity. The Project Applicant would be required to pay appropriate school developer fees at the time building permit are obtained to address potential impacts to SUSD services, as set forth in Education Code Section 17620, pursuant to Government Code 65995. These fees would be directed towards maintaining adequate service levels, which would ensure that any impact to schools that could result from the proposed project would be offset by development fees, and in effect, reduce potential impacts to a less than significant level.

The SUSD would continue to provide services to the project site and would not require the construction of new or expanded school facilities. Therefore, the proposed project would not result in a substantial adverse impact associated with the provision of additional school facilities or services, and impacts related to increased demand for school services would represent a less than significant level.

iv. Parks?

Less Than Significant Impact. The proposed project would construct 40 multifamily residential units and a 3,000-square-foot commercial development. Additionally, the project would include the construction of picnic and play facilities in the project site. Planned growth under the General Plan would increase demand for parks in Selma. The Project Applicant would need to submit a General Plan Amendment and rezone application and comply with all associated requirements and fees. The project would be consistent with growth under the General Plan after implementation of the General Plan Amendment and rezoning requirements.

The proposed project could increase the demand for park services and nearby recreational facilities. However, the project would include the construction of private play areas that would offset the demand for public parks in the project vicinity. Furthermore, the Project Applicant would be required to pay a Parks and Recreation Fee, pursuant to Title IX, Chapter 6, Section 9-6-9.02 of the Municipal Code, at the time building permits are obtained. Therefore, the proposed project would not result in a substantial adverse impact associated with the provision of additional park facilities, and impacts to parks would represent a less than significant impact.

v. Other public facilities?

Less Than Significant Impact. Planned growth under the General Plan would increase the demand for public facilities in Selma. The Project Applicant would need to submit a General Plan Amendment and rezone application and comply with all associated requirements and fees. The

[39] Selma Unified School District (SUSD). Supplement to the Annual Update to the 2021-22 Local Control and Accountability Plan.

project would be consistent with growth under the General Plan after implementation of the General Plan Amendment and rezoning requirements. The General Plan was designed to accommodate anticipated growth under the typical development scenario by providing adequate services, access, and infrastructure. The population increase generated by the proposed project would incrementally increase demand for other public services, including libraries, community centers, and public health care facilities. However, as discussed in Section 3.14, Population and Housing, the proposed project would represent a negligible population increase of approximately 0.6 percent in the City of Selma, based on existing population. The proposed project would not result in a significant impact on the physical environment due to the incremental increase in demand for public facilities and the incremental increase in demand is not expected to require the construction of new or expanded school facilities. Additionally, the Project Applicant would be required to pay applicable development impact fees. As such, the impact would be less than significant.

3.16 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?	☐	☐	☒	☐
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?	☐	☐	☒	☐

3.16.1 Impact Analysis

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?

Less Than Significant Impact. The proposed project would construct 40 multifamily residential units and a 3,000-square-foot commercial development. Additionally, the project would include the construction of picnic and play facilities in the project site. The development of the project would result in population growth that could increase the demand for nearby recreational facilities. The Project Applicant would be required to pay a Parks and Recreation Fee, pursuant to Title IX, Chapter 6, Section 9-6-9.02 of the Municipal Code, at the time building permits are obtained. The impact fee would serve to offset project impact on existing recreational facilities. Therefore, the impact would be less than significant.

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?

Less Than Significant Impact. The project would include the construction of picnic and play facilities in the project site. Development of the proposed project and associated recreational opportunities for use by users of the project site would not result in additional environmental effects beyond those described in this document. The potential environment effects resulting from construction of play facilities within the project site is included in the analysis included in this Initial Study/Mitigated Negative Declaration (IS/MND). As described herein, physical effects of the project would be less than significant.

3.17 TRANSPORTATION

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

3.17.1 Impact Analysis

The following discussion is based on the Traffic Study[40] prepared for the proposed project, which is included as Appendix D.

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

Less Than Significant Impact. While level of service (LOS) analysis is no longer a criterion of significance for traffic impacts under CEQA, the City of Selma 2035 General Plan includes policies that utilize LOS to determine project conditions of approval. As such, this analysis includes LOS impacts while VMT impacts are discussed in Response 3.17.1.b below.

The City of Selma 2035 General Plan identifies an LOS standard of D or better for intersections and roadway segments on Minor Collectors, Collectors, Arterials, Major Arterials, and Highways in the City. For local streets, the LOS standard is B or better. For the purposes of this analysis, an operational deficiency would occur when the project causes an unsatisfactory condition (deterioration from LOS A through D to LOS E or F) for intersections, or when the project increases the average delay for a study intersection already operating at a deficient LOS (LOS E or F) by 0.5 second or more.

The Traffic Study prepared for the project examined traffic operations in the vicinity of the proposed project under the following five scenarios:

- Existing Conditions
- Existing Plus Project Conditions
- Near-Term with Project Conditions

[40] Peters Engineering Group. 2023. Traffic Study – Casa De Villa Project.

- Cumulative 2044 No Project Conditions
- Cumulative 2044 With Project Conditions

Traffic conditions were examined for the weekday daily, AM, and PM peak-hour conditions. The AM peak hour is defined as the single hour of highest traffic volumes occurring between 7:00 a.m. and 9:00 a.m. The PM peak hour is the single hour of highest traffic volumes occurring between 4:00 p.m. and 6:00 p.m. The study area for the Traffic Study included the following study intersections for the LOS and queuing analysis:

- Highland Avenue (State Route 43 [SR-43])/Nebraska Avenue
- Mitchell Avenue/Nebraska Avenue
- Thompson Avenue/Nebraska Avenue

Under existing conditions, all intersections are operating at LOS D or better in the AM and PM peak hours.

Project Trip Generation. To assess potential impacts that the project may have on the surrounding roadway network, the first step was to determine project trip generation. Trip generation counts primary trips, which are vehicle trips that are generated for the primary purpose of using the development. The proposed project's trip generation estimates are based on the 11th Edition of the Institute of Transportation Engineers (ITE) Trip Generation Manual. The Traffic Study analyzed the subject property under ITE Code 220 [Multifamily Housing (Low-Rise)] and Code 720 (Medical-Dental Office Building – Stand Alone).

Applying the factors outlined in the ITE Trip Generation Manual, the proposed project would generate 378 average daily trips, including 26 vehicle trips during the AM peak hour and 32 vehicle trips during the PM peak hour.

Intersection Capacity Analysis. Synchro 11 was used to determine LOS of study intersections under all study scenarios and to determine the 95th percentile projected queue lengths at study intersections to assess the adequacy of the turn-lane storage lengths.

Under existing conditions, all study intersections would operate with acceptable calculated 95th percentile queues and at acceptable LOS D or better for both AM and PM peak hours. Additionally, under existing plus project conditions, all study intersections would continue to operate with acceptable calculated 95th percentile queues and at acceptable LOS D or better for both AM and PM peak hours.

Under the near term with project conditions, the Mitchell Avenue/Nebraska Avenue and Thompson Avenue/Nebraska Avenue intersections would continue to operate at an acceptable LOS D or better with acceptable calculated 95th percentile queues. The Highland Avenue/Nebraska Avenue intersection would continue to operate at an acceptable LOS D or better during the AM peak hour but would operate at an unacceptable LOS F during the PM peak hour.

Under cumulative 2044 no project conditions, the Mitchell Avenue/Nebraska Avenue and Thompson Avenue/Nebraska Avenue intersections would operate at an acceptable LOS D or better with

acceptable calculated 95th percentile queues. The Highland Avenue/Nebraska Avenue intersection would operate at an acceptable LOS D or better during the AM peak hour but would operate at an unacceptable LOS F during the PM peak hour.

Under cumulative 2044 with project conditions, the Mitchell Avenue/Nebraska Avenue and Thompson Avenue/Nebraska Avenue intersections would continue to operate at an acceptable LOS D or better with acceptable calculated 95th percentile queues. The Highland Avenue/Nebraska Avenue intersection would continue to operate at an acceptable LOS D or better during the AM peak hour but would operate at an unacceptable LOS F during the PM peak hour. As such, the project would contribute to existing unacceptable LOS at the Highland Avenue/Nebraska Avenue intersection during the PM peak hour.

In order to operate at acceptable LOS under the near term with project and cumulative 2044 with project scenarios, the Highland Avenue/Nebraska Avenue intersection would need to be widened as follows:

- **Eastbound:** one left-turn lane, one through lane, and one right-turn lane
- **Westbound:** one left-turn lane and one shared through/right-turn lane
- **Northbound:** one left-turn lane and two through lanes with a shared right-turn lane (same as existing)
- **Southbound:** one left-turn lane and two through lanes with a shared right-turn lane (same as existing).

With implementation of recommended improvements, all study intersections would operate at acceptable LOS. As described in Section 13.0 of the Traffic Study, where required improvements for the cumulative conditions are not included in a traffic impact fee, the project's financial responsibility for the improvements can be determined based on equitable share calculations. Based on the equitable share responsibility calculations for the recommended cumulative 2044 improvements, the Project Applicant would be required to pay 0.5 percent of the equitable share for cumulative 2044 improvements to the Highland Avenue/Nebraska Avenue intersection. Therefore, with implementation of Mitigation Measure TRA-1, which requires the Project Applicant to pay the equitable share, all study intersections are forecast to operate at a satisfactory LOS. With implementation of Mitigation Measure TRA-1, impacts to the study intersections' LOS would be less than significant with mitigation incorporated.

Mitigation Measure TRA-1 The Project Applicant shall pay the project's equitable share for improvements to widen the Highland Avenue/Nebraska Avenue intersection to ensure that it operates at adequate level of service (LOS).

In addition, the proposed project would implement the following features: construct site frontage improvements along Nebraska Avenue to include curb, gutter, and sidewalk; provide adequate ingress and egress to and from the project site as represented in the Site Plan with driveways; and provide on-site bike racks/bike lockers and pedestrian accessibility to all proposed buildings and off-

site sidewalk. Additionally, the project would not conflict with the implementation of planned pedestrian and bicycle facilities pursuant to the City's Active Transportation Plan.

Summary. As described above, the addition of project traffic is anticipated to exceed the City's level of significance threshold of LOS (LOS D or better) along the Highland Avenue/Nebraska Avenue intersection. However, implementation of Mitigation Measure TRA-1, which would require the Project Applicant to pay the equitable share percentage for recommended improvements to widen the Highland Avenue/Nebraska Avenue intersection, would reduce significant LOS impacts along study intersections and they would operate at acceptable LOS levels. In addition, the project-related traffic would not result in a deficiency to existing transit, roadway, bicycle, and pedestrian facilities. Therefore, the proposed project would not conflict with any plan, ordinance, or policy establishing measures of effectiveness for the performance of the circulation system or congestion management program. Impacts would be less than significant with mitigation incorporated.

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

Less Than Significant Impact. SB 743 requires that relevant CEQA analysis of transportation impacts be conducted using a metric known as VMT instead of LOS. VMT measures how much actual auto travel (additional miles driven) a proposed project would create on California roads. If the project adds excessive car travel onto our roads, the project may cause a significant transportation impact.

The *State CEQA Guidelines* were amended to implement SB 743 by adding Section 15064.3. Among its provisions, Section 15064.3 confirms that, except with respect to transportation projects, a project's effect on automobile delay shall not constitute a significant environmental impact. Therefore, LOS measures of impacts on traffic facilities are no longer a relevant CEQA criterion for transportation impacts.

The Governor's Office of Planning and Research (OPR) created a Technical Advisory in December 2018[41] as guidance for evaluating VMT impacts. The Fresno COG prepared the Fresno County SB 743 Implementation Regional Guidelines dated January 2021 (COG Guidelines)[42] that includes substantial evidence for local significance criteria.

The City adopted the COG Guidelines on November 15, 2021. Based on the criteria in the COG Guidelines, projects generating fewer than 500 trips per day would screen out of conducting a detailed VMT analysis. As described under Response 3.16.1.a, the proposed project would generate 378 average daily trips. Since the proposed project would generate fewer than 500 trips per day, the project would result in a less than significant VMT impact and is consistent with *State CEQA Guidelines* Section 15064.3(b).

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41 State of California, Governor's Office of Planning and Research (OPR). 2018. Technical Advisory on Evaluating Transportation Impacts in CEQA. December. Website: https://opr.ca.gov/docs/20190122-743_Technical_Advisory.pdf (accessed June 2023).

42 Fresno Council of Governments (Fresno COG). 2021. Fresno County SB 743 Implementation Regional Guidelines. January. Website: https://fresnocog.wpenginepowered.com/wp-content/uploads/2021/01/Fresno-COG-VMT-Report_01-08-2021.pdf (accessed June 2023).

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

Less Than Significant Impact. Vehicle access to the project site would be provided on Nebraska Avenue. The proposed driveway on the western portion of the site would be gated, and all project driveways would be stop controlled. Therefore, vehicles exiting the project site from the project driveway must stop before they continue to merge onto the neighboring circulation network.

Project improvements would include construction of a new curb, gutter, and pedestrian sidewalk along project frontage with Nebraska Avenue. Additionally, the project would include internal pedestrian sidewalks and walkways in the project site for pedestrian circulation.

The proposed project would not include any sharp curves or other roadway design elements that would create dangerous conditions. In addition, the project design features would be required to comply with standards set by the City of Selma 2035 General Plan, Municipal Code, and City Engineer. In addition, the proposed project would also be required to submit plans to the SFD for review and approval prior to the issuance of building permits to ensure there are no substantial hazards associated with the project design. Therefore, the proposed project would result in a less than significant impact related to hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).

d. Would the project result in inadequate emergency access?

Less Than Significant Impact. Emergency vehicles would have access to the project site on Nebraska Avenue. Further, the proposed project's site plan would be subject to review and approval by the SFD to ensure the project includes adequate emergency access. In addition, as discussed in Section 3.9, Hazards and Hazardous Materials, project implementation would not physically interfere with emergency evacuation or the SFD access to and from the project site. Therefore, the proposed project would result in less than significant impacts related to inadequate emergency access.

3.18 TRIBAL 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 tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				
i. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k)? Or	☐	☒	☐	☐
ii. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1? In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	☐	☒	☐	☐

3.18.1 Impact Analysis

a. Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

i. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k)? Or

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

Less Than Significant with Mitigation Incorporated. The State requires lead agencies to consider the potential effects of proposed projects and consultation with California Native American tribes during the local planning process for the purpose of protecting Traditional Tribal Cultural Resources through the *State CEQA Guidelines*. Pursuant to PRC Section 21080.3.1, the lead agency shall begin consultation with the California Native American tribe that is traditionally and culturally affiliated with the geographical area of the proposed project. Such significant cultural resources are either sites, features, places, cultural landscapes, sacred places,

and objects with cultural value to a tribe that are either on or eligible for inclusion in the California Historic Register or local historic register, or, the lead agency, at its discretion, and support by substantial evidence, choose to treat the resources as a Tribal Cultural Resource (PRC Section 21074(a)(1-2)).

Additional information may also be available from the California Native American Heritage Commission (NAHC) SLF per PRC Section 5097.96 and the California Historical Resources Information System administered by the California Office of Historic Preservation. Please also note that PRC Section 21082.3(c) contains provisions specific to confidentiality.

Pursuant to SB 18, Native American tribes traditionally and culturally affiliated with the project area were invited to consult regarding the proposed project based on a list of contacts provided by the NAHC.

AB 52, which became law January 1, 2015, requires that, as part of the CEQA review process, public agencies provide early notice of a project to California Native American Tribes to allow for consultation between the tribe and the public agency. The purpose of AB 52 is to provide the opportunity for public agencies and tribes to consult and consider potential impacts to Tribal Cultural Resources, as defined by PRC Section 2107(a). Under AB 52, public agencies shall reach out to California Native American Tribes who have requested to be notified of projects in areas within or which may have been affiliated with their tribal geographic range. Tribal consultation letters were mailed out by the City on April 13, 2023. The contacted Tribes did not provide a response to invitations to consult.

No tribal cultural resources or historical resources were identified on the project site. If any artifacts are inadvertently discovered during ground-disturbing activities, existing federal, State, and local laws and regulations would require construction activities to cease until such artifacts are properly examined and determined not to be of significance by a qualified cultural resources professional. In addition, Mitigation Measures CUL-1 and CUL-2 included above in Section 3.5, Cultural Resources, would apply to the project and would reduce potential impacts to unknown resources to less than significant.

3.19 UTILITIES AND SERVICE SYSTEMS

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

3.19.1 Impact Analysis

a. Would the project require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?

Less Than Significant Impact. As identified in the Project Description, utilities required to serve the proposed project would include water, sanitary sewer, storm water drainage, electricity and natural gas infrastructure.

Water. Water supply for the proposed project would be provided by the Cal Water Selma District. The proposed project would connect to existing service infrastructure along Nebraska Avenue. According to the Selma District 2020 UWMP,[43] the Selma District extracts water from 16 wells. Two 10-million-gallon (MG) capacity surface storage structures enable the Selma District to pump and store water during non-peak demand periods to provide water supplies during peak day demand. The Selma District currently produces approximately 4 MG of groundwater per day that it delivers throughout its service area through 93 miles of pipeline. The 2020 UWMP states that the District's 2020 daily per capita water use was 219 gallons per capita per day (GPCD). The project would introduce approximately 136 residents to the project site,[44] which would require approximately

[43] California Water Service (Cal Water). 2021. 2020 Urban Water Management Plan, Selma District. June. Website: https://www.calwater.com/docs/uwmp2020/SEL_2020_UWMP_FINAL.pdf (accessed June 2023).

[44] Based on an average of 3.40 persons per household in the City of Selma, as identified by the Census Bureau.

29,784 gallons per day. Additionally, the project would introduce approximately 3,000 square feet, or 0.07 acre, of commercial uses to the project site, which would also increase existing water demand at the project site.

Based on the nature of the proposed project, the project-generated increase in water demand would be minimal and would fall within the City's existing capacity and available supply. Additionally, as described in the discussion for 3.19.1.b below, the City would have sufficient water supplies during normal, single-year dry and multiple-year dry scenarios through 2045. Once the Project Applicant submits a General Plan Amendment and rezone application and complies with the City requirements, the proposed uses for the project site would be compatible with the zoning and land use designation of the project site, the proposed project would be consistent with growth under the City of Selma 2035 General Plan, and would be accounted for in the Cal Water 2020 UWMP projections.

As such, the proposed project would not necessitate new or expanded water entitlements, and the City would be able to accommodate the increased demand for potable water. As such, the proposed project would not necessitate new or expanded water entitlements, and the City would be able to accommodate the increased demand for potable water.

Wastewater. Wastewater sewage services for the proposed project would be provided by the 3-71K FCSD. The proposed project would connect to existing service infrastructure along Nebraska Avenue. According to the 3-71K FCSD 2016 Collection System Master Plan Update,[45] the SKF CSD infrastructure includes a wastewater treatment plant and a wastewater collection system consisting of approximately 165 miles of pipeline and 22 lift stations. Design flow projections for the wastewater collection system identified that the system had a service capacity of 17.54 MG/day in 2020.

No significant increase in wastewater flows is anticipated as a result of construction activities on the project site. Sanitary services during construction would be provided by portable toilet facilities, which transport waste off site for treatment and disposal. In addition, wastewater generation associated with the proposed project, based on estimated water use, is not anticipated to exceed wastewater treatment requirements or exceed the available capacity to accommodate the increased wastewater flows from the proposed project. The project would be adequately served by the capacity of the existing wastewater conveyance system. As such, the proposed project would not necessitate new or expanded wastewater collection or treatment facilities, and the City would be able to accommodate the increased demand for wastewater sewage services.

Stormwater and Drainage Facilities. Impacts to storm drainage facilities have been previously discussed in Section 3.10, Hydrology and Water Quality. The proposed project would result in the construction of new internal stormwater collection and drainage infrastructure in the project site (e.g., manholes, culverts, catch basins) to direct stormwater towards the City's existing stormwater system, and the construction of a new curb and gutter along the project frontage with Nebraska

[45] Selma-Kingsburg-Fowler County Sanitation District (SKF CSD). 2016. 2016 Collection System Master Plan Update. October. Website: https://www.skfcsd.org/files/8f21406e4/2016+Collection+System+MP+Update+Final-1.pdf (accessed June 2023).

Avenue. The construction of such minor facilities would be constructed in conformance with City standards; therefore, its construction would not cause significant environmental effects.

Electricity and Natural Gas Facilities. Electric power and natural gas facilities would require connections to the project site. However, because the project site is located within an urbanized area with existing facilities in close proximity, connection to these facilities would not cause significant environmental effects. As a result, the project would result in a less than significant impact related to the relocation or construction or new or expanded utilities.

Summary. The proposed project would not require or result in the relocation or construction of new or expanded facilities for water, wastewater treatment, storm drainage, electric power, or natural gas that could cause significant environmental effects. Impacts would be less than significant.

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

Less Than Significant Impact. Refer to Response 3.10.1.b in Section 3.10, Hydrology and Water Quality. The Cal Water Selma District would supply water to the project site. Based on the Selma District's 2020 UWMP,[46] the water supplies under normal conditions for the District from 2025 (4,434 AFY) to 2045 (4,800 AFY) would be sufficient to cover the potable water demand (i.e., 4,434 AFY by 2025 and 4,800 AFY by 2045) for each normal year through 2045.[47] Additionally, water supplies for the District during single dry year and five dry year periods are predicted to be sufficient to accommodate potable water demand in the Selma District through 2045.

After submitting a General Plan Amendment and rezone application and complying with all associated requirements and fees related to the General Plan Amendment and rezone progress, the proposed project would be consistent with growth under the City of Selma General Plan and would be accounted for in the Selma District 2020 UWMP projections. Therefore, the proposed project would have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years, and the impact would be less than significant.

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

Less Than Significant Impact. Refer to Response 3.19.1.a above. Wastewater generation associated with the proposed project is not anticipated to exceed wastewater treatment requirements or exceed the available capacity to accommodate the increased wastewater flows from the proposed project. The project would be adequately served by the capacity of the existing wastewater

[46] Selma-Kingsburg-Fowler County Sanitation District. 2016. 2016 Collection System Master Plan Update. October. Website: https://www.skfcsd.org/files/8f21406e4/2016+Collection+System+MP+Update+Final-1.pdf (accessed June 2023).

[47] California Water Service (Cal Water). 2021. 2020 Urban Water Management Plan, Selma District. June. Website: https://www.calwater.com/docs/uwmp2020/SEL_2020_UWMP_FINAL.pdf (accessed June 2023).

conveyance system from the SKF CSD. In addition, the proposed project is not expected to exceed wastewater treatment requirements of the applicable RWQCB. As such, the proposed project would result in a determination by the wastewater treatment provider that 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, and impacts would be less than significant. In addition, the proposed project would be subject to the payment of any applicable connection charges and/or fees and extension of services in a manner that is compliant with the SKF CSD standards, specifications, and policies. As such, impacts would be less than significant.

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

Less Than Significant Impact. Garbage collection in Selma is handled by Waste Management. Solid waste generated within Selma is delivered to the American Avenue Landfill, a Fresno County-operated landfill located approximately 6.5 miles southwest of the City of Kerman.

The American Avenue Landfill (i.e., American Avenue Disposal Site 10-AA-0009) has a maximum permitted capacity of 32,700,000 cubic yards and a remaining capacity of 29,358,535 cubic yards, with an estimated closure date of August 31, 2031. The maximum permitted throughput is 2,200 tons per day.

The proposed project would include the construction of 40 multifamily residential units and a 3,000-square-foot commercial development. Based on CalRecycle's estimated solid waste generation rates for multifamily residential uses[48] and commercial uses,[49] operation of the proposed project would generate approximately 38.5 tons of solid waste per year, or approximately 0.1 ton per day.[50] Given the available capacity at the landfills, the additional solid waste generated by the proposed project is not anticipated to cause the facility to exceed its daily permitted capacity. As such, the project would be served by a landfill with sufficient capacity to accommodate the project's waste disposal needs, and impacts associated with the disposition of solid waste would be less than significant.

48 A solid waste generation rate value of 4.3 pounds per residential unit per day was used to obtain solid waste generated by the residential component of the project. The waste generation rate used was obtained by averaging estimated solid waste generation rates for multifamily residential uses provided by CalRecycle for Multifamily Residential uses.

49 A solid waste generation rate value of 13 pounds per 1,000 square feet of commercial development per day was used to obtain solid waste generated by the commercial component of the project. This reference rate was obtained by selecting rates from a similar commercial development to the one proposed from a list provided by CalRecycle.

50 California Department of Resources Recycling and Recovery (CalRecycle). n.d. Estimated Solid Waste Generation Rates. Website: https://www2.calrecycle.ca.gov/wastecharacterization/general/rates# Residential (accessed June 2023).

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

Less Than Significant Impact. The proposed project would be required to comply with the CALGreen Code, and the Fresno County (County) C&D Debris Recycling Program, which is intended to assist the County in achieving AB 939 solid waste reduction goals. The proposed project would also comply with the City's General Plan Policy 5.2 (provided below), which requires recycling of all construction waste generated by new development in Selma. As such, the proposed project would dispose of waste in accordance with applicable federal, State, and local recycling, reduction, and waste requirements and policies, and the impact would be less than significant.

> **Policy 5.2:** Encourage all construction wastes generated from new construction and demolition to be recycled.

3.20 WILDFIRE

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

3.20.1 Impact Analysis

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

Less Than Significant Impact. The proposed project would not interfere with any emergency evacuation routes within Selma or an adopted emergency response plan. The project would not impede access to any nearby roadways that may serve as emergency access routes in the project vicinity. Therefore, the impact would be less than significant.

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

Less Than Significant Impact. The project site is located in an area mapped by the California Department of Forestry and Fire Protection (CAL FIRE) as LRA Unzoned, indicating that the area is urbanized and not susceptible to wildland conflagrations, and is not located within a VHFHSZ.[51] The project site would comply with City and County fire safety regulations for project construction and operation. Therefore, the proposed project would not exacerbate wildfire risks and potentially expose project occupants to wildfires. The impact would be less than significant.

[51] California Department of Forestry and Fire Protection (CAL FIRE). 2022. Fresno County State Responsibility Area Fire Hazard Severity Zones. Website: https://osfm.fire.ca.gov/fire-hazard-severity-zones-maps-2022/ (accessed June 2023).

c. Would the project require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?

Less Than Significant Impact. The project site is in an LRA Unzoned area and is not within a VHFHSZ. Although the proposed project may require the installation of infrastructure to serve the site, the installation of this infrastructure would not exacerbate fire risk in the project vicinity. The installation of wastewater and stormwater infrastructure to serve the project site would comply with design and construction requirements of the City and the SKF CSD. The project applicant would also pay for applicable impact fees and connection fees for utilities that would serve the project site. Compliance with utility installation requirements of the City and utility providers would reduce potential impacts to less than significant.

d. Would the project expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?

Less Than Significant Impact. As discussed above, the project is not located within a VHFHSZ. The project site is also located on a relatively flat area and is not adjacent to any hills. In general, the potential for landslides or slope failure in Selma is very low, and the project site would not be susceptible to landslides. The project site is also not located in a flood hazard zone and would not be susceptible to flooding due to post-fire drainage changes. Therefore, the proposed project would not expose people or structures to significant post-fire risks, and the impact would be less than significant.

3.21 MANDATORY FINDINGS OF SIGNIFICANCE

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

3.21.1 Impact Analysis

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

Less Than Significant with Mitigation Incorporated. As discussed in Section 3.4, Biological Resources, and Section 3.5, Cultural Resources, with the incorporation of Mitigation Measures BIO-1, BIO-2, CUL-1, and CUL-2, development of the proposed project would not (1) degrade the quality of the environment, (2) substantially reduce the habitat of a fish or wildlife species, (3) cause a fish or wildlife species population to drop below self-sustaining levels, (4) threaten to eliminate a plant or animal community, (5) reduce the number or restrict the range of a rare or endangered plant or animal, or (6) eliminate important examples of the major periods of California history. Therefore, this impact would be less than significant with mitigation incorporated.

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

Less Than Significant with Mitigation Incorporated. The proposed project's impacts would be individually limited and not cumulatively considerable due to the site-specific nature of the potential impacts. The potentially significant impacts that can be reduced to less than significant levels with

implementation of recommended mitigation measures include the topics of Aesthetics, Air Quality, Biological Resources, Cultural Resources, Noise, and Transportation. These impacts would primarily be related to construction-period activities, would be temporary in nature, and would not substantially contribute to any potential cumulative impacts associated with these topics.

Implementation of Mitigation Measures AES-1, AIR-1 , BIO-1, BIO-2, CUL-1, CUL-2, GEO-1, NOI-1, and TRA-1 would ensure that the impacts of the project would be below established thresholds of significance. Since the proposed project would not result in any significant project-level impacts, the proposed project would not result in any significant impacts that would combine with the impacts of other cumulative projects to result in a cumulatively considerable impact on the environment as a result of project development. As such, this impact would be less than significant with mitigation incorporated.

For the topics of Agriculture and Forestry Resources, Energy, Greenhouse Gas Emissions, Hazards and Hazardous Materials, Hydrology and Water Quality, Land Use and Planning, Mineral Resources, Population and Housing, Public Services, Recreation, Utilities and Service Systems, and Wildlife, the project would have no impacts or less than significant impacts; therefore, the project would not substantially contribute to any potential cumulative impacts for these topics. As such, impacts would be less than significant with mitigation incorporated.

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

Less Than Significant with Mitigation Incorporated. The proposed project's potential to result in environmental effects that could directly or indirectly impact human beings has been evaluated in this IS/MND. With implementation of the recommended mitigation measures, all environmental effects that could adversely affect human beings, either directly or indirectly, would be less than significant with mitigation incorporated.

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APPENDIX A

AIR QUALITY ANALYSIS

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LSA

CARLSBAD
CLOVIS
IRVINE
LOS ANGELES
PALM SPRINGS
POINT RICHMOND
RIVERSIDE
ROSEVILLE
SAN LUIS OBISPO

MEMORANDUM

DATE: May 6, 2022

TO: Brenda Ramirez, Central Valley Engineering & Surveying, Inc.

FROM: Amy Fischer, Principal
Cara Carlucci, Senior Planner

SUBJECT: Air Quality Analysis Memorandum for the Casa De Villa Apartments Project

INTRODUCTION

This Air Quality Analysis for the proposed Casa De Villa Apartments Project (project) in the City of Selma (City), has been prepared using methods and assumptions recommended in the San Joaquin Valley Air Pollution Control District's (SJVAPCD) *Guidance for Assessing and Mitigating Air Quality Impacts* (GAMAQI).[1] This analysis includes a description of existing regulatory framework, an assessment of project construction and operation-period emissions, and an assessment of greenhouse gas (GHG) emissions.

PROJECT DESCRIPTION

The project is located at the southwest corner of Nebraska Avenue and Thompson Avenue, City of Selma, California. The project site is currently occupied by a residence and outbuildings; however, the existing house and shed would be removed prior to the development of the project. The site would encompass a 3.29-acre parcel, Assessor's Parcel Number (APN) 390-030-71.

The project would develop 40 multi-family units and a 3,000-square-foot commercial development in two phases. Phase 1 would construct five, two-story residential buildings totaling 28,155 square feet. Phase 1 would also include the construction of trash enclosures, 83 paved vehicular parking spaces and 4 bicycle parking spaces, and open and common areas. Phase 2 would consist of a 3,000-square-foot commercial development, which would include medical/dental offices, general offices, or a laundromat.

The project site would be primarily accessed from Nebraska Avenue on the northern end of the project. The project site would be bound by the City of Selma dog park on the north, single-family residences to the south, an apartment complex to the west, and a commercial development to the east.

The project will require approval of a General Plan Amendment, a Zone Change, a Tentative Parcel Map, and a Site Plan Review.

[1] San Joaquin Valley Air Pollution Control District (SJVAPCD). 2015. *Guidance for Assessing and Mitigating Air Quality Impacts*. March 19. Website: www.valleyair.org/transportation/ceqa_idx.htm (accessed April 2022).

Existing Sensitive Land Uses in the Project Area

For the purposes of this analysis, sensitive receptors are areas of the population that have an increased sensitivity to air pollution or environmental contaminants. Sensitive receptor locations include residences, schools, daycare centers, hospitals, parks, and similar uses that are sensitive to air quality. Impacts on sensitive receptors are of particular concern because those receptors are the population most vulnerable to the effects of air pollution.[2] The closest sensitive receptors to the project site include single-family residences located adjacent to the southern border of the project site and an apartment complex located adjacent to the western border of the project site.

ENVIRONMENTAL SETTING

Air Quality Background

Air quality is primarily a function of both local climate, local sources of air pollution and regional pollution transport. The amount of a given pollutant in the atmosphere is determined by the amount of the pollutant released and the atmosphere's ability to transport and dilute the pollutant. The major determinants of pollutant transport and dilution are wind, atmospheric stability, terrain, and for photochemical pollutants, sunshine.

A region's topographic features have a direct correlation with air pollution flow and, therefore, are used to determine the boundary of air basins. The proposed project is located in the City of Selma in Fresno County, within the jurisdiction of the SJVAPCD, which regulates air quality in the San Joaquin Valley Air Basin (SJVAB).

The SJVAB is comprised of approximately 25,000 square miles and covers all of seven counties including Fresno, Kings, Madera, Merced, San Joaquin, Stanislaus and Tulare, and the western portion of an eighth, Kern. The SJVAB is defined by the Sierra Nevada mountains in the east (8,000 to 14,000 feet in elevation), the Coast Ranges in the west (averaging 3,000 feet in elevation), and the Tehachapi mountains in the south (6,000 to 8,000 feet in elevation). The San Joaquin Valley is topographically flat with a slight downward gradient to the northwest and opens to the sea at the Carquinez Straits where the San Joaquin-Sacramento Delta empties into San Francisco Bay. An aerial view of the SJVAB would simulate a "bowl" opening only to the north. These topographic features restrict air movement through and out of the basin.

Both the State of California (State) and the federal government have established health-based Ambient Air Quality Standards (AAQS) for six criteria air pollutants: carbon monoxide (CO), ozone (O_3), nitrogen dioxide (NO_2), sulfur dioxide (SO_2), lead (Pb), and suspended particulate matter (particulate matter less than 2.5 microns in size [$PM_{2.5}$] and particulate matter less than 10 microns in size [PM_{10}]). The SJVAB is designated as nonattainment for O_3 and $PM_{2.5}$ for federal standards and nonattainment for O_3, PM_{10}, and $PM_{2.5}$ for State standards.

[2] SJVAPCD. 2015. *Guidance for Assessing and Mitigating Air Quality Impacts (GAMAQI*). March. Website: http://www.valleyair.org/transportation/GAMAQI_3-19-15.pdf (accessed April 2022).

Air quality monitoring stations are located throughout the nation and maintained by the local air districts and State air quality regulating agencies. Data collected at permanent monitoring stations are used by the United States Environmental Protection Agency (USEPA) to identify regions as "attainment" or "nonattainment" depending on whether the regions meet the requirements stated in the applicable National Air Quality Standards (NAAQS). Nonattainment areas are imposed with additional restrictions as required by the USEPA. In addition, different classifications of attainment, such as marginal, moderate, serious, severe, and extreme, are used to classify each air basin in the State on a pollutant-by-pollutant basis. The classifications are used as a foundation to create air quality management strategies to improve air quality and comply with the NAAQS. The SJVAB attainment statuses for each of the criteria pollutants for Fresno County are listed in Table A, below**.**

Table A: SJVAB Air Quality Attainment Status for Fresno County

Pollutant	State	Federal
O_3 1-hour	Severe/Nonattainment	Standard Revoked
O_3 8-hour	Nonattainment	Extreme Nonattainment
PM_{10}	Nonattainment	Attainment (Maintenance)
$PM_{2.5}$	Nonattainment	Nonattainment
CO	Attainment	Attainment (Maintenance)
NO_2	Attainment	Unclassified/Attainment
Lead	Attainment	Unclassified/Attainment
SO_2	Attainment	Unclassified
Sulfates	Attainment	No Federal Regulation
Hydrogen Sulfide	Unclassified	No Federal Regulation

Sources: California Air Resources Board (2016) and United States Environmental Protection Agency (2016).

CO = carbon dioxide
NO_2 = nitrogen dioxide
O_3 = ozone
$PM_{2.5}$ = particulate matter less than 2.5 microns in size
PM_{10} = particulate matter less than 10 microns in size
SO_2 = sulfur dioxide
SJVAB = San Joaquin Valley Air Basin

Ozone levels, as measured by peak concentrations and the number of days over the State 1-hour standard, have declined substantially as a result of aggressive programs by the SJVAPCD and other regional, State, and federal agencies. The reduction of peak concentrations represents progress in improving public health; however, the SJVAB still exceeds the State standard for 1-hour and 8-hour ozone levels. In addition, the SJVAB was designated as a serious nonattainment area for the federal 1997 8-hour ozone level in June 2004. The USEPA lowered the national 8-hour ozone standard from 0.80 to 0.75 parts per million (ppm) on May 27, 2008. The SJVAB is classified nonattainment for the 1-hour and 8-hour ozone standards at the State and federal level, although a request for redesignation as attainment of the 1-hour ozone standard was submitted to the USEPA in 2014.

During the 2019 to 2021 time period, the monitoring station of 9240 S. Riverbend located in the City of Parlier (the closest monitoring station to the project site) recorded the following exceedances of the State and federal 1-hour and 8-hour ozone standards:[3]

[3] California Air Resources Board (CARB). 2021. iADAM Air Quality Data Statistics. Website: www.arb.ca.gov/adam (accessed April 2022).

- 39 exceedances of the federal 8-hour ozone standard in 2019, 43 in 2020, and 28 in 2021;
- 47 exceedances of the State 8-hour ozone standard in 2019, 46 in 2020, and no data in 2021;
- 9 exceedances of the federal 1-hour ozone standard in 2019, 10 in 2020, and 0 in 2021; and
- 1 exceedance of the State 1-hour ozone standard in 2019, 0 in 2020 and no data in 2021.

National and State standards have also been established for $PM_{2.5}$ over 24-hour and yearly averaging periods. $PM_{2.5}$, because of the small size of individual particles, can be especially harmful to human health. $PM_{2.5}$ is emitted by common combustion sources such as cars, trucks, buses, and power plants, in addition to ground-disturbing activities. The SJVAB is considered a nonattainment area for the $PM_{2.5}$ standard at the State and federal levels. The following $PM_{2.5}$ exceedances were recorded at the Fresno-Hamilton and Winery air monitoring station:

- 3 exceedances of the federal 24-hour $PM_{2.5}$ standard in 2019, 13 in 2020, and 0 in 2021.

The SJVAB is classified as a PM_{10} nonattainment area at the State level and was redesignated from serious nonattainment to attainment of the federal PM_{10} standard in 2008. Because the SJVAB was redesignated from nonattainment to attainment, a PM_{10} maintenance plan was adopted in 2007 and is required to be updated every 10 years. The following PM_{10} exceedances were recorded at the Fresno-Drummond Street air monitoring station:

- The federal 24-hour PM_{10} standard was exceeded 13 times in 2019, 25 in 2020, and 0 in 2021.

- 1 exceedance of the State 24-hour PM_{10} standard was measured for both 2019 and 2020, and no data for 2021.

No exceedances of the State or federal CO standards have been recorded at any of the region's monitoring stations since 1991. The SJVAB is currently considered an attainment area for State and federal 8-hour and 1-hour CO standards.

Greenhouse Gas and Global Climate Change Background

GHGs are present in the atmosphere naturally, are released by natural sources, or are formed from secondary reactions taking place in the atmosphere. The gases that are widely seen as the principal contributors to human-induced global climate change are:

- Carbon dioxide (CO_2);
- Methane (CH_4);
- Nitrous oxide (N_2O);
- Hydrofluorocarbons (HFCs);
- Perfluorocarbons (PFCs); and
- Sulfur Hexafluoride (SF_6).

Over the last 200 years, humans have caused substantial quantities of GHGs to be released into the atmosphere. These extra emissions are increasing GHG concentrations in the atmosphere and enhancing the natural greenhouse effect, which is believed to be causing global warming. While manmade GHGs include naturally occurring GHGs such as CO_2, CH_4, and N_2O, some gases, like HFCs, PFCs, and SF_6 are completely new to the atmosphere.

Certain gases, such as water vapor, are short-lived in the atmosphere. Others remain in the atmosphere for significant periods of time, contributing to climate change in the long term. Water vapor is excluded from the list of GHGs above because it is short-lived in the atmosphere and its atmospheric concentrations are largely determined by natural processes, such as oceanic evaporation.

These gases vary considerably in terms of Global Warming Potential (GWP), which is a concept developed to compare the ability of each GHG to trap heat in the atmosphere relative to another gas. The GWP is based on several factors, including the relative effectiveness of a gas to absorb infrared radiation and length of time that the gas remains in the atmosphere ("atmospheric lifetime"). The GWP of each gas is measured relative to CO_2, the most abundant GHG; the definition of GWP for a particular GHG is the ratio of heat trapped by one unit mass of the GHG to the ratio of heat trapped by one unit mass of CO_2 over a specified time period. GHG emissions are typically measured in terms of pounds or tons of "CO_2 equivalents" (CO_2e).

Regulatory Framework

Air quality and GHG standards and the regulatory framework are discussed below.

Federal Regulations

At the federal level, the USEPA has been charged with implementing national air quality programs. USEPA air quality mandates are drawn primarily from the Federal Clean Air Act (FCAA), which was enacted in 1963. The FCAA was amended in 1970, 1977, and 1990.

The United States has historically had a voluntary approach to reducing GHG emissions. However, on April 2, 2007, the United States Supreme Court ruled that the USEPA has the authority to regulate CO_2 emissions under the FCAA. While there currently are no adopted federal regulations for the control or reduction of GHG emissions, the USEPA commenced several actions in 2009 to implement a regulatory approach to global climate change. This includes the 2009 USEPA final rule for mandatory reporting of GHGs from large GHG emission sources in the United States. Additionally, the USEPA Administrator signed an endangerment finding action in 2009 under the FCAA, finding that six GHGs (CO_2, CH_4, N_2O, HFCs, PFCs, SF_6) constitute a threat to public health and welfare, and that the combined emissions from motor vehicles cause and contribute to global climate change, leading to national GHG emission standards.

California Air Resources Board

The California Air Resources Board (CARB) is the State's "clean air agency." The CARB's goals are to attain and maintain healthy air quality, protect the public from exposure to toxic air contaminants, and oversee compliance with air pollution rules and regulations. CARB is also the lead agency for implementing climate change regulations in the State. Since its formation, the CARB has worked with the public, the business sector, and local governments to find solutions to California's air pollution problems. Key efforts by the State are described below.

Assembly Bill 2588 Air Toxics "Hot Spots" Information and Assessment Act. Under Assembly Bill (AB) 2588, stationary sources of air pollutants are required to report the types and quantities of certain substances their facilities routinely released into the air. The goals of the Air Toxics "Hot

Spots" Act are to collect emission data, identify facilities having localized impacts, determine health risks, and notify nearby residents of significant risks.

The California Air Resources Board Handbook. The CARB has developed an Air Quality and Land Use Handbook (the CARB Handbook),[4] which is intended to serve as a general reference guide for evaluating and reducing air pollution impacts associated with new projects that go through the land use decision-making process. According to the CARB Handbook, recent air pollution studies have shown an association between respiratory and other non-cancer health effects and proximity to high traffic roadways. Other studies have shown that diesel exhaust and other cancer-causing chemicals emitted from cars and trucks are responsible for much of the overall cancer risk from airborne toxics in California. The CARB Handbook recommends that county and city planning agencies strongly consider proximity to these sources when finding new locations for "sensitive" land uses such as homes, medical facilities, daycare centers, schools, and playgrounds.

Land use designations with air pollution sources of concern include freeways, rail yards, ports, refineries, distribution centers, chrome plating facilities, dry cleaners, and large gasoline service stations. Key recommendations in the CARB Handbook include taking steps to avoid siting new, sensitive land uses:

- Within 500 feet of a freeway, urban roads with 100,000 vehicles/day or rural roads with 50,000 vehicles/day;
- Within 1,000 feet of a major service and maintenance rail yard;
- Immediately downwind of ports (in the most heavily impacted zones) and petroleum refineries;
- Within 300 feet of any dry-cleaning operation (for operations with two or more machines, provide 500 feet); and
- Within 300 feet of a large gas station (defined as a facility with a throughput of 3.6 million gallons per year or greater).

The CARB Handbook specifically states that its recommendations are advisory and acknowledges land use agencies have to balance other considerations, including housing and transportation needs, economic development priorities, and other quality of life issues.

The recommendations are generalized and do not consider site-specific meteorology, freeway truck percentages, or other factors that influence risk for a particular project site. The purpose of this guidance is to further examine project sites for actual health risk associated with the location of new sensitive land uses.

Assembly Bill 32 (2006), California Global Warming Solutions Act. California's major initiative for reducing GHG emissions is AB 32, passed by the State legislature on August 31, 2006. This effort aims at reducing GHG emissions to 1990 levels by 2020. The CARB has established the level of GHG

[4] CARB. 2005. *Air Quality and Land Use Handbook: A Community Health Perspective.* April.

emissions in 1990 at 427 million metric tons (MMT) CO_2e. The emissions target of 427 MMT requires the reduction of 169 MMT from the State's projected business-as-usual 2020 emissions of 596 MMT. AB 32 requires the CARB to prepare a Scoping Plan that outlines the main State strategies for meeting the 2020 deadline and to reduce GHGs that contribute to global climate change. The Scoping Plan was approved by the CARB on December 11, 2008, and contains the main strategies California will implement to achieve the reduction of approximately 169 MMT CO_2e, or approximately 30 percent, from the State's projected 2020 emission level of 596 MMT CO_2e under a business-as-usual scenario (this is a reduction of 42 MMT CO_2e, or almost 10 percent from 2002–2004 average emissions). The Scoping Plan also includes CARB-recommended GHG reductions for each emissions sector of the State's GHG inventory. The Scoping Plan calls for the largest reductions in GHG emissions to be achieved by implementing the following measures and standards:

- Improved emissions standards for light-duty vehicles (estimated reductions of 31.7 MMT CO_2e);
- The Low-Carbon Fuel Standard (15.0 MMT CO_2e);
- Energy efficiency measures in buildings and appliances and the widespread development of combined heat and power systems (26.3 MMT CO_2e); and
- A renewable portfolio standard for electricity production (21.3 MMT CO_2e).

The Scoping Plan identifies 18 emission reduction measures that address cap-and-trade programs, vehicle gas standards, energy efficiency, low carbon fuel standards, renewable energy, regional transportation-related GHG targets, vehicle efficiency measures, goods movement, solar roof programs, industrial emissions, high speed rail, green building strategies, recycling, sustainable forests, water, and air. The measures would result in a total reduction of 174 MMT CO_2e by 2020.

On August 24, 2011, the CARB unanimously approved both the new supplemental assessment and reapproved its Scoping Plan, which provides the overall roadmap and rule measures to carry out AB 32. The CARB also approved a more robust California Environmental Quality Act (CEQA) equivalent document supporting the supplemental analysis of the cap-and-trade program. The cap-and-trade took effect on January 1, 2012, with an enforceable compliance obligation that began January 1, 2013.

The CARB approved the First Update to the Climate Change Scoping Plan on May 22, 2014. The First Update identifies opportunities to leverage existing and new funds to further drive GHG emission reductions through strategic planning and targeted low carbon investments. The First Update defines CARB climate change priorities until 2020, and also sets the groundwork to reach long-term goals set forth in Executive Orders (EOs) S-3-05 and B-16-2012. The Update highlights California's progress toward meeting the "near-term" 2020 GHG emission reduction goals as defined in the initial Scoping Plan. It also evaluates how to align the State's "longer-term" GHG reduction strategies with other State policy priorities for water, waste, natural resources, clean energy, transportation,

and land use. CARB released a second update to the Scoping Plan, the 2017 Scoping Plan,[5] to reflect the 2030 target set by EO B-30-15 and codified by Senate Bill (SB) 32.

Senate Bill 375 (2008). Signed into law on October 1, 2008, SB 375 supplements GHG reductions from new vehicle technology and fuel standards with reductions from more efficient land use patterns and improved transportation. Under the law, the CARB approved GHG reduction targets in February 2011 for California's 18 federally designated regional planning bodies, known as Metropolitan Planning Organizations (MPOs). The CARB may update the targets every 4 years and must update them every 8 years. MPOs in turn must demonstrate how their plans, policies and transportation investments meet the targets set by the CARB through Sustainable Community Strategies (SCS). The SCS are included with the Regional Transportation Plan (RTP), a report required by State law. However, if an MPO finds that their SCS will not meet the GHG reduction target, they may prepare an Alternative Planning Strategy (APS). The APS identifies the impediments to achieving the targets.

Executive Order B-30-15 (2015). Governor Jerry Brown signed EO B-30-15 on April 29, 2015, which added the immediate target of:

- GHG emissions should be reduced to 40 percent below 1990 levels by 2030.

All State agencies with jurisdiction over sources of GHG emissions were directed to implement measures to achieve reductions of GHG emissions to meet the 2030 and 2050 targets. CARB was directed to update the AB 32 Scoping Plan to reflect the 2030 target, and therefore, is moving forward with the update process. The mid-term target is critical to help frame the suite of policy measures, regulations, planning efforts, and investments in clean technologies and infrastructure needed to continue reducing emissions.

Senate Bill 350 (2015) Clean Energy and Pollution Reduction Act. SB 350, signed by Governor Jerry Brown on October 7, 2015, updates and enhances AB 32 by introducing the following set of objectives in clean energy, clean air, and pollution reduction for 2030:

- Raise California's renewable portfolio standard from 33 percent to 50 percent; and
- Increasing energy efficiency in buildings by 50 percent by the year 2030.

The 50 percent renewable energy standard will be implemented by the California Public Utilities Commission for the private utilities and by the California Energy Commission for municipal utilities. Each utility must submit a procurement plan showing it will purchase clean energy to displace other non-renewable resources. The 50 percent increase in energy efficiency in buildings must be achieved through the use of existing energy efficiency retrofit funding and regulatory tools already available to State energy agencies under existing law. The addition made by this legislation requires State energy agencies to plan for and implement those programs in a manner that achieves the energy efficiency target.

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5 CARB. 2017. *California's 2017 Climate Change Scoping Plan*. November.

Senate Bill 32, California Global Warming Solutions Act of 2016, and Assembly Bill 197. In summer 2016, the Legislature passed, and the Governor signed, SB 32 and AB 197. SB 32 affirms the importance of addressing climate change by codifying into statute the GHG emissions reductions target of at least 40 percent below 1990 levels by 2030 contained in Governor Brown's April 2015 EO B-30-15. SB 32 builds on AB 32 and keeps us on the path toward achieving the State's 2050 objective of reducing emissions to 80 percent below 1990 levels, consistent with an Intergovernmental Panel on Climate Change (IPCC) analysis of the emissions trajectory that would stabilize atmospheric GHG concentrations at 450 parts per million CO_2e and reduce the likelihood of catastrophic impacts from climate change.

The companion bill to SB 32, AB 197, provides additional direction to CARB related to the adoption of strategies to reduce GHG emissions. Additional direction in AB 197 meant to provide easier public access to air emissions data that are collected by CARB was posted in December 2016.

Senate Bill 100. On September 10, 2018, Governor Brown signed SB 100, which raises California's renewable portfolio standard requirements to 60 percent by 2030, with interim targets, and 100 percent by 2045. The bill also establishes a State policy that eligible renewable energy resources and zero-carbon resources supply 100 percent of all retail sales of electricity to California end-use customers and 100 percent of electricity procured to serve all State agencies by December 31, 2045. Under the bill, the State cannot increase carbon emissions elsewhere in the western grid or allow resource shuffling to achieve the 100 percent carbon-free electricity target.

Executive Order B-55-18. EO B-55-18, signed September 10, 2018, sets a goal "to achieve carbon neutrality as soon as possible, and no later than 2045, and achieve and maintain net negative emissions thereafter." EO B-55-18 directs CARB to work with relevant State agencies to ensure future Scoping Plans identify and recommend measures to achieve the carbon neutrality goal. The goal of carbon neutrality by 2045 is in addition to other statewide goals, meaning not only should emissions be reduced to 80 percent below 1990 levels by 2050, but that, by no later than 2045, the remaining emissions be offset by equivalent net removals of CO_2e from the atmosphere, including through sequestration in forests, soils, and other natural landscapes.

Safer Affordable Fuel-Efficient Vehicles Rule. On March 21, 2020, the USEPA and National Highway Traffic Safety Administration (NHTSA) finalized the Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule for Model Years 2021–2026 Passenger Cars and Light Trucks.[6] The SAFE Vehicles Rule amends certain existing Corporate Average Fuel Economy and tailpipe CO_2 emissions standards for passenger cars and light trucks and establishes new standards, all covering model years 2021 through 2026. More specifically, NHTSA set new Corporate Average Fuel Economy standards for model years 2022 through 2026 and amended its 2021 model year Corporate Average Fuel Economy standards, and the USEPA amended its CO_2 emission standards for model years 2021 and later.

[6] United States Department of Transportation (USDOT). 2020. The Safer Affordable Fuel-Efficient "SAFE" Vehicle Rule. March 31. Website: https://www.nhtsa.gov/corporate-average-fuel-economy/safe#:~:text=The%20Safer%20Affordable%20Fuel%2DEfficient%20(SAFE)%20Vehicles%20Rule%2C,model%20years%202021%20through%202026 (accessed April 2022).

San Joaquin Valley Air Pollution Control District

The SJVAPCD has specific air quality-related planning documents, rules, and regulations. This section summarizes the local planning documents and regulations that may be applicable to the proposed project as administered by the SJVAPCD with CARB oversight.

Rule 8011—General Requirements: Fugitive Dust Emission Sources. Fugitive dust regulations are applicable to outdoor fugitive dust sources. Operations, including construction operations, must control fugitive dust emissions in accordance with SJVAPCD Regulation VIII. According to Rule 8011, the SJVAPCD requires the implementation of control measures for fugitive dust emission sources.

Guidance for Assessing and Mitigating Air Quality Impacts. The SJVAPCD prepared the GAMAQI to assist lead agencies and project applicants in evaluating the potential air quality impacts of projects in the SJVAB. The GAMAQI provides SJVAPCD-recommended procedures for evaluating potential air quality impacts during the CEQA environmental review process. The GAMAQI provides guidance on evaluating short-term (construction) and long-term (operational) air emissions. The most recent version of the GAMAQI, adopted March 19, 2015, was used in this evaluation. It contains guidance on the following:

- Criteria and thresholds for determining whether a project may have a significant adverse air quality impact;
- Specific procedures and modeling protocols for quantifying and analyzing air quality impacts;
- Methods to mitigate air quality impacts; and
- Information for use in air quality assessments and environmental documents, including air quality, regulatory setting, climate, and topography data.

Climate Change Action Plan. In August 2008, the SJVAPCD adopted the Climate Change Action Plan (CCAP).[7] The CCAP directed the SJVAPCD to develop guidance to assist lead agencies, project proponents, permit applicants, and interested parties in assessing and reducing the impacts of project-specific GHG emissions on global climate change.

In December 2009, the SJVAPCD adopted the document, *Guidance for Valley Land-use Agencies in Addressing GHG Emission Impacts for New Projects under CEQA*[8] and the policy, *District Policy – Addressing GHG Emission Impacts for Stationary Source Projects Under CEQA When Serving as the Lead Agency.*[9] The guidance and policy rely on the use of performance based standards, otherwise known as Best Performance Standards (BPS),[10] to assess significance of project-specific GHG

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7 SJVAPCD. 2008. *Climate Change Action Plan*. November.

8 SJVAPCD. 2009c. *Guidance for Valley Land-Use Agencies in Addressing GHG Emission Impacts for New Projects under CEQA.* December 17.

9 SJVAPCD. 2009a. *Addressing GHG Emission Impacts for Stationary Source Projects under CEQA When Serving as the Lead Agency*. December 17.

10 SJVAPCD. 2009b. *Final Staff Report Appendix J: GHG Emission Reduction Measures – Development Projects*. December 17.

emissions on global climate change during the environmental review process, as required by CEQA. Projects implementing BPS in accordance with SJVAPCD's guidance would be determined to have a less than significant individual and cumulative impact on GHG emissions and would not require project-specific quantification of GHG emissions.

City of Selma

General Plan. The City of Selma addresses air quality in the Open Space, Conservation and Recreation Element of the City's General Plan.[11] The Open Space, Conservation and Recreation Element contains goals and policies that work to protect and enhance open space, natural, and recreational resources to ensure a high level of quality living in Selma. The following objectives regarding air quality are applicable for the proposed project:

Objectives

1. Participate in the development of consistent and accurate procedures for evaluating the air quality impacts of new projects

2. As part of the development review process, develop mitigation measures to minimize stationary and area source emissions.

3. Develop transportation systems that minimize vehicle delay and air pollution.

4. Develop consistent and accurate procedures for mitigating transportation emissions from new and existing projects.

5. Encourage alternative modes of transportation including pedestrian, bicycle, and transit usage.

6. Conserve energy and reduce air emissions by encouraging energy efficient building designs and transportation systems.

THRESHOLDS OF SIGNIFICANCE

The *State CEQA Guidelines* indicate that a project would normally have a significant adverse air quality impact if project-generated pollutant emissions would:

- Conflict with or obstruct implementation of the applicable air quality plan;

- Result in a cumulatively considerable net increase of any criteria pollutant for which the project is nonattainment under an applicable federal or state ambient air quality standard;

- Expose sensitive receptors to substantial pollutant concentrations; or

[11] Selma, City of. 2010. City of Selma General Plan Update 2035, *General Plan Policies Statement*. Adopted October 2010.

- Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people.

The SJVAPCD defines emissions thresholds in the GAMAQI, established based on the attainment status of the air basin in regard to air quality standards for specific criteria pollutants. Because the concentration standards were set at a level that protects public health with an adequate margin of safety, these emission thresholds are regarded as conservative and would overstate an individual project's contribution to health risks, as shown in Table B. The related impacts are discussed further in the Project Impacts analysis section, below.

Table B: SJVAPCD Construction and Operation Thresholds of Significance (in Tons per Year)

	CO	NO_x	ROG	SO_x	PM_{10}	$PM_{2.5}$
Construction Thresholds	100	10	10	27	15	15
Operation Thresholds	100	10	10	27	15	15

Source: *Guidance for Assessing and Mitigating Air Quality Impacts* (SJVAPCD 2015).

CO = carbon dioxide
NO_X = nitrous oxides
$PM_{2.5}$ = particulate matter less than 2.5 microns in size
PM_{10} = particulate matter less than 10 microns in size
ROG = reactive organic compounds
SJVAPCD = San Joaquin Valley Air Pollution Control District
SO_X = sulfur oxide

The emissions thresholds in the SJVAPCD GAMAQI were established based on the attainment status of the air basin in regard to air quality standards for specific criteria pollutants.[12] Because the concentration standards were set at a level that protects public health with an adequate margin of safety, these emission thresholds are regarded as conservative and would overstate an individual project's contribution to health risks.

The *State CEQA Guidelines* indicate that a project would normally have a significant adverse GHG emission impact if the project would:

- Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment; or

- Conflict with an applicable plan, policy or regulation adopted for the purpose of reduction the emissions of GHGs.

Neither the City of Selma, Fresno County, nor SJVAPCD has developed or adopted numeric GHG significance thresholds. Therefore, this analysis evaluates the GHG emissions based on the project's consistency with applicable State GHG reduction goals.

PROJECT IMPACTS

The proposed project would release emissions over the short term as a result of construction activities, and over the long term from traffic generation and operation of the proposed project. Emissions would include criteria air pollutants and GHG emissions. The sections below describe the

[12] SJVAPCD. 2015, op. cit.

proposed project's consistency with applicable air quality plans, estimated project emissions, and the significance of impacts with respect to SJVAPCD thresholds.

Air Quality

Consistency with Applicable Air Quality Plans

An air quality plan describes air pollution control strategies to be implemented by a city, county, or region classified as a nonattainment area. The main purpose of the air quality plan is to bring the area into compliance with the requirements of the federal and State air quality standards. To bring the San Joaquin Valley into attainment, the SJVAPCD has developed the 2013 Plan for the Revoked 1-Hour Ozone Standard (Ozone Plan), adopted on September 19, 2013.[13] The SJVAPCD also adopted the 2016 Plan for the 2008 8-Hour Ozone Standard in June 2016 to satisfy FCAA requirements and ensure attainment of the 75 parts per billion (ppb) 8-hour ozone standard.[14]

To ensure the SJVAB's continued attainment of the USEPA PM_{10} standard, the SJVAPCD adopted the 2007 PM_{10} Maintenance Plan in September 2007.[15] SJVAPCD Regulation VIII (Fugitive PM_{10} Prohibitions) is designed to reduce PM_{10} emissions generated by human activity. The SJVAPCD adopted the 2018 Plan for the 1997, 2006, and 2012 $PM_{2.5}$ standards in November 2018 to address the USEPA 1997 annual $PM_{2.5}$ standard of 15 micrograms per cubic meter ($\mu g/m^3$) and the 24-hour $PM_{2.5}$ standard of 65 $\mu g/m^3$, the 2006 24-hour $PM_{2.5}$ standard of 35 $\mu g/m^3$, and the 2012 annual $PM_{2.5}$ standard of 12 $\mu g/m^3$.[16]

CEQA requires that certain proposed projects be analyzed for consistency with the applicable air quality plan. For a project to be consistent with SJVAPCD air quality plans, the pollutants emitted from a project should not exceed the SJVAPCD emission thresholds or cause a significant impact on air quality. In addition, emission reductions achieved through implementation of offset requirements are a major component of the SJVAPCD air quality plans. As discussed below, construction of the proposed project would not result in the generation of criteria air pollutants that would exceed the SJVAPCD thresholds of significance. Implementation of Regulatory Control Measure (RCM) AIR-1, provided below, would further reduce construction dust impacts. Operational emissions associated with the proposed project would also not exceed SJVAPCD established significance thresholds. Therefore, the proposed project would not conflict with or obstruct implementation of SJVAPCD air quality plans.

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13 SJVAPCD). 2013. *2013 Plan for the Revoked 1-Hour Ozone Standard*. September 19. Website: www.valleyair.org/Air_Quality_Plans/Ozone-OneHourPlan-2013.htm (accessed April 2022).

14 SJVAPCD. 2016. *2016 Plan for the 2008 8-Hour Ozone Standard*. June 16. Website: http://valleyair.org/Air_Quality_Plans/Ozone-Plan-2016.htm (accessed April 2022).

15 SJVAPCD. 2007. *2007 PM_{10} Maintenance Plan and Request for Redesignation*. September 20. Website: www.valleyair.org/Air_Quality_Plans/docs/Maintenance%20Plan10-25-07.pdf (accessed April 2022).

16 SJVAPCD. 2018. *2018 Plan for the 1997, 2006, and 2012 $PM_{2.5}$ Standards*. November 15. Website: http://valleyair.org/pmplans/documents/2018/pm-plan-adopted/2018-Plan-for-the-1997-2006-and-2012-PM2.5-Standards.pdf (accessed April 2022).

Criteria Pollutant Analysis

In developing thresholds of significance for air pollutants, the SJVAPCD considered the emission levels for which a project's individual emissions would be cumulatively considerable. If a project exceeds the identified significance thresholds, its emissions would be cumulatively considerable, resulting in significant adverse air quality impacts to the region's existing air quality conditions. The following analysis assesses the potential project-level construction- and operation-related air quality impacts.

Construction Emissions. During construction, short-term degradation of air quality may occur due to the release of particulate emissions generated by grading, paving, building, and other activities. Emissions from construction equipment are also anticipated and would include CO, nitrous oxides (NO_X), reactive organic gases (ROG), directly emitted particulate matter ($PM_{2.5}$ and PM_{10}), and toxic air contaminants, such as diesel exhaust particulate matter.

Project construction activities would include site preparation, grading, building, paving, and architectural coating activities. Construction-related effects on air quality from the proposed project would be greatest during the grading phase due to the large disturbance of soils. If not properly controlled, these activities would temporarily generate particulate emissions. Sources of fugitive dust would include disturbed soils at the construction site. Unless properly controlled, vehicles leaving the site would deposit dirt and mud on local streets, which could be an additional source of airborne dust after it dries. PM_{10} emissions would vary from day to day, depending on the nature and magnitude of construction activity and local weather conditions. PM_{10} emissions would depend on soil moisture, silt content of soil, wind speed, and the amount of operating equipment. Larger dust particles would settle near the source, while fine particles would be dispersed over greater distances from the construction site.

Water or other soil stabilizers can be used to control dust, resulting in emission reductions of 50 percent or more. The SJVAPCD has implemented Regulation VIII measures for reducing fugitive dust emissions (PM_{10}). With the implementation of Regulation VIII measures, fugitive dust emissions from construction activities would not result in adverse air quality impacts.

In addition to dust-related PM_{10} emissions, heavy trucks and construction equipment powered by gasoline and diesel engines would generate CO, SO_2, NO_X, ROG, and some soot particulate ($PM_{2.5}$ and PM_{10}) in exhaust emissions. If construction activities were to increase traffic congestion in the area, CO and other emissions from traffic would increase slightly while those vehicles idle in traffic. These emissions would be temporary in nature and limited to the immediate area surrounding the construction site.

The SJVAPCD has developed screening criteria in the SJVAPD's Small Project Analysis Level (SPAL) to provide lead agencies with a conservative indication of whether the proposed project would result in potentially significant air quality impacts. If all of the screening criteria are met by a proposed project, then the lead agency would not need to perform a detailed air quality assessment of the proposed project's emissions. These screening levels are generally representative without any form of mitigation measures taken into consideration. In addition, the screening criteria do not account for project design features, attributes, or local development requirements that could also result in lower emissions.

For mid-rise apartment residential land uses, the SJVAPCD screening size is 225 units and for medical office building uses, the SJVAPCD screening size is 68,000 square feet. As discussed previously in the Project Description, the proposed project would develop 40 multi-family units and a 3,000- square-foot commercial development, which would include medical/dental offices, general offices, or a laundromat. Therefore, based on the SJVAPCD's screening criteria, construction activities associated with the proposed project are not anticipated to exceed established thresholds. In addition, the SJVAPCD has implemented Regulation VIII measures for dust control during construction. Implementation of RCM AIR-1 would ensure that the proposed project complies with Regulation VIII.

RCM AIR-1 Consistent with San Joaquin Valley Air Pollution Control District (SJVAPCD) Regulation VIII (Fugitive PM_{10} Prohibitions), the following controls are required to be included as specifications for the proposed project and implemented at the construction site:

- All disturbed areas, including storage piles, which are not being actively utilized for construction purposes, shall be effectively stabilized from dust emissions using water or chemical stabilizers/suppressants, covered with a tarp or other suitable cover or vegetative ground cover.
- All on-site unpaved roads and off-site unpaved access roads shall be effectively stabilized of dust emissions using water or chemical stabilizers/suppressants.
- All land clearing, grubbing, scraping, excavation, land leveling, grading, cut and fill, and demolition activities shall be effectively controlled of fugitive dust emissions utilizing application of water or by presoaking.
- When materials are transported off site, all material shall be covered, or effectively wetted to limit visible dust emissions, and at least six inches of freeboard space from the top of the container shall be maintained.
- All operations shall limit or expeditiously remove the accumulation of mud or dirt from adjacent public streets at the end of each workday. (The use of dry rotary brushes is expressly prohibited except where preceded or accompanied by sufficient wetting to limit the visible dust emissions. Use of blower devices is expressly forbidden.)
- Following the addition of materials to, or the removal of materials from, the surface of outdoor storage piles, said piles shall be effectively stabilized of fugitive dust emissions utilizing sufficient water or chemical stabilizers/ suppressants.

Construction emissions associated with the proposed project would be less than significant with implementation of RCM AIR-1. Therefore, construction of the proposed project would not result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in nonattainment under an applicable federal or State ambient air quality standards.

Long-Term Operational Emissions. Long-term air pollutant emission impacts are typically associated with mobile sources (e.g., employee, delivery, catering trucks, and guest trips), energy sources (e.g., electricity and natural gas), and area sources (e.g., architectural coatings and the use of landscape maintenance equipment) related to the proposed project.

PM_{10} emissions result from running exhaust, tire and brake wear, and the entrainment of dust into the atmosphere from vehicles traveling on paved roadways. Entrainment of PM_{10} occurs when vehicle tires pulverize small rocks and pavement and the vehicle wakes generate airborne dust. The contribution of tire and brake wear is small compared to the other PM emission processes. Gasoline-powered engines have small rates of particulate matter emissions compared with diesel-powered vehicles.

Energy source emissions result from activities in buildings for which electricity and natural gas are used. The quantity of emissions is the product of usage intensity (i.e., the amount of electricity or natural gas) and the emission factor of the fuel source. The primary sources of energy demand for the proposed project would include building mechanical systems, such as heating and air conditioning, lighting, and plug-in electronics, such as refrigerators or computers. Greater building or appliance efficiency reduces the amount of energy for a given activity and thus lowers the resultant emissions. The emission factor is determined by the fuel source, with cleaner energy sources, like renewable energy, producing fewer emissions than conventional sources. As discussed in the methodology section above, the proposed project would comply with current Title 24 requirements.

Typically, area source emissions consist of direct sources of air emissions located at the project site, including architectural coatings and the use of landscape maintenance equipment. Area source emissions associated with the project would include emissions from the use of landscaping equipment.

As discussed above, the SJVAPCD has developed screening criteria to determine whether a project requires an analysis of project-generated criteria air pollutants. If all the screening criteria are met by a proposed project, then the lead agency does not need to perform a detailed air quality assessment. According to the SJVAPCD's GAMAQI, for a multi-use project, if its combined trip generation rate exceeds the lowest applicable trip threshold, an air quality analysis should be prepared.

For mid-rise apartment residential land uses, the SJVAPCD screening size criteria pollutants is 225 units and 800 average daily vehicle trips. For medical office building uses, the SJVAPCD screening size is 68,000 square feet and 1,000 average daily vehicle trips. The proposed project would develop 40 multi-family units and a 3,000-square-foot commercial development, which would include medical/dental offices, general offices, or a laundromat. Based on trip generation rates identified in the project's Traffic Study[17], the proposed project would generate a total of 378 average daily trips, including 270 average daily trips associated with the residential uses and 108 average daily trips associated with the commercial uses. Therefore, based on the SJVAPCD's screening criteria, the project is well below the size and trip generation estimate that would warrant a detailed analysis.

[17] Peters Engineering Group. 2023. *Traffic Study – Casa De Villa Project*. July 21.

Therefore, operational activities associated with the proposed project are not anticipated to exceed established thresholds. Operation of the proposed project would not result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in nonattainment under an applicable federal or State AAQS

Sensitive Receptors

Sensitive receptors are defined as people that have an increased sensitivity to air pollution or environmental contaminants. Sensitive receptor locations include schools, parks and playgrounds, daycare centers, nursing homes, hospitals, and residential dwelling units. The closest sensitive receptors to the project site include single-family residences located adjacent to the southern border of the project site and an apartment complex located adjacent to the western border of the project site.

Construction of the proposed project may expose surrounding sensitive receptors to airborne particulates, as well as a small quantity of construction equipment pollutants (i.e., usually diesel-fueled vehicles and equipment). However, construction contractors would be required to implement RCM AIR-1 described above. Project construction pollutant emissions would be below the SJVAPCD significance thresholds, and with implementation of RCM AIR-1, emissions would be further reduced. Once the project is constructed, it would not be a source of substantial pollutant emissions. Therefore, sensitive receptors are not expected to be exposed to substantial pollutant concentrations during project construction and operation.

Objectionable Odors

The SJVAPCD addresses odor criteria in its GAMAQI; rather than an established rule or standard regarding odor emissions, the SJVAPCD has a nuisance rule: “Any project with the potential to frequently expose members of the public to objectionable odors should be deemed to have a significant impact.”

During project construction, some odors may be present due to diesel exhaust. However, these odors would be temporary and limited to the construction period. The proposed project would not include any activities or operations that would generate objectionable odors and, once operational, the project would not be a source of odors. Therefore, the proposed project would not result in other emissions (such as those leading to odors) adversely affecting a substantial number of people.

Greenhouse Gas Emissions

Generate Greenhouse Gas Emissions

This section discusses the project’s impacts related to the release of GHG emissions for both construction and operational phases of the project.

Construction GHG Emissions. Construction activities, such as site preparation, site grading, on-site heavy-duty construction vehicles, equipment hauling materials to and from the project site, and motor vehicles transporting the construction crew would produce combustion emissions from various sources. During construction of the proposed project, GHGs would be emitted through the operation of construction equipment and from worker and builder supply vendor vehicles, each of

which typically uses fossil-based fuels to operate. The combustion of fossil-based fuels creates GHGs such as CO_2, CH_4, and N_2O. Furthermore, CH_4 is emitted during the fueling of heavy equipment. Exhaust emissions from on-site construction activities would vary daily as construction activity levels change.

As discussed above, the SJVAPCD has developed screening criteria to determine whether a project requires an analysis of project-generated criteria air pollutants. If all the screening criteria are met by a proposed project, then the lead agency does not need to perform a detailed air quality assessment. For mid-rise apartment residential land uses, the SJVAPCD screening size is 225 units and for medical office building uses, the SJVAPCD screening size is 68,000 square feet. As discussed previously in the Project Description, the proposed project would develop 40 multi-family units and a 3,000-square-foot commercial development, which would include medical/dental offices, general offices, or a laundromat. Therefore, based on the SJVAPCD's screening criteria, construction activities associated with the proposed project are not anticipated to result in substantial GHG emissions during construction.

Operational GHG Emissions. Long-term GHG emissions are typically generated from mobile sources (e.g., cars, trucks, and buses), area sources (e.g., maintenance activities and landscaping), indirect emissions from sources associated with energy consumption, waste sources (land filling and waste disposal), and water sources (water supply and conveyance, treatment, and distribution). Mobile-source GHG emissions would include project-generated vehicle trips to and from the project. Area-source emissions would be associated with activities such as landscaping and maintenance on the project site. Energy source emissions would be generated at off-site utility providers as a result of increased electricity demand generated by the project. Waste source emissions generated by the proposed project include energy generated by land filling and other methods of disposal related to transporting and managing project-generated waste. In addition, water source emissions associated with the proposed project are generated by water supply and conveyance, water treatment, water distribution, and wastewater treatment.

As mentioned previously, for mid-rise apartment residential land uses, the SJVAPCD screening size criteria pollutants is 225 units and 800 average daily vehicle trips, and for medical office building uses, the SJVAPCD screening size is 68,000 square feet and 1,000 average daily vehicle trips. The proposed project would develop 40 multi-family units and a 3,000-square-foot commercial development, which would include medical/dental offices, general offices, or a laundromat. Based on trip generation rates identified in the project's Traffic Study, the proposed project would generate a total of 378 average daily trips, including 270 average daily trips associated with the residential uses and 108 average daily trips associated with the commercial uses.[18] Therefore, based on the SJVAPCD's screening criteria, operational activities associated with the proposed project would not generate significant GHG emissions that would have a significant effect on the environment.

[18] Peters Engineering Group. 2023. Traffic Study – Casa De Villa Project. July 21.

Consistency with Greenhouse Gas Reduction Plans

Absent a local or regional Climate Action Plan, the proposed project was analyzed for consistency with the goals of AB 32 and the AB 32 Scoping Plan. The following discussion evaluates the proposed project according to the goals of AB 32, the AB 32 Scoping Plan, EO B-30-15, SB 32, and AB 197.

AB 32 is aimed at reducing GHG emissions to 1990 levels by 2020. AB 32 requires the CARB to prepare a Scoping Plan that outlines the main State strategies for meeting and the State's goal to reduce GHGs that contribute to global climate change. The AB 32 Scoping Plan has a range of GHG reduction actions, which include direct regulations, alternative compliance mechanisms, monetary and non-monetary incentives, voluntary actions, market-based mechanisms such as a cap-and-trade system, and an AB 32 implementation fee to fund the program.

EO B-30-15 added the immediate target of reducing GHG emissions to 40 percent below 1990 levels by 2030. The CARB released a second update to the Scoping Plan, the 2017 Scoping Plan,[19] to reflect the 2030 target set by EO B-30-15 and codified by SB 32. SB 32 affirms the importance of addressing climate change by codifying into statute the GHG emissions reductions target of at least 40 percent below 1990 levels by 2030 contained in EO B-30-15. SB 32 builds on AB 32 and keeps the State on the path toward achieving its 2050 objective of reducing emissions to 80 percent below 1990 levels. The companion bill to SB 32, AB 197, provides additional direction to the CARB related to the adoption of strategies to reduce GHG emissions. Additional direction in AB 197 intended to provide easier public access to air pollutant emissions data that are collected by the CARB was posted in December 2016.

As identified above, the AB 32 Scoping Plan contains GHG reduction measures that work toward reducing GHG emissions, consistent with the targets set by AB 32, EO B-30-15, and codified by SB 32 and AB 197. The measures applicable to the proposed project include energy efficiency measures, water conservation and efficiency measures, and transportation and motor vehicle measures, as discussed below.

Energy efficient measures are intended to maximize energy efficiency building and appliance standards, pursue additional efficiency efforts including new technologies and new policy and implementation mechanisms, and pursue comparable investment in energy efficiency from all retail providers of electricity in California. Therefore, the energy measures would not be applicable to the proposed project. However, these measures are designed to expand the use of green building practices to reduce the carbon footprint of California's new and existing inventory of buildings. The proposed project would comply with the latest Title 24 standards of the California Code of Regulations, established by the California Energy Commission and the City's current building code, regarding energy conservation and green building standards. As such, the proposed project would not conflict with the energy measures included in the Scoping Plan.

Water conservation and efficiency measures are intended to continue efficiency programs and use cleaner energy sources to move and treat water. Increasing the efficiency of water transport and reducing water use would reduce GHG emissions. As noted above, the project would comply with

[19] CARB. 2017. *California's 2017 Climate Change Scoping Plan*. November.

the California Green Building Standards Code and Title 24, which includes a variety of different measures, including reduction of wastewater and water use. In addition, the proposed project would include install low flow toilets, faucets, and drip irrigation. Therefore, the proposed project would not conflict with any of the water conservation and efficiency measures.

The goal of transportation and motor vehicle measures is to develop regional GHG emissions reduction targets for passenger vehicles. The second phase of Pavley standards will reduce GHG emissions from new cars by 34 percent from 2016 levels by 2025, resulting in a 3 percent decrease in average vehicle emissions for all current vehicles. Specific regional emission targets for transportation emissions would not directly apply to the proposed project. However, vehicles traveling to the project site would comply with the Pavley II (LEV III) Advanced Clean Cars Program. Therefore, the proposed project would not conflict with the identified transportation and motor vehicle measures.

The proposed project would comply with existing State regulations adopted to achieve the overall GHG emissions reduction goals identified in AB 32 and would be consistent with applicable plans and programs designed to reduce GHG emissions. Therefore, the proposed project would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs.

CONCLUSION

Based on the analysis presented above, construction of the proposed project would not result in the generation of criteria air pollutants that would exceed SJVAPCD thresholds of significance. Implementation of RCM AIR-1 would further reduce construction dust impacts. As discussed above, the proposed project's construction emissions of criteria pollutants are estimated to be well below the emissions threshold established for the region. Operational emissions associated with the proposed project would also not exceed SJVAPCD established significance thresholds. The proposed project is not expected to produce significant emissions that would affect nearby sensitive receptors. The proposed project would also not result in objectionable odors affecting a substantial number of people.

The project would not result in the emission of substantial GHG emissions. Additionally, the project would not conflict with the State's GHG emissions reductions objectives embodied in AB 32, EO B-30-15, SB 32, and AB 197. Therefore, the proposed project's incremental contribution to cumulative GHG emissions would not be cumulatively considerable.

APPENDIX B

BIOLOGICAL RESOURCES ASSESSMENT

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DRAFT
BIOLOGICAL RESOURCES ASSESSMENT

CASA DE VILLA APARTMENT COMPLEX PROJECT

SELMA, FRESNO COUNTY, CALIFORNIA

LSA

May 2022

DRAFT
BIOLOGICAL RESOURCES ASSESSMENT

CASA DE VILLA APARTMENT COMPLEX PROJECT

FRESNO COUNTY, CALIFORNIA

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LSA Project No. CVN2201

LSA

May 2022

EXECUTIVE SUMMARY

LSA Associates, Inc. (LSA) prepared this Biological Resources Assessment (BRA) for the proposed Casa De Villa Apartment Complex Project (project) located at the southwest corner of Nebraska Avenue and Thompson Avenue in the City of Selma, Fresno County, California. The project consists of the construction of 40 multi-family units and a 3,000 square foot (sf) commercial development on approximately 3.29-acres. The western portion of the project site was historically used for agriculture but has remained fallow for many years. The eastern side of the project site was developed with residential homes, but currently only contains two buildings that are unoccupied. The site is located on the margin of urban portions of the City of Selma with no connection to undisturbed or natural lands.

In March 2022, LSA biologists conducted a literature review and records search to identify the existence and potential for occurrence of sensitive or special-status plant and animal species in the vicinity of the project site. Federal and state lists of sensitive species were also examined. Current electronic database records reviewed included the California Natural Diversity Database, California Native Plant Society's Electronic Inventory of Rare and Endangered Vascular Plants, and United States Fish and Wildlife Service's National Wetlands Inventory. Historic and current aerial imagery, existing environmental reports for developments in the project vicinity, regional habitat conservation plans, and local land use policies related to biological resources were also reviewed. A field survey covering the project site was conducted on March 29, 2022.

The project site is strictly upland in nature with well-drained soils and vegetation consisting of nonnative grassland with patches of mixed herbaceous ruderal/invasive species and bare ground in several areas. Ongoing soil disturbance and the resulting competitive exclusion by invasive nonnative plants limit the potential for native flora to occur in the project site. No native or special-status vegetation communities exist in the project site. No special-status plant species were observed during the field survey and none are expected to occur due to historical and ongoing anthropogenic disturbances.

Habitat in the project site is considered low quality with respect to most of the regionally occurring special-status animal species, and no special-status species were observed during the field survey. However, one special-status animal species, burrowing owl (*Athene cunicularia*), has a low probability to occur on the project site due to the presence of suitable habitat. The project site also contains suitable foraging habitat for certain raptors such as Swainson's hawk (*Buteo swainsoni*), but suitable tree-nesting habitat is limited within the project site. Suitable avian nesting habitat in the project site is limited to that which supports ground-nesting species and other birds that may nest in the annual herbaceous cover.

With the implementation of recommended impact avoidance, minimization, and mitigation measures—including pre-construction surveys and avoidance of sensitive species and nesting birds—there would be no significant impacts to special-status biological resources resulting from the project.

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ATTACHMENTS

Appendix A (Figures), Appendix B (Site Plan), Appendix C (Representative Site Photos), Appendix D (Plant and Animal Species Observed), Appendix E (Regional Special-Status Species)

INTRODUCTION

LSA has prepared this Biological Resources Assessment (BRA) for the proposed Casa De Villa Apartment Complex Project (project) located at the southwest corner of Nebraska Avenue and Thompson Avenue Railroad in the City of Selma (City), Fresno County, California (refer to Figure 1, Project Location; all figures are provided in Appendix A). The purpose of this report is to describe and document biological resources—including sensitive and special-status species—known to occur or with the potential to occur on the proposed project site. This technical information is provided for project planning purposes and review under the California Environmental Quality Act (CEQA), California Endangered Species Act (CESA), the Federal Endangered Species Act (FESA), and other pertinent regulations.

The BRA conducted for the project involved the following components:

- Reviewing existing relevant scientific literature and other pertinent information related to the project site;
- Creating a list of regionally occurring special-status species determined to have the potential to occur on or in the vicinity of the project site;
- Characterizing the vegetation communities present within the project site;
- Evaluating the potential for the occurrence of special-status plant and wildlife species within the project site;
- Assessing the potential for the project to adversely impact existing biological resources; and
- Recommending avoidance, minimization, and mitigation measures to avoid or minimize any potentially significant project-related impacts to biological resources.

PROJECT DESCRIPTION

The project involves the construction of 40 multi-family units and a 3,000-sf commercial development. The proposed project will be built out in two phases with Phase 1 consisting of the construction of five, two-story buildings totaling 28,155 sf. Additionally, Phase 1 will include construction of trash enclosures, 83 paved vehicular parking spaces and four bicycle parking spaces, open and common areas. Phase 2 consist of a 3,000 sf of commercial development (refer to Appendix B, Site Plan).

The General Plan designation is Medium Low Density and is currently zoned as R-1-7 (One Family Zone). The project will require approval of a General Plan Amendment, a zone change, a tentative parcel map and a site plan review.

Regional access to the site is provided from Nebraska Avenue located immediately north of the project site. The project would not require any work within undeveloped lands outside of the approximately 3.29-acre project site.

PROJECT SETTING

The project site is located along the eastern portion of the San Joaquin Valley floor in the Fresno County. Specifically, the project site is located on Assessor's Parcel Number 390-030-71 in the western quarter of the United States Geological Survey (USGS) *Selma, California*, 7.5-minute topographic quadrangle map (refer to Figure 1). The "project site" discussed in this report refers to all areas within the 3.29-acre property where temporary and permanent ground disturbance would occur.

The project site is currently fallow and disturbed with two buildings that are unoccupied (refer to Figure 2). Additionally, the western portion of the of the project site was recently tilled at the time of March 2022. The site was previously used for agriculture and had a developed residential home, consistent with many of the surrounding lands in the region. According to historic aerial imagery, the project site has remained in its current condition for more than 20 years. Adjacent parcels consist mostly of single-family homes, a dog park and a commercial development. Recent developments along the margins of the City of Selma and expansion into ranch land settlements have brought increased urban development throughout lands previously used for agriculture. Some lands in the vicinity of the project site are fallow or active agricultural lands; however, most of the lands are developed and are a mixture of school, residential, commercial, retail, and industrial uses. There are no undisturbed open spaces in the vicinity of the project site.

The project site is located within the San Joaquin Valley Sub-region of the California Floristic Province (Baldwin, et al. 2012) and within the Benight Pond watershed (Hydrologic Unit Code # 180300090201). The project site is flat with almost no topographic variation and is at approximately 304 feet (92 meters) above mean sea level in elevation. There are no natural drainage features or riparian areas present in the project site. Extensive soil disturbance from recent tilling is evident throughout the site, and the site appears to be regularly tilled for vegetation control.

METHODS

LITERATURE REVIEW AND RECORDS SEARCH

LSA Biologist Kelly McDonald conducted a literature review and records search on March 28, 2022, to identify the existence and potential for occurrence of sensitive or special-status[1] plant and animal species in the vicinity of the project site. Federal and State lists of sensitive species were also examined. Current electronic database records reviewed included the following:

- **California Natural Diversity Data Base information (CNDDB – RareFind 5)**, which is administered by the California Department of Fish and Wildlife (CDFW), formerly known as the California Department of Fish and Game (CDFG). This database covers sensitive plant and animal species as well as sensitive natural communities that occur in California. Records from nine USGS quadrangles surrounding the project site (*Selma, Wahtoke, Malaga, Sanger, Burris Park, Reedley, Traver, Conejo,* and *Laton*) were obtained from this database to inform the field survey.

- **California Native Plant Society's (CNPS) Electronic Inventory of Rare and Endangered Vascular Plants**, which utilizes four specific categories or "lists" of sensitive plant species to assist with the conservation of rare or endangered botanical resources. All of the plants constituting California Rare Plant Ranks 1A, 1B, 2A, and 2B are intended to meet the status definitions of "threatened" or "endangered" in CESA and the California Department of Fish and Game Code, and are considered by CNPS to be eligible for State listing. At the discretion of the CEQA Lead Agency, impacts to these species may be analyzed as such, pursuant to the CEQA Guidelines Sections 15125(c) and 15380. Plants in Rank 3 (limited information; review list), Rank 4 (limited distribution; watch list), or that are considered Locally Unusual and Significant may be analyzed under CEQA if there is sufficient information to assess potential significant impacts. Records from the nine USGS quadrangles surrounding the project site were obtained from this database to inform the field survey.

- **United States Fish and Wildlife Service's (USFWS) Information for Planning and Conservation (IPaC) Online System**, which lists all proposed, candidate, threatened, and endangered species managed by the Endangered Species Program of the USFWS that have the potential to occur on or near a particular site. This database also lists all known critical habitats, national wildlife refuges, and migratory birds that could potentially be impacted by activities from a proposed project. An IPaC Trust Resource Report (USFWS 2022a) was generated for the project area.

[1] For the purposed of this report, the term "special-status species" refers to those species that are listed or proposed for listing under the CESA and/or FESA, California Fully Protected Species, California Species of Special Concern, and California Special Animals. It should be noted that "Species of Special Concern" and "California Special Animal" are administrative designations made by the CDFW and carry no formal legal protection status. However, Section 15380 of the CEQA Guidelines indicates that these species should be included in an analysis of project impacts if they can be shown to meet the criteria of sensitivity outlined therein.

- **Designated and Proposed USFWS Critical Habitat Polygons** were reviewed to determine whether critical habitat has been designated or proposed within or in the vicinity of the project site (USFWS 2022b).

- **The USFWS National Wetlands Inventory** was reviewed to determine whether any wetlands or surface waters of the United States have been previously-identified in the survey area (USFWS 2022c).

- **eBird:** eBird is a real-time, online checklist program launched in 2002 by the Cornell Lab of Ornithology and National Audubon Society. It provides rich data sources for basic information on bird abundance and distribution at a variety of spatial and temporal scales. eBird occurrence records within the project site and a 5-mile radius around the project site were reviewed in March 2022 (eBird 2022).

In addition to the databases listed above, historic and current aerial imagery, existing environmental reports for developments in the project vicinity, and local land use policies related to biological resources were reviewed.

FIELD SURVEY

A general biological survey of the project site was conducted by LSA Biologist Kelly McDonald on March 29, 2022. The project site was surveyed on foot, and all biological resources observed were noted and mapped. Suitable habitat for any species of interest or concern was duly noted, and general site conditions were photographed (Appendix C, Site Photos). The field survey took place on a partly cloudy morning with weather conditions conducive to the detection of plant and animal species.

RESULTS

This section summarizes the environmental setting and provides further analysis of the data collected in the field. Discussions regarding the existing project site conditions, soils, vegetation communities, potentially occurring special-status biological resources, and habitat connectivity are presented below.

The project site consists of a flat area supporting nonnative grassland and two buildings. Ruderal and nonnative grassland vegetation existing on the site appears to be regularly maintained. There are several small trees of heaven (*Ailanthus altissima*; a nonnative species) and one valley oak (*Quercus lobata*) within the project site. Much of the soil and vegetation within the project site is disturbed from tilling and agriculture practices. Worn foot paths, litter, and trampling are evident throughout the project site.

Habitat within the project site is considered low quality with respect to most of the special-status animal species identified during the literature review and the project site is not expected to support any special-status plant species (refer to Appendix E). Wildlife species observed during the March 2022 field survey include northern mockingbird (*Mimus polyglottos*) and European starling (*Sturnus vulgaris*; nonnative species). A complete list of animal species observed can be found in Appendix D.

No riparian habitat exists in the project site or on adjacent parcels and there are no depressional wetlands (e.g., vernal pools) or natural drainage features within the project site. The project site does not serve as a wildlife nursery or as a wildlife migration corridor. Further details regarding specific biological resources are provided in the following subsections.

VEGETATION COMMUNITIES AND LAND COVER TYPES

The project site is strictly upland in nature with dominant vegetation consisting of nonnative grassland with patches of mixed herbaceous ruderal/invasive species. Ongoing soil disturbance and the resulting competitive exclusion by invasive nonnative plants limit the potential for native flora to occur in the project site. No native or special-status vegetation communities exist in the project site.

The identification and characterizations of vegetation communities generally follow the plant community descriptions in the Manual of California Vegetation (Sawyer et al. 2009). Anthropogenic areas are those areas that have been converted from their natural habitat to ones that are subject to ongoing human maintenance and disturbance; these areas include roads, road shoulders, and areas that are disturbed or maintained. The acreages of each vegetation community and land cover type occurring in the project site are shown in Table A, below. Representative photographs of the project site are presented in Appendix C, and Figure 3 provides a map of these vegetation and land cover types within the project site.

Table A: Vegetation and Land Cover Types Within the Project site

Vegetation / Land Cover Type	Acreage[1]
Developed	0.01

Disturbed/Barren	0.21
Tilled Non-Native Annual Grassland	1.40
Non-native Annual Grassland	1.67
Total	**3.29**

[1] All acreages were calculated using geographic information system (GIS) measurements and are considered approximate.

A total of 22 vascular plant species were identified within the project site during the March 2022 field survey (refer to Appendix D). A total of 18 of these plant species (81 percent) represent nonnative taxa, reflecting a high level of disturbance within the project site.

Developed

Developed sites consist of paved areas, buildings, and other areas that are cleared or graded for anthropogenic purposes. A small portion of the project site contains two buildings mapped as developed.

Disturbed/Barren

Based on the observations during the March 2022 site survey, vehicles have been parked and drive a portion of the site to access the two buildings. These disturbed areas lacked vegetation or supported a sparse cover of ruderal vegetation, with annual nonnative grasses being the most frequently encountered plant species. Several other invasive, pioneering plant species were also observed in these areas.

Tilled Non-Native Annual Grassland

The area had been recently tilled at the time of field survey. Minimal live vegetation was present in this area at the time of field survey, but remnants of the non-native annual grassland are present from the vegetation uprooted by tilling.

Non-Native Annual Grassland (*Bromus Diandrus-Bromus Madritensis* Semi-Natural Herbaceous Alliance)

This grassland alliance is found in all topographic settings and soil textures throughout the state. Within the project site, this vegetation type is dominated by invasive/pioneering ripgut brome (*Bromus diandrus**), red brome (*Bromus madritensis ssp. rubens**), wild oat (*Avena fatua**), barley (*Hordeum murinum*) and cheatgrass (*Bromus tectorum**). Other nonnative plant species such as redstem filaree *(Erodium cicutarium**), milk thistle (*Silybum marianum**) and black mustard (*Brassica nigra**) were present, among others. Several native plants are present at low cover, including valley popcorn flower (*Plagiobothrys canescens*), common fiddleneck (*Amsinckia intermedia*) and red maids (*Calandrinia menziesii*). One valley oak and several trees of heaven are located within this vegetation community. The dominance of these nonnative weedy species is indicative of historical and recent soil disturbance.

SOILS

According to the NRCS online soil survey of Fresno County, the project site is composed of Delhi loamy sand and Delhi Sand as shown on Figure 4. This soil classifications are discussed in greater detail below.

Delhi loamy sand, 0 to 3 percent slopes, Major Land Resource Areas (MLRA) 17

The parent material of this soil type is eolian deposits derived from sandy alluvium derived from granite, occurring between 30 and 430 ft (9 and 131 m) in elevation. The drainage class of this soil type is somewhat excessively drained, and it is typically composed of loamy sand. Delhi loamy sand usually typically occurs on dunes on fan remnants. This soil is not classified as hydric.

Delhi sand, 0 to 3 percent slopes, MLRA 17

The parent material of this soil type is wind modified sandy alluvium derived from granitoid, occurring between 30 and 1,400 ft (9 and 426 m) in elevation. The drainage class of this soil type is somewhat excessively drained, and it is typically composed of sand. Delhi sand usually occurs on dunes on valleys. This soil is not classified as hydric.

SPECIAL-STATUS BIOLOGICAL RESOURCES

The Selma region supports various special-status natural communities, plants, and animals. Appendix E provides tables that identify those special-status plant and animal species known to occur or that potentially occur in the vicinity of the project site (based on the literature review and experience in the region) and includes detailed information about each species' habitat and distribution, State and Federal status designations, and probability of occurrence within the project site. As stated in the methodology section above, the background research included occurrence records from nine USGS topographic quadrangles surrounding the survey area. A nine USGS quadrangle search covers a large, variable geographic and topographic area containing numerous habitat types not found within or around the project site.

The following subsections provide specific discussions for special-status natural communities, plant and animal species, and habitats of concern (including critical habitat, jurisdictional aquatic resources, wildlife movement corridors, and regional and local habitat conservation plans).

Special-Status Natural Communities

The CNDDB search identified occurrences of two special-status natural (i.e., plant) communities within the nine-quad search area: Great Valley Mixed Riparian Forest, Northern Claypan Vernal Pool and Valley Sacaton Grassland.

No special-status natural communities or conservation areas exist within the project site or in adjacent parcels. The project site is completely isolated and distant from all special-status natural communities that occur in the region.

Special-Status Plants

The literature review identified 18 special-status plant species that are known to occur within a nine-quad radius of the project site (refer to Appendix E). The majority of the rare plant species that were identified in the databases have specialized habitat requirements (i.e., they occur on predominantly alkaline soils, woodland, riparian, or wetland habitats, etc.) that do not occur within the project site.

Historic anthropogenic disturbances have greatly altered the natural hydrologic regimes and have either eliminated or greatly impacted the pre-settlement habitats needed to support the special-status plant species identified in the CNDDB and CNPS queries. As such, the specific habitats, soil substrates or "micro-climates" necessary for special-status plant species to occur are absent within the boundaries of the project site. Based on site observations coupled with the habitat suitability analysis, no special-status plant species are expected to occur within the project site. It is also unlikely that any source populations exist in adjacent or nearby parcels.

Special-Status Animals

The historic anthropogenic disturbances in the project site and adjacent parcels (i.e., farming, disking, development, etc.) have greatly altered, eliminated, or impacted the pre-settlement habitats needed to support most of the special-status animal species identified in the CNDDB and USFWS queries (refer to Appendix E). There are no known occurrences of any special-status animal species in the project site, and none were observed during the March 2022 field survey. Nonetheless, marginally suitable, isolated habitat for several regionally occurring special-status species is present in the project site and those species are discussed in further detail below.

One special-status animal species, burrowing owl (*Athene cunicularia*) has a low potential to occur in the project site due to the presence of suitable habitat. However, no sign which would indicate occupation or use by this species (e.g., burrows, scat, whitewash or any other sign) was identified during the March 2022 survey. Several small mammal burrows, likely those of California vole [*Microtus californicus*], and/or Botta's pocket gopher [*Thomomys bottae*], were observed within the non-native annual grassland of the project site. However, none of the small mammal burrows observed in the project site exhibited features typical of occupied burrowing owl burrows, and site usage is unlikely in 2022 given the lack of suitable burrows observed and the lack of recent occurrence records in the vicinity.

The project site contains minimal foraging habitat for certain raptors such as the Swainson's hawk (*Buteo swainsoni*), but potential tree-nesting habitat is extremely limited on the project site–only one mature valley oak tree is present. Suitable avian nesting habitat in the project site is limited to that which supports ground-nesting species such as killdeer (*Charadrius vociferus*) and other birds that may nest in the annual herbaceous cover. There are trees in the vicinity that could be used by raptors and other tree-nesting species.

The evaluation of special-status animal species occurrence within the project site was based on a habitat suitability analysis. It did not include exhaustive surveys to determine their presence or absence, but did include direct observation of on-site and off-site conditions and a review of the

available recorded occurrence data from the area to conclude whether or not a particular species could be expected to occur. Based on this analysis, it is unlikely that the remaining special-status wildlife species listed in Appendix E would occupy or otherwise utilize the habitat present within the project site. Significant adverse impacts to special-status wildlife species are not anticipated with the implementation of the recommended impact avoidance, minimization, and mitigation measures described in further detail below.

Critical Habitat

The project site is not located within or adjacent to designated or proposed critical habitat for any species.

Jurisdictional Aquatic Resources

The project site is strictly upland in nature with well-drained soils. There are no records of wetlands or potential jurisdictional drainage features existing within the project site, and no potentially jurisdictional drainage features, wetlands, or riparian areas were observed on the project site.

Wildlife Movement and Habitat Connectivity

As the project site is isolated from natural areas, it is unlikely that the site serves as an important corridor for animals moving locally, regionally, or in broader migrations. Migratory bird species may utilize the project site for foraging; however, the usage is likely transient and limited to species that forage over open grassland areas. The project site does not possess any characteristics that would indicate a locally significant stopover point for migratory species including raptors or waterfowl.

No known wildlife movement corridors occur within the project site or in the immediate vicinity.

Regional Habitat Conservation Plans and Local Policies

The City of Selma and Fresno County currently do not have a regional Natural Community Conservation Plan or Habitat Conservation Plan. The 2035 General Plan for the City of Selma and 2015 Fresno County General Plan outlines local relevant policies related to biological resources. Additionally, the City of Selma municipal code outlines procedures for tree removal, however the municipal code is currently in the process of being updated. Therefore, the codes outline below are subject to change. The project is in compliance with all of the City of Selma and Fresno County goals and policies. Below is the list of applicable polices:

- City of Selma municipal Code Chapter 4 Tress and Shrubbery:
    - 9-4-5: Removal of Trees:
        - It shall be the policy of the City to conserve mature and healthy trees whenever feasible; provided, however, the Director of Public Works may cause trees to be removed when the Director of Public Works in his discretion determines that removal outweighs the interest in conservation of said tree.

- Where roots from trees, shrubs or plants growing in a parking strip, any public place or in private property cause or may cause damage to sidewalks, curbs, gutters, driveways or public or private utilities, the Director of Public Works shall investigate and shall order corrective action. The Director of Public Works shall give written notice to the occupant or owner of such property or to the occupant or owner of property abutting a parking strip requiring that necessary trimming, root pruning or removal be performed by the occupant or owner at occupant or owner's expense. Owner or occupant may, within ten (10) days of date of mailing of the notice of required corrective action, request an appeal of the Director's decision to the City Council. The decision of the Council shall be final.

- If the occupant or owner does not request an appeal and if the corrective action is not taken within the required ten (10) days by the occupant or owner, then in that event the Director of Public Works shall proceed to perform the required work and shall then charge the occupant or owner for all costs involved and such cost shall be a lien against the real property of the owner.

- Nothing contained herein shall be deemed to impose any liability upon the City or to relieve the occupant or owner of any private property from the duty to keep any tree, shrub or plant upon his property or under his control in such condition as to prevent it from constituting a hazard to persons or property.

- Nothing in this Section shall preclude the immediate removal by City forces of any obstruction, nuisance or overhang which the Director of Public Works determines to be a public safety hazard. (Ord. 852, 2-22-83)

  - 9-4-10: Protection of Trees During Construction:

  - During the erection, repair, alteration or removal of any building, house or structure in the City no person shall leave any tree in any public street in the vicinity of such building or structure without such good and sufficient guards or protectors as shall prevent injury to said tree.

- City of Selma 5.4 Open Space and Conservation-Natural Resources:

  - *5.15:* Use conservation irrigation technology as well as a water efficient plant palette for all City-owned properties.
  - *5.16:* Areas with high erosion potential or soil instability which cannot be mitigated shall be designated for open space land uses.
  - *5.17:* Channel and slope modification shall be discouraged where they increase the rate of surface runoff and increase the potential for erosion.
  - *5.18:* The City shall endeavor to mitigate, to the extent feasible, activities which will exacerbate groundwater overdraft.

D. Fresno County: WETLAND AND RIPARIAN AREAS

Goal OS-D **To conserve the function and values of wetland communities and related riparian areas throughout Fresno County while allowing compatible uses where appropriate. Protection of these resource functions will positively affect aesthetics, water quality, floodplain management, ecological function, and recreation/tourism.**

Policy OS-D.1 The County shall support the "no-net-loss" wetlands policies of the US Army Corps of Engineers, the US Fish and Wildlife Service, and the California Department of Fish and Game. Coordination with these agencies at all levels of project review shall continue to ensure that appropriate mitigation measures and the concerns of these agencies are adequately addressed.

Policy OS-D.2 The County shall require new development to fully mitigate wetland loss for function and value in regulated wetlands to achieve "no-net-loss" through any combination of avoidance, minimization, or compensation. The County shall support mitigation banking programs that provide the opportunity to mitigate impacts to rare, threatened, and endangered species and/or the habitat which supports these species in wetland and riparian areas.

Policy OS-D.3 The County shall require development to be designed in such a manner that pollutants and siltation do not significantly degrade the area, value, or function of wetlands. The County shall require new developments to implement the use of Best Management Practices (BMPs) to aid in this effort.

Policy OS-D.4 The County shall require riparian protection zones around natural watercourses and shall recognize that these areas provide highly valuable wildlife habitat. Riparian protection zones shall include the bed and bank of both low- and high-flow channels and associated riparian vegetation, the band of riparian vegetation outside the high-flow channel, and buffers of 100 feet in width as measured from the top of the bank of unvegetated channels and 50 feet in width as measured from the outer edge of the dripline of riparian vegetation.

Policy OS-D.5 The County shall strive to identify and conserve remaining upland habitat areas adjacent to wetland and riparian areas that are critical to the feeding, hibernation, or nesting of wildlife species associated with these wetland and riparian areas.

Policy OS-D.6 The County shall require new private or public developments to preserve and enhance existing native riparian habitat unless public safety concerns require removal of habitat for flood control or other purposes. In cases where new private or public development results in modification or destruction of riparian habitat for purposes of flood control, the developers shall be responsible for creating new riparian habitats within or near the project area. Adjacency to the project area shall be defined as being within the same watershed subbasin as the project site.

Compensation shall be at a ratio of three (3) acres of new habitat for every one (1) acre destroyed.

Policy OS-D.7 The County shall support the management of wetland and riparian plant communities for passive recreation, groundwater recharge, nutrient storage, and wildlife habitats.

Policy OS-D.8 The County should consider the acquisition of wetland, meadows, and riparian habitat areas for parks limited to passive recreational activities as a method of wildlife conservation.

E. Fresno County: FISH AND WILDLIFE HABITAT

Goal OS-E **To help protect, restore, and enhance habitats in Fresno County that support fish and wildlife species so that populations are maintained at viable levels.**

Policy OS-E.1 The County shall support efforts to avoid the "net" loss of important wildlife habitat where practicable. In cases where habitat loss cannot be avoided, the County shall impose adequate mitigation for the loss of wildlife habitat that is critical to supporting special-status species and/or other valuable or unique wildlife resources. Mitigation shall be at sufficient ratios to replace the function, and value of the habitat that was removed or degraded. Mitigation may be achieved through any combination of creation, restoration, conservation easements, and/or mitigation banking. Conservation easements should include provisions for maintenance and management in perpetuity. The County shall recommend coordination with the US Fish and Wildlife Service and the California Department of Fish and Game to ensure that appropriate mitigation measures and the concerns of these agencies are adequately addressed. Important habitat and habitat components include nesting, breeding, and foraging areas, important spawning grounds, migratory routes, migratory stopover areas, oak woodlands, vernal pools, wildlife movement corridors, and other unique wildlife habitats (e.g., alkali scrub) critical to protecting and sustaining wildlife populations.

Policy OS-E.2 The County shall require adequate buffer zones between construction activities and significant wildlife resources, including both onsite habitats that are purposely avoided and significant habitats that are adjacent to the project site, in order to avoid the degradation and disruption of critical life cycle activities such as breeding and feeding. The width of the buffer zone should vary depending on the location, species, etc. A final determination shall be made based on informal consultation with the US Fish and Wildlife Service and/or the California Department of Fish and Game.

Policy OS-E.3 The County shall require development in areas known to have particular value for wildlife to be carefully planned and, where possible, located so that the value of the habitat for wildlife is maintained.

Policy OS-E.4 The County shall encourage private landowners to adopt sound wildlife habitat management practices, as recommended by the California Department of Fish and Game officials and the U.S. Fish and Wildlife Service.

Policy OS-E.5 The County shall support preservation of habitats of rare, threatened, endangered, and/or other special-status species including fisheries. The County shall consider developing a formal Habitat Conservation Plan in consultation with Federal and State agencies, as well as other resource conservation organizations. Such a plan should provide a mechanism for the acquisition and management of lands that support special-status species.

Policy OS-E.6 The County shall ensure the conservation of large, continuous expanses of native vegetation to provide suitable habitat for maintaining abundant and diverse wildlife populations, as long as this preservation does not threaten the economic well-being of the county.

Policy OS-E.7 The County shall continue to closely monitor pesticide use in areas adjacent to habitats of special-status plants and animals.

Policy OS-E.8 The County shall promote effective methods of pest (e.g., ground squirrel) control on croplands bordering sensitive habitat that do not place special- status species at risk, such as the San Joaquin kit fox.

Policy OS-E.9 Prior to approval of discretionary development permits, the County shall require, as part of any required environmental review process, a biological resources evaluation of the project site by a qualified biologist. The evaluation shall be based upon field reconnaissance performed at the appropriate time of year to determine the presence or absence of significant resources and/or special-status plants or animals. Such evaluation will consider the potential for significant impact on these resources and will either identify feasible mitigation measures or indicate why mitigation is not feasible.

Policy OS-E.10 The County shall support State and Federal programs to acquire significant fish and wildlife habitat areas for permanent protection and/or passive recreation use.

Policy OS-E.11 The County shall protect significant aquatic habitats against excessive water withdrawals that could endanger special-status fish and wildlife or would interrupt normal migratory patterns.

Policy OS-E.12 The County shall ensure the protection of fish and wildlife habitats from environmentally-degrading effluents originating from mining and construction activities that are adjacent to aquatic habitats.

Policy OS-E.13 The County should protect to the maximum extent practicable wetlands, riparian habitat, and meadows since they are recognized as essential habitats for birds and wildlife.

Policy OS-E.14 The County shall require a minimum 200-foot-wide wildlife corridor along particular stretches of the San Joaquin River and Kings River, whenever possible. The exact locations for the corridors should be determined based on the results of biological evaluations of these watercourses. Exceptions may be necessary where the minimum width is infeasible due to topography or other physical constraints. In these instances, an offsetting expansion on the opposite side of the river should be considered.

Policy OS-E.15 The County should preserve, to the maximum extent practicable, significant wildlife migration routes such as the North Kings Deer Herd migration corridors and fawn production areas.

Policy OS-E.16 Areas that have unusually high value for fish and wildlife propagation should be preserved in a natural state to the maximum possible extent.

Policy OS-E.17 The County should preserve, to the maximum possible extent, areas defined as habitats for rare or endangered animal and plant species in a natural state consistent with State and Federal endangered species laws.

Policy OS-E.18 The County should preserve areas identified as habitats for rare or endangered plant and animal species primarily through the use of open space easements and appropriate zoning that restrict development in these sensitive areas.

F. Fresno County: VEGETATION

Goal OS-F **To preserve and protect the valuable vegetation resources of Fresno County.**

Policy OS-F.1 The County shall encourage landowners and developers to preserve the integrity of existing terrain and natural vegetation in visually-sensitive areas such as hillsides and ridges, and along important transportation corridors, consistent with fire hazard and property line clearing requirements.

Policy OS-F.2 The County shall require developers to use native and compatible non-native plant species, especially drought-resistant species, to the extent possible, in fulfilling landscaping requirements imposed as conditions of discretionary permit approval or for project mitigation.

Policy OS-F.3 The County shall support the preservation of significant areas of natural vegetation, including, but not limited to, oak woodlands, riparian areas, and vernal pools.

Policy OS-F.4 The County shall ensure that landmark trees are preserved and protected whenever possible.

Policy OS-F.5 The County shall establish procedures for identifying and preserving rare, threatened, and endangered plant species that may be adversely affected by public or private development projects. As part of this process, the County shall require, as part of the environmental review process, a biological resources evaluation of the

project site by a qualified biologist. The evaluation shall be based on field reconnaissance performed at the appropriate time of year to determine the presence or absence of significant plant resources and/or special-status plant species. Such evaluation shall consider the potential for significant impact on these resources and shall either identify feasible mitigation measures or indicate why mitigation is not feasible.

Policy OS-F.6 The County shall require that development on hillsides be limited to maintain valuable natural vegetation, especially forests and open grasslands, and to control erosion.

Policy OS-F.7 The County shall require developers to take into account a site's natural topography with respect to the design and siting of all physical improvements in order to minimize grading.

Policy OS-F.8 The County should encourage landowners to maintain natural vegetation or plant suitable vegetation along fence lines, drainage and irrigation ditches and on unused or marginal land for the benefit of wildlife.

Policy OS-F.9 The County shall support the continued use of prescribed burning to mimic the effects of natural fires to reduce fuel volumes and associated fire hazards to human residents and to enhance the health of biotic communities.

Policy OS-F.10 The County shall require that new developments preserve natural woodlands to the maximum extent possible.

Policy OS-F.11 The County shall promote the preservation and management of oak woodlands by encouraging landowners to follow the Fresno County Oak Management Guidelines shown below and to prepare an Oak Management Plan for their property.

IMPACT FINDINGS AND RECOMMENDED MITIGATION MEASURES

The following impact assessment and recommended mitigation measures are intended to support the CEQA review process. The project, as proposed by the applicant, coupled with LSA's survey results and review of biological literature, provided the basis for this analysis. The impact discussion below addresses the range of impacts that could result from the proposed project, as well as recommended mitigation measures that would avoid, reduce, or compensate for such impacts.

SPECIAL-STATUS NATURAL COMMUNITIES

The project site does not contain any special-status natural communities and such habitats would not be impacted by the proposed project.

SPECIAL-STATUS SPECIES

No special-status plant species are expected to occur within the project site or to be adversely affected by the proposed project.

While no special-status animal species (or signs of such species) were observed on site during the March 2022 survey, several gopher (or vole) burrows were observed within the project site, however the site lacks California ground squirrel (*Otospermophilus beecheyi*) burrows which are more commonly used (and more suitable habitat) by burrowing owl, therefore further reduces the likelihood of occurrence. Burrowing owls could utilize debris piles and remnant structures located within the site. None of the gopher (or vole) burrows observed in the project site exhibited features typical of occupied burrowing owl burrows at the time of the survey, although there is some potential for use by these species in the future. Potentially significant direct and indirect impacts, including mortality, harassment, or other forms of incidental take, could occur if construction-related ground disturbance occurs in or around an occupied burrow.

No other special-status species were determined to have a moderate or high probability of occurrence on the project site (refer to Appendix E). The removal of the disturbed annual grassland habitat documented on the project site is not anticipated to substantially impact the population sizes of any special-status animal species given the context and setting of the project site and additional habitats for such species in the project vicinity.

While suitable habitat for shrub and tree nesting birds is very limited on the project site (only one mature valley oak tree and several small immature trees of heaven occur within the site limits), the project site and immediate surroundings that could be subjected to indirect disturbances during construction do contain suitable nesting habitat for a variety of tree and ground-nesting birds and for other birds that could nest in the annual herbaceous vegetation. Nesting birds are protected under the California Fish and Game Code. Construction activities that occur during the nesting bird season (typically February 15 through September 15) have potential to result in the direct or indirect take of nesting birds.

If unmitigated or avoided, these potential direct and indirect impacts on special-status wildlife species and nesting birds could be considered potentially significant. However, implementation of

Mitigation Measures BIO-1 through BIO-3, as summarized below, would effectively mitigate any impacts on special-status wildlife species to less-than-significant levels.

Mitigation Measure BIO-1: **Conduct Preconstruction Clearance Surveys for Burrowing Owl.** A preconstruction clearance survey is required for burrowing owl no more than 30 calendar days prior to initiation of project activities. All survey results must be delivered to the City of Selma. If an active burrowing owl burrow is found within the project site, the applicant must coordinate with CDFW to obtain applicable agency approval/direction prior to any ground disturbance activities on the site. Specific avoidance, den excavation, passive relocation, and compensatory mitigation activities shall be performed as required by CDFW. If no active burrowing owl burrows are identified, project activities may proceed as planned following the preconstruction survey.

Mitigation Measure BIO-2: **Nesting Bird Surveys and Avoidance.** If vegetation removal, construction, or grading activities are planned to occur within the active nesting bird season (February 15 through September 15), a qualified biologist shall conduct a preconstruction nesting bird survey no more than 5 days prior to the start of such activities. The nesting bird survey shall include the project site and areas immediately adjacent to the site that could potentially be affected by project-related activities such as noise, vibration, increased human activity, and dust, etc. For any active nest(s) identified, the qualified biologist shall establish an appropriate buffer zone around the active nest(s). The appropriate buffer shall be determined by the qualified biologist based on species, location, and the nature of the proposed activities. Project activities shall be avoided within the buffer zone until the nest is deemed no longer active by the qualified biologist. Documentation of all survey results shall be provided to the City.

CRITICAL HABITAT

The project would not result in any impacts to critical habitat, and no additional mitigation is required.

JURISDICTIONAL AQUATIC RESOURCES

The proposed project would not result in any impacts to jurisdictional aquatic resources, and no mitigation is required.

WILDLIFE MOVEMENT AND HABITAT CONNECTIVITY

The wildlife species that occur in the project vicinity are adapted to the urban-wildland interface, and the project would not introduce new affects to the area. The noise, vibration, light, dust, or

human disturbance within construction areas would only temporarily deter wildlife from using areas in the immediate vicinity of construction activities. These indirect effects could temporarily alter migration behaviors, territories, or foraging habitats in select areas. However, because these are temporary effects, it is likely that wildlife already living and moving in close proximity to urban development would alter their normal functions for the duration of the project construction and then re-establish these functions once all temporary construction effects have been removed. The proposed project would not place any permanent barriers within any known wildlife movement corridors or interfere with habitat connectivity. The impact is considered less than significant, and no mitigation is required.

REGIONAL HABITAT CONSERVATION PLANS AND LOCAL POLICIES

The project would not conflict with any regional habitat conservation plan related to the protection and conservation of biological resources. At this time, the project does not conflict with any local policies, however because the City of Selma Municipal Code is being updated, tree removal policies are subject to change.

CONCLUSION

Based on field observations coupled with the habitat suitability analysis conducted for this assessment, the proposed project has low potential to impact several regionally-occurring special-status wildlife species, but is not anticipated to impact any special-status plant species, natural communities, or other habitats of concern. The implementation of the recommended mitigation measures detailed herein would ensure consistency with local policies related to biological resources, and would reduce any potentially significant impacts on special-status wildlife species to a less than significant level.

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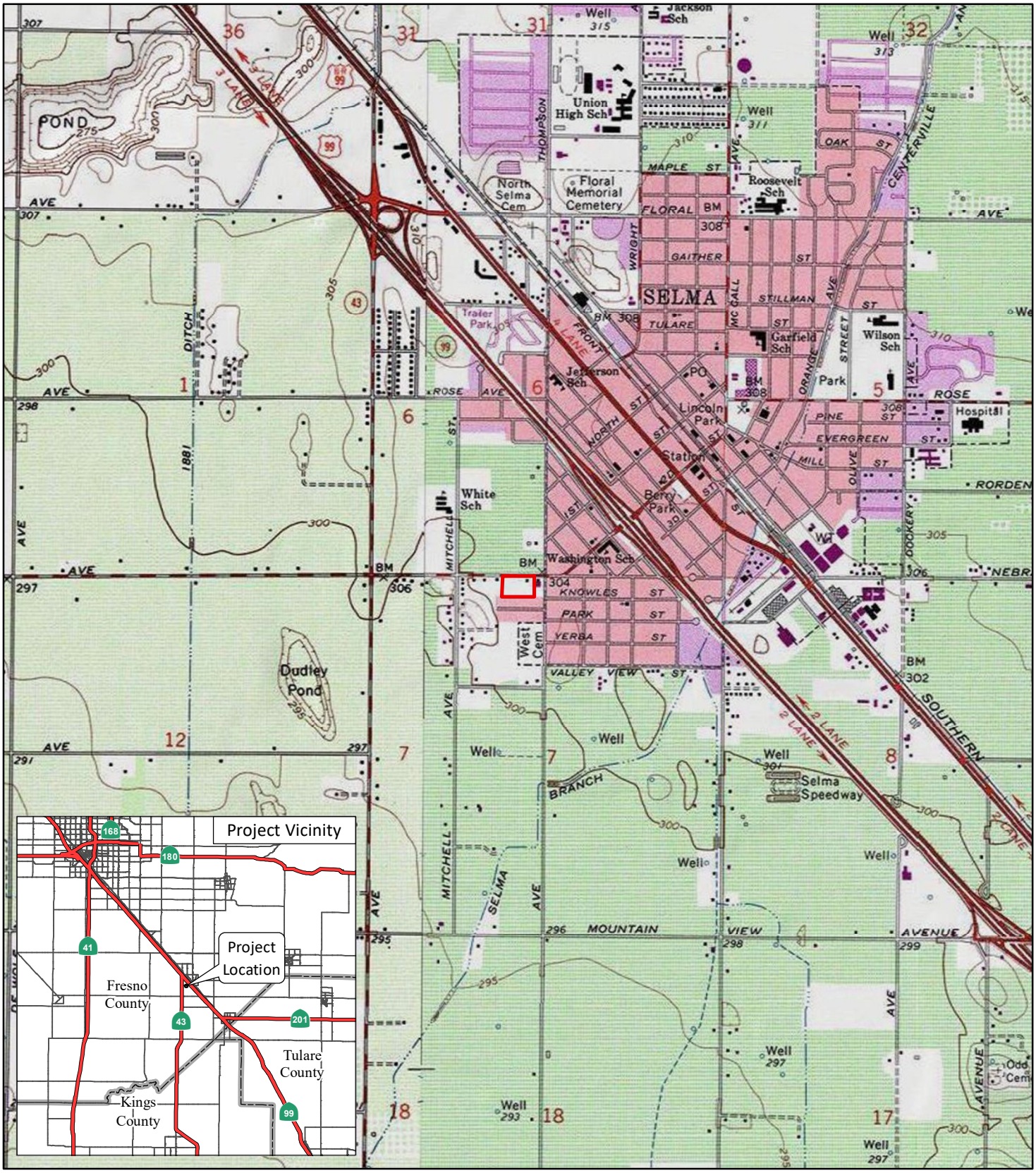
APPENDIX A

FIGURES



LSA

LEGEND

Project Site

FIGURE 1

N

0 1000 2000

FEET

Casa De Villa Apartment Complex Project

Project Location and Vicinity

SOURCE: USGS 7.5' Quad.- *Selma, CA* (1981)

\\vCorp12\Images\CVN2201\GIS\MXD\Fig1_Proloc and Vic.mxd (3/23/2022)

LSA

LEGEND

Project Site

FIGURE 2

N

0 62.5 125

FEET

SOURCE: Google Maps, 2022

Casa De Villa Apartment Complex Project

Project Site

\\vCorp12\Images\CVN2201\GIS\MXD\Figure2_Project Site.mxd (3/23/2022)

LSA

LEGEND

Project Site

Vegetation and Land Cover

Developed

Disturbed/Barren

Non-native annual grassland

Tilled non-native annual grassland

FIGURE 3

N

0 50 100

FEET

SOURCE: Google Maps, 2022

Casa De Villa Apartment Complex Project

Vegetation and Land Cover

R:\CVN2201\GIS\MXD\Bio\Figure3_Vegetation.mxd (4/7/2022)

LSA

LEGEND

Project Site

Soil Type

DeA- Delhi sand

DhA-Delhi loamy sand

N

0 50 100

FEET

FIGURE 4

Casa De Villa Apartment Complex Project

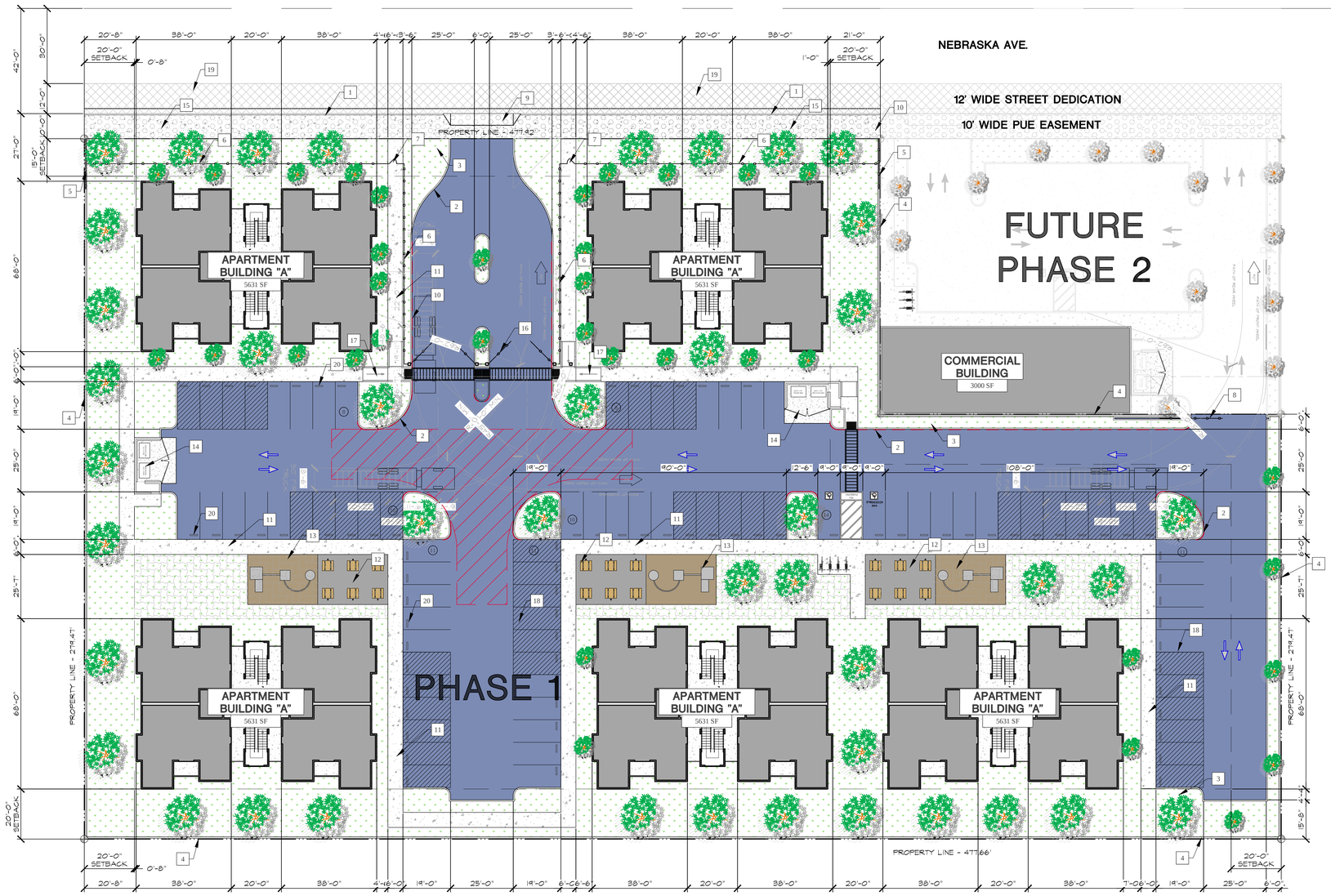
Soil

SOURCE: Google Maps, 2022; NRCS Web Soil Survey, 2022

R:\CVN2201\GIS\MXD\Bio\Figure4_Soil.mxd (4/6/2022)

APPENDIX B

SITE PLAN



SITE PLAN KEYED NOTES

X		DESCRIPTION
1	(N)	6" HIGH CONC. CURB AND GUTTER. MATCH EXISTING CONDITION.
2	(N)	6" HIGH CONCRETE CURB
3	(N)	LANDSCAPE.
4	(N)	6' HIGH BLOCK WALL FENCE PER CITY STD.
5	(N)	1' HIGH BLOCK WALL W/ 3' HIGH WROUGHT-IRON FENCE ON TOP OF CMU FOR FIRST 20 FEET FROM PROPERTY LINE.
6	(N)	6' HIGH WROUGHT-IRON FENCE.
7	(N)	6' HIGH WROUGHT-IRON MAN GATE(S).
8	(N)	6' HIGH WROUGHT-IRON SLIDING GATE(S). USED FOR EMERGENCY VEHICLE ONLY.
9	(N)	25' DRIVEWAY APPROACH PER CITY STD.
10	(N)	INDICATES FIRE LANE STRIPPING.
11	(N)	6' WIDE SIDEWALK.
12	(N)	PICNIC TABLE CANOPY.
13	(N)	PLAYGROUND SANDBOX.
14	(N)	TRASH ENCLOSURE PER CITY STANDARD.
15	(N)	10' WIDE PUBLIC SIDEWALK PER CITY STD. MATCH EXISTING CONDITION. REFER TO PEDESTRIAN NOTE ON THIS SHEET.
16	(N)	6' HIGH WROUGHT-IRON SWINGING GATE(S). PROVIDE KNOX BOX.
17	(N)	CONCRETE CURB RAMP.
18	(N)	INDICATES PARKING CANOPY.
19	(N)	INDICATES 12' WIDE STREET DEDICATION.
20	(N)	6" HIGH CONCRETE WHEEL STOP.

PROPOSED SITE PLAN

SCALE: 1:20

CVEAS
CENTRAL VALLEY
ENGINEERING & SURVEYING, IN
2132 HIGH STREET Tel. (559) 891-8
SELMA, CA 93662 Fax (559) 891-8
WWW.CVEAS.COM Email: info@cveas.c

CIVIL ENGINEERING • LAND SURVEYING • CONSULTING • STRUCTURAL DESIGN • ARCHITECTURAL DRAFTING • COMMERCIAL & RESIDENTIAL BUILDING DESIGN • PLANNING & PROJECT MANAGEMENT

PROJECT

CASA DE VILLA
APARTMENT COMPLEX
NEBRASKA AVE AND THOMPSON AVE.
SELMA, CA 93662
APN: 390-030-71

REGISTERED PROFESSIONAL ENGINEER
RICARDO LEAL
No. C 71625
Exp. 06-30-23
CIVIL
STATE OF CALIFORNIA

DATE SIGNED: 7/1/2021

Revisions:	Date:
X -	-
X -	-
X -	-
X -	-
X	

PROPOSED SITE PLAN

CVEAS JOB #: 21058
DATE: 04-13-2021
PLANNING PLAN CHECK #: XX-XXXX
BUILDING PLAN CHECK #: XX-XXXX
DRAWN BY: CVEAS
CHECKED BY: RL
SCALE: AS NOTED

A1.1

APPENDIX C
REPRESENTATIVE SITE PHOTOS

View of the non-native annual grassland and tilled annual grassland, facing west. March 29, 2022

View of the non-native annual grassland, facing southwest. March 29, 2022

View of the tilled non-native grassland, facing northeast. March 29, 2022

View of the tilled non-native grassland, facing south. March 29, 2022

View of the tilled non-native grassland and developed house in the background, facing east. March 29, 2022

View of the developed house and disturbed/barren areas, facing south. March 29, 2022

View of valley oak and non-native grassland, facing northeast. March 29, 2022

View of non-native grassland and tilled non-native grassland, facing east.
March 29, 2022

APPENDIX D
PLANT AND ANIMAL SPECIES OBSERVED

Plant Species Observed

The table below contains a list of plant species identified on the project site by LSA Biologist Kelly McDonald on March 29, 2022.

* Introduced species not native to California

EUDICOTS	
Asparagaceae	**Asparagus Family**
*Asparagus officinalis**	Garden asparagus
Asteraceae	**Sunflower Family**
*Silybum marianum**	Milk thistle
Boraginaceae	**Borage family**
Amsinckia intermedia	Common fiddleneck
Plagiobothrys canescens	Valley popcorn flower
Brassicaceae	**Mustard Family**
*Capsella bursa-pastoris**	Shepherd's purse
*Sisymbrium irio**	London rocket
Chenopodiaceae	**Goosefoot Family**
*Chenopodium album**	Lamb's quarters
*Salsola tragus**	Russian thistle
Geraniaceae	**Geranium Family**
*Erodium cicutarium**	Redstem stork's bill
Fabaceae	**Legume Family**
*Melilotus indicus**	Yellow sweetclover
Fagaceae	**Oaks Family**
Quercus lobata	Valley oak
Malvaceae	**Mallow Family**
*Malva parviflora**	Cheeseweed mallow
Montiaceae	**Miner's lettuce Family**
Calandrinia menziesii	Red maids
Lamiaceae	**Mint Family**
*Lamium amplexicaule**	Henbit
Simaroubaceae	**Quassi Family**
*Ailanthus altissima**	Tree of Heaven
Urticaceae	**Nettle Family**
*Urtica urens**	Annual stinging nettle
Vitaceae	**Grape Family**
*Vitis vinifera**	Cultivated grape
MONOCOTS	
Poaceae	**Grass Family**
*Avena barbata**	Wild oat
*Bromus diandrus**	Ripgut grass
Bromus madritensis ssp. *rubens**	Red brome
*Bromus tectorum**	Cheat grass
*Hordeum murinum**	Foxtail barley

Wildlife Species Observed

The following wildlife species were observed in the project site by LSA biologist Kelly McDonald on March 29, 2022.

Scientific Name	Common Name
BIRDS	
Charadriidae	**Shorebirds**
Charadrius vociferus	Killdeer
Columbidae	**Pigeons and Doves**
Zenaida macroura	Mourning dove
Picidae	**Woodpeckers**
Melanerpes formicivorus	Acorn woodpecker
Corvidae	**Jays, Magpies, Crows and Ravens**
Aphelocoma californica	California scrub-jay
Corvus brachyrhynchos	American crow
Mimidae	**Catbirds, Mockingbirds, and Thrashers**
Mimus polyglottos	Northern mockingbird
Parulidae	**Wood-warblers**
Setophaga coronate	Yellow-rumped warbler
Passeridae	**Old World Sparrows**
Passer domesticus	House sparrow
Passerellidae	**New World Sparrows**
Haemorhous mexicanus	House finch
Zonotrichia leucophrys	White-crowned sparrow
Sturnidae	**Starling and Mynas**
*Sturnus vulgaris**	European starling
MAMMALS	
Geomyidae	**Pocket Gophers**
Thomomys bottae	Botta's pocket gopher

* introduced species not native to California

APPENDIX E

SPECIAL-STATUS SPECIES IDENTIFIED AS POTENTIALLY OCCURING IN THE PROJECT VICINITY

Table B: Special-Status Plant Species Potentially Occurring in the Project Vicinity

Common Name	Scientific Name	Status	General Habitat Description	Flowering Period	Likelihood of Occurrence and Rationale
Heartscale	*Atriplex cordulata var.cordulata*	US: – CA: – CNPS: 1B.2	Annual herb occurring in chenopod scrub, meadows, seeps and valley/foothill grasslands (sandy) in saline or alkaline soil between 0 and 560 m in elevation. Found in the Central Valley counties.	April-October	**Not Expected.** There are no known historical records of occurrence in the project vicinity [1] and suitable habitat is absent from the project site.
Earlimart orache	*Atriplex cordulata var. erecticaulis*	US: – CA: – CNPS: 1B.2	Annual herb occurring in valley and foothill grassland between 40 and 100 m in elevation. Kings, Kern and Tulare counties.	August-September	**Not Expected.** There are no known historical records of occurrence in the project vicinity and suitable habitat is absent from the project site.
Brittlescale	*Atriplex depressa*	US: – CA: – CNPS: 1B.2	Annual herb occurring in chenopod scrub, valley/foothill grasslands and vernal pools between 50 and 635 m elevation. Found in Central Valley counties.	April-September	**Not Expected.** There are no known historical records of occurrence in the project vicinity and suitable habitat is absent from the project site.
Lesser saltscale	*Atriplex minuscula*	US: – CA: – CNPS: 1B.1	Annual herb occurring in chenopod scrub, valley/foothill grassland, and playas in sandy soils between 15 and 200 m in elevation. Found in Central Valley counties.	May-October	**Not Expected.** There are no known historical records of occurrence in the project vicinity and suitable habitat is absent from the project site.
Subtle orache	*Atriplex subtilis*	US: – CA: – CNPS: 1B.2	Annual herb occurring in valley and foothill grassland on alkaline soils between 40 and 100 m in elevation. Found in Central Valley counties.	June-October	**Not Expected.** There are no known historical records of occurrence in the project vicinity and suitable habitat is absent from the project site.
Bristly sedge	*Carex comosa*	US: – CA: – CNPS: 2B.1	Perennial rhizomatous herb occurring in coastal prairie, marshes and swamps (lake margins) and valley/foothill grassland between 0 and 625 m in elevation. Found in Central Valley Counties.	May-September	**Not Expected.** There are no known historical records of occurrence in the project vicinity and suitable habitat is absent from the project site.
California jewelflower	*Caulanthus californicus*	US: FE CA: CE CNPS: 1B.1	Annual herb occurring in chenopod scrub, pinyon and juniper woodland, and valley/foothill grassland in sandy soils between 61 and 1,000 m in elevation. Found in Central Coast and Central Valley counties.	February-May	**Not Expected.** There are no known historical records of occurrence in the project vicinity and suitable habitat is absent from the project site.

Table B: Special-Status Plant Species Potentially Occurring in the Project Vicinity

Common Name	Scientific Name	Status	General Habitat Description	Flowering Period	Likelihood of Occurrence and Rationale
Spiny-sepaled button-celery	*Eryngium spinosepalum*	US: – CA: – CNPS: 1B.2	Annual/perennial herb occurring in vernal pools and valley/foothill grassland between 80 and 975 m in elevation. Found in Central Coast and Central Valley counties.	April-June	**Not Expected.** There are no known historical records of occurrence in the project vicinity and suitable habitat is absent from the project site.
Kings River monkeyflower	*Erythranthe acutidens*	US: – CA: – CNPS: 3	Annual herb occurring within lower montane coniferous forest and cismontane woodlands between 305 and 1,220m in elevation. Found in Calaveras, Fresno, Madera, Mariposa and Tulare counties.	April-July	**Not Expected.** There are no known historical records of occurrence in the project vicinity and suitable habitat is absent from the project site.
Winter's sunflower	*Helianthus winteri*	US: – CA: – CNPS: 1B.2	Perennial shrub occurring in cismontane woodland and valley/foothill grassland on relatively steep south-facing slopes. Often found in granitic, openings, rocky, slopes and often roadsides between 125 and 460 m in elevation. Found in Fresno and Tulare counties.	January-December	**Not Expected.** There are no known historical records of occurrence in the project vicinity and suitable habitat is absent from the project site.
California satintail	*California satintail*	US: – CA: – CNPS: 2B.1	Perennial rhizomatous herb occurring in chaparral, coastal scrub, Mojavean desert scrub, meadows/seeps, and riparian scrub between 0 and 1,215 m in elevation. Found in Central Valley and Southern California counties.	September-May	**Not Expected.** There are no known historical records of occurrence in the project vicinity and suitable habitat is absent from the project site.
Alkali-sink goldfields	*Lasthenia chrysantha*	US: – CA: – CNPS: 1B.1	Annual herb occurring in alkaline vernal pools between 0 and 200 m in elevation. Found in Central Valley counties.	February-June	**Not Expected.** There are no known historical records of occurrence in the project vicinity and suitable habitat is absent from the project site.
Madera leptosiphon	*Leptosiphon serrulatus*	US: – CA: – CNPS: 1B.2	Annual herb occurring in cismontane woodland and lower montane coniferous forest between 300 and 1,300 m in elevation. Found in Fresno, Kern, Madera, Mariposa and Tulare counites.	April-May	**Not Expected.** There are no known historical records of occurrence in the project vicinity and suitable habitat is absent from the project site.
San Joaquin Valley Orcutt grass	*Orcuttia inaequalis*	US: FT CA: CE CNPS: 1B.1	Annual herb occurring in vernal pools between 10 and 755 m in elevation. Found in Fresno, Madera, Merced, Solano, Stanislaus and Tulare counites.	April-September	**Not Expected.** There are no known historical records of occurrence in the project vicinity and suitable habitat is absent from the project site.

Table B: Special-Status Plant Species Potentially Occurring in the Project Vicinity

Common Name	Scientific Name	Status	General Habitat Description	Flowering Period	Likelihood of Occurrence and Rationale
San Joaquin adobe sunburst	*Pseudobahia peirsonii*	US: FT CA: CE CNPS: 1B.1	Annual herb occurring in cismontane woodland and valley/foothill grassland in adobe clay between 90 and 800 m in elevation. Found in Fresno, Kern, and Tulare counties.	February-April	**Not Expected.** There are no known historical records of occurrence in the project vicinity and suitable habitat is absent from the project site.
California alkali grass	*Puccinellia simplex*	US: – CA: – CNPS: 1B.2	Annual herb occurring in chenopod scrub, meadows/seeps, vernal pools and valley/foothill grassland with other micro habitat conditions such as alkaline, vernally mesic, sinks, flats and lake margins between 2 and 930 m in elevation. Found throughout California counites.	March-May	**Not Expected.** There are no known historical records of occurrence in the project vicinity and suitable habitat is absent from the project site.
Sanford's arrowhead	*Sagittaria sanfordii*	US: – CA: – CNPS: 1B.2	Perennial rhizomatous herb (emergent) occurring in marshes and swamps within shallow freshwater between 0 and 650 m in elevation. Found throughout California counites.	May-October	**Not Expected.** There are no known historical records of occurrence in the project vicinity and suitable habitat is absent from the project site.
Greene's tuctoria	*Tuctoria greenei*	US: FT CA: CR CNPS: 1B.1	Annual herb occurring in vernal pools between 30 and 1,070 m in elevation. Found in Central Valley counties.	May-Kuly	**Not Expected.** There are no known historical records of occurrence in the project vicinity and suitable habitat is absent from the project site.

[1]Project vicinity = Project site plus a 5 mile buffer

Status: Federal Endangered (FE), Federal Threatened (FT), Federal Candidate (FC), Federal Proposed (FP, FPE, FPT), Federal Delisted (FD), California Endangered (CE), California Threatened (CT), California Species of Special Concern (SSC), California Fully Protected Species (CFP), California Special Plant (CSP), California Special Animal (CSA), California Rare (CR)

California Native Plant Society Designations:
1B = Rare, threatened, or endangered in California and elsewhere
2B = Rare, threatened, or endangered in California, but not elsewhere and ,
0.1 = seriously endangered
0.2 = fairly endangered

CA = California
CNPS = California Native Plant Society
ft = foot/feet
m = meter/meters
mi = mile/miles
US = United States

Table B: Special-Status Animal Species Potentially Occurring or Known to Occur in the Project Vicinity

Common Name	Scientific Name	Status Listing	Habitat and Comments	Likelihood of Occurrence and Rationale
CRUSTACEANS				
Vernal pool fairy shrimp	*Branchinecta lynchi*	US: FT CA: –	Endemic to the grasslands of the Central Valley, Central Coast mountains, and South Coast mountains, in astatic rain-filled pools. Inhabit small, clear-water sandstone-depression pools and grassed swale, earth slump, or basalt-flow depression pools.	**Not Expected.** There are no known historical records of occurrence in the project vicinity [1] and suitable habitat is absent from the project site.
Vernal pool tadpole shrimp	*Lepidurus packardi*	US: FE CA: –	Inhabits vernal pools and swales in the Sacramento Valley containing clear to highly turbid water. Pools commonly found in grass-bottomed swales of unplowed grasslands. Some pools are mud-bottomed and highly turbid.	**Not Expected.** There are no known historical records of occurrence in the project vicinity and suitable habitat is absent from the project site.
California linderiella	*Linderiella occidentalis*	US: – CA: SA	Seasonal pools in unplowed grasslands with old alluvial soils underlain by hardpan or in sandstone depressions. Water in the pools has very low alkalinity, conductivity, and total dissolved solids.	**Not Expected.** There are no known historical records of occurrence in the project vicinity and suitable habitat is absent from the project site.
INSECTS				
Crotch bumble bee	*Bombus crotchii*	US: – CA: SA	Coastal California east to the Sierra-Cascade crest and south into Mexico. Food plant genera include Antirrhinum, Phacelia, Clarkia, Dendromecon, Eschscholzia, and Eriogonum.	**Not Expected.** There is one known historical record of occurrence in the project vicinity (CNDDB 1912) and suitable habitat is absent from the project site. No typical food genera was observed during the March 2022 field survey.
Valley elderberry longhorn beetle	*Desmocerus californicus dimorphus*	US: FT CA: –	Occurs only in the Central Valley of California, in association with blue elderberry (*Sambucus mexicana*). Prefers to lay eggs in elderberries 2-8 inches in diameter; some preference shown for "stressed" elderberries.	**Not Expected.** There are no known historical records of occurrence in the project vicinity and suitable habitat is absent from the project site.
Antioch efferian robberfly	*Efferia antiochi*	US: – CA: SA	Known only from Contra Costa and Fresno counties.	**Not Expected.** There are no known historical records of occurrence in the project vicinity and suitable habitat is absent from the project site.
Molestan blister beetle	*Lytta molesta*	US: – CA: SA	Inhabits the Central Valley of California, from Contra Costa to Kern and Tulare counties.	**Not Expected.** There are no known historical records of occurrence in the project vicinity and suitable habitat is absent from the project site.
Hurd's metapogon robberfly	*Metapogon hurdi*	US: – CA: SA	Known only from Antioch Dunes and Fresno.	**Not Expected.** There are no known historical records of occurrence in the project vicinity and suitable habitat is absent from the project site.
AMPHIBIANS				

Table B: Special-Status Animal Species Potentially Occurring or Known to Occur in the Project Vicinity

Common Name	Scientific Name	Status Listing	Habitat and Comments	Likelihood of Occurrence and Rationale
California tiger salamander - central California DPS	*Ambystoma californiense pop. 1*	US: FT CA: CT	Lives in vacant or mammal-occupied burrows throughout most of the year; in grassland, savanna, or open woodland habitats. Need underground refuges, especially ground squirrel burrows, and vernal pools or other seasonal water sources for breeding.	**Not Expected.** There are no known historical records of occurrence in the project vicinity and suitable habitat is absent from the project site.
Western spadefoot	*Spea hammondii*	US: – CA: SSC	Occurs primarily in grassland and other relatively open habitats. Found in elevations ranging from sea level to 4,500 ft. Requires temporary pools for breeding.	**Not Expected.** There are no known historical records of occurrence in the project vicinity and suitable habitat is absent from the project site.
REPTILES				
Northern California legless lizard	*Anniella pulchra*	US: – CA: SSC	Sandy or loose loamy soils under sparse vegetation. Soil moisture is essential. They prefer soils with a high moisture content.	**Not Expected.** There are no known historical records of occurrence in the project vicinity and suitable habitat is absent from the project site.
California glossy snake	*Arizona elegans occidentalis*	US: – CA: SSC	Patchily distributed from the eastern portion of San Francisco Bay, southern San Joaquin Valley, and the Coast, Transverse, and Peninsular ranges, south to Baja California. Generalist reported from a range of scrub and grassland habitats, often with loose or sandy soils.	**Not Expected.** There are no known historical records of occurrence in the project vicinity and suitable habitat is absent from the project site.
Coast horned lizard	*Phrynosoma blainvillii*	US: – CA: SSC	Frequents a wide variety of habitats, most common in lowlands along sandy washes with scattered low bushes. Open areas for sunning, bushes for cover, patches of loose soil for burial and abundant supply of ants and other insects.	**Not Expected.** There are no known historical records of occurrence in the project vicinity and suitable habitat is absent from the project site.
BIRDS				
Burrowing owl	*Athene cunicularia*	US: – CA: SSC	Burrows in open, dry, annual or perennial grasslands, deserts, and scrublands characterized by low-growing vegetation. Subterranean nester, dependent upon burrowing mammals, most notably the California ground squirrel.	**Low probability of occurrence.** There are no known historical records of occurrence in the project vicinity and no eBird records. However, the non-native annual grassland provides marginal suitable habitat, and several gopher burrows were observed. The gopher burrows could provide suitable habitat.
Swainson's hawk	*Buteo swainsoni*	US: – CA: CT	Breeds in grasslands with scattered trees, juniper-sage flats, riparian areas, savannas, and agricultural/ranch lands. Requires adjacent suitable foraging areas such as grasslands, alfalfa, or grain fields supporting rodent populations.	**Moderate probability of foraging; low probability of nesting.** There are two known records of occurrence in the project vicinity (CNDDB 1926, 2000). There are several eBird records with the most recent from March 2022. Additionally, eBird records documented a nesting site approximately 2.54 miles west of the project site in 2019. The project site does

Table B: Special-Status Animal Species Potentially Occurring or Known to Occur in the Project Vicinity

Common Name	Scientific Name	Status Listing	Habitat and Comments	Likelihood of Occurrence and Rationale
				contain trees and shrubs that provide marginal suitable nesting habitat. The surrounding areas on the project site could also provide suitable foraging habitat.
Western yellow-billed cuckoo	*Coccyzus americanus occidentalis*	US: FT CA: CE	Riparian forest nester, along the broad, lower flood-bottoms of larger river systems. Nests in riparian jungles of willow, often mixed with cottonwoods, with lower story of blackberry, nettles, or wild grape.	**Not Expected.** There is one historical record of occurrence in project vicinity (CNDDB 1898) and suitable habitat is absent.
MAMMALS				
San Joaquin kit fox	*Vulpes macrotis mutica*	US: FE CA: CT	Prefers open, level areas with loose-textured soils supporting scattered, shrubby vegetation with little human disturbance. Some agricultural areas may support these foxes.	**Not Expected.** There are no known historical records of occurrence in the project vicinity and suitable habitat is absent from the project site.

[1]Project vicinity = Project area plus a 5 mile buffer
Status: Federal Endangered (FE), Federal Threatened (FT), Federal Candidate (FC), Federal Proposed (FP, FPE, FPT), Federal Delisted (FD), California Endangered (CE), California Threatened (CT), California Species of Special Concern (SSC), California Fully Protected Species (CFP), California Special Animal (CSA)

CA = California

ft = foot/feet
m = meter/meters
mi = mile/miles
US = United States

APPENDIX C

PHASE I ARCHAEOLOGICAL SURVEY STUDY

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CARLSBAD
CLOVIS
IRVINE
LOS ANGELES
PALM SPRINGS
POINT RICHMOND
RIVERSIDE
ROSEVILLE
SAN LUIS OBISPO

October 17, 2023

Brenda Ramirez, Assistant Project Manager
Central Valley Engineering & Surveying, Inc.
2511 Logan Street
Selma, CA 93662

Subject: Phase I Archaeological Survey Study for the Casa De Villa Apartment Complex Project in Selma, Fresno County, California (LSA Project No. CVN2201)

Dear Ms. Ramirez:

LSA conducted a Phase I archaeological survey study (study) for the proposed Casa De Villa Apartment Complex Project (project) in Selma, Fresno County, California. Study work was completed per the requirements of the California Environmental Quality Act of 1970 (CEQA).

This study has the following purposes: (1) identify archaeological deposits that may meet the CEQA definition of a historical resource (California Public Resources Code [PRC] Section 21084.1) or a unique archaeological resource (PRC Section 21083.2) and that may be impacted by the proposed project; (2) assess the potential for human remains; and (3) recommend procedures for avoiding or mitigating impacts to such deposits, if warranted. The study consisted of background research and a field survey and was conducted by LSA Associate/Senior Cultural Resources Manager Kerrie Collison, M.A., Registered Professional Archaeologist (RPA) 28731436.

PROJECT SITE LOCATION AND CHARACTERISTICS

The 3.29-acre project site, which is also the study site, is depicted on the United States Geological Survey (USGS) *Selma, California* 7.5-minute topographic quadrangle map in Section 7 of Township 16 South, Range 22 East, Mount Diablo Baseline and Meridian (USGS 1981; Figure 1) (References are provided as Attachment A; Figures are provided as Attachment B). The project site is located at the southwest corner of Nebraska Avenue and Thompson Avenue in Selma, approximately 15 miles southeast of Fresno (Figure 2).

The project site is relatively level and is situated at an elevation of approximately 310 feet. The nearest year-round freshwater source is the Kings River, which is 5.85 miles southeast of the project site at its closest point. Subsurface sediments of the project site consist of Quaternary alluvium, lake, playa, and terrace deposits that date to the Pleistocene and Holocene, which range in age from 2.58 million years ago to the present (CGS 2015).

PROJECT DESCRIPTION

The proposed project consists of the construction of 40 multifamily units and a 3,000-square-foot commercial development. As proposed, the project would be completed in two phases with Phase 1 consisting of the construction of five two-story buildings totaling 28,155 square feet. Additionally, Phase 1 would include construction of trash enclosures, 83 paved vehicular parking spaces and four bicycle parking spaces, and open and common areas. Phase 2 would consist of a 3,000-square-foot commercial development.

BACKGROUND RESEARCH

Southern San Joaquin Valley Information Center

A record search of the project site and a 0.5-mile search radius was conducted on April 4, 2022, by Jeremy E. David, Assistant Coordinator at the Southern San Joaquin Valley Information Center (SSJVIC) of the California Historical Resources Information System at California State University, Bakersfield (SSJVIC Record Search File No. 22-128). The SSJVIC, an affiliate of the California Office of Historic Preservation, is the official repository of cultural resource records and reports for Fresno County. The record search results (Attachment C) indicate that no previous cultural resources studies have included a portion of the project site and five previous cultural resources studies have included a portion of the 0.5-mile radius of the project site. These five studies consisted of four archaeological surveys and one literature search. Less than 25 percent of the record search area has been previously studied for cultural resources. As a result of previous studies, no cultural resources have been recorded within the project site and four non-archaeological cultural resources have been recorded within 0.5-mile of the project site.

Native American Heritage Commission

On March 23, 2022, LSA submitted a request to the Native American Heritage Commission (NAHC) to request a review of the Sacred Lands File (SLF). The NAHC maintains the SLF database and is the official State repository of Native American sacred sites in California.

On May 25, 2022, the NAHC responded, stating that the SLF search was negative for resources in the project area. The NAHC also provided a list of 13 Native American tribes in the vicinity of the project who may have knowledge of cultural resources in the area. The NAHC response letter is provided (Attachment D).

Aerial Photographs and Maps

Aerial photographs and historic maps that include the project site were also reviewed (USGS n.d., NETR n.d.). The results of the review are presented in Table A.

Table A: Aerial Photograph and Historic Map Review

Map/Photograph	Results
1924 *Selma, California* map (Scale 1:31,680)	The city of Selma has already been mostly developed, and a building is depicted on the project site.
1946 *Selma, California* map (Scale 1:62,500)	Multiple buildings are depicted on the project site.
1948 *Fresno, California* map (Scale 1:250,000)	The boundaries of the city of Selma are depicted. No development details of the project site are depicted.
1962 aerial photograph	At least one building is in the project site. The remainder of the project site is obscured by trees or has been mechanically disked for agricultural purposes.
1964 *Selma, California* map (Scale 1:24,000)	Only one building is depicted within the project site.
1972 aerial photograph	No visible change from the 1962 aerial photograph.
1984 aerial photograph	No visible change from the 1972 aerial photograph.

Source: USGS (n.d.) and National Environmental Title Research (n.d.).

FIELD SURVEY

On April 14, 2022, LSA archaeologist Kerrie Collison conducted a pedestrian field survey of the entire project site by walking transects spaced 5 meters apart. Sparse, ankle-high vegetation throughout the project site appears to have been maintained via mechanical disking or raking, as evidenced by the patterns of dirt throughout the site (Photo 1). A trowel was occasionally used to expose subsurface sediments to check subsurface sediment characteristics. Where present, rodent burrowing holes and rodent dirt aprons were also examined for indications of archaeological deposits and/or human remains.

Photo 1: Overview of Property from Center of Site. View to west.

The field survey did not identify any cultural resources in the project site. Observed sediments were uniform throughout the project site and were a light-brown, fine-grained material. Examined subsurface sediments were similar in composition and contained no evidence of midden deposits.

SUMMARY AND RECOMMENDATIONS

This cultural resource study, consisting of background research and a field survey, did not identify archaeological deposits or human remains in the project site. However, determining the age of currently standing buildings in the project site is extremely difficult due to the poor quality of aerial photographs for the area. It is possible that the building depicted on the 1924 map as within the project site may have been previously demolished. However, subsurface historic-period archaeological deposits associated with the building may still exist within the project site. The project site has historically undergone mechanical disking since prior to 1962, which may have

destroyed any previously present surficial archaeological resources. However, the subsurface sediments of the project site date to a period prior to historic occupation of the region, and sediments below disturbance from mechanical disking (estimated at 18 inches below the surface) could potentially contain intact archaeological deposits.

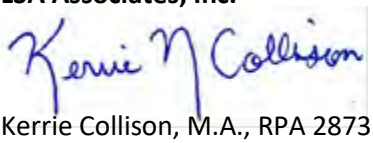
For the above reasons, there is potential for subsurface historic-period and/or prehistoric resources within the project site. LSA recommends archaeological monitoring during ground-disturbing work associated with the project. A qualified professional archaeologist should be contracted to provide archaeological monitoring during ground-disturbing construction activities in order to identify potential archaeological deposits and/or human remains. If any such resources are discovered, the archaeological monitor shall have the authority to stop work in the immediate area in order to assess the nature and significance of the find. Monitoring should occur on a full-time basis during all excavation activities until the qualified archaeologist is satisfied that there is little likelihood of encountering archaeological deposits. Upon completion of monitoring activities, the qualified archaeologist should prepare a report to document the methods and results of monitoring activities. This report should be submitted to the SSJVIC.

If any of the remaining buildings in the project site are more than 50 years old, LSA recommends that those buildings be evaluated for significance per CEQA. If human remains are encountered during project work, the regulatory process outlined in Health and Safety Code Section 7050.5 must be followed, which involves immediately contacting the County coroner for a determination of the age and disposition of the remains.

Please contact me at kerrie.collison@lsa.net if you have any questions regarding this study. Thank you for using the services of LSA.

Sincerely,

LSA Associates, Inc.



Kerrie Collison, M.A., RPA 28731436
Associate/Senior Cultural Resources Manager

Attachments: A—References
B—Project Figures
C—Record Search Results Summary Letter
D—Results of Native American Heritage Commission Sacred Lands File Search

ATTACHMENT A

REFERENCES

California Geological Survey (CGS)
2015 Geologic Map of California. Website: https://maps.conservation.ca.gov/cgs/gmc/ (accessed April 14, 2022).

National Environmental Title Research (NETR)
n.d. Historic Aerials. Website: http://www.historicaerials.com (accessed April 13, 2022).

United States Geological Survey (USGS)
1981 *Selma, California* 7.5-minute topographic quadrangle. Published 1964, photorevised 1981. USGS, Denver, Colorado.

n.d. USGS topoView. Website: https://ngmdb.usgs.gov/topoview/viewer/#4/39.98/-100.06 (accessed April 13, 2022).

ATTACHMENT B

PROJECT FIGURES

Figure 1: Project Location and Vicinity

Figure 2: Project Site

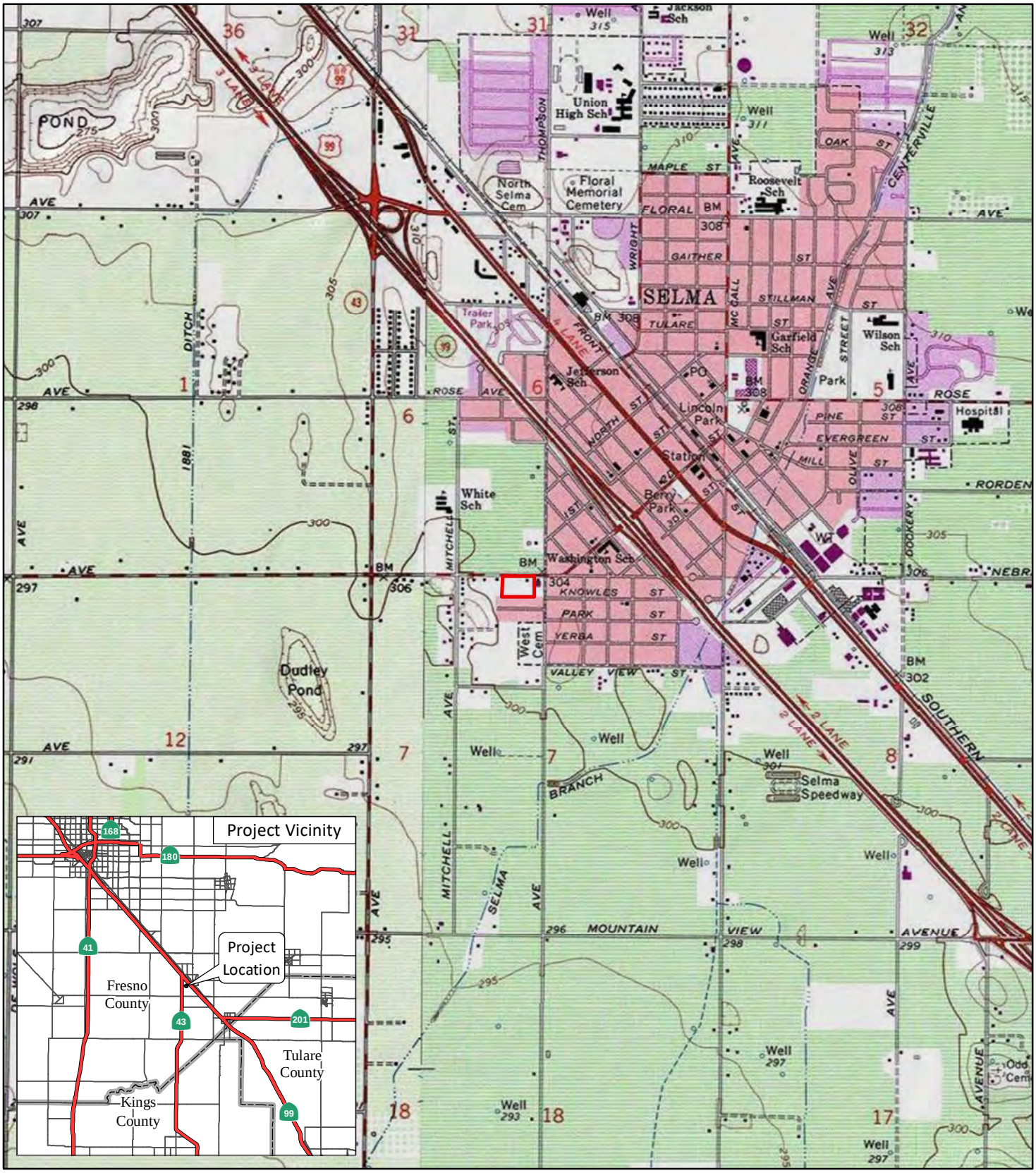


FIGURE 1

Casa De Villa Apartment Complex Project

Project Location and Vicinity

SOURCE: USGS 7.5' Quad.- *Selma, CA* (1981)

\\vCorp12\Images\CVN2201\GIS\MXD\Fig1_Proloc and Vic.mxd (3/23/2022)

LSA

LEGEND

Project Site

FIGURE 2

N

0 62.5 125

FEET

SOURCE: Google Maps, 2022

Casa De Villa Apartment Complex Project

Project Site

\\vCorp12\Images\CVN2201\GIS\MXD\Figure2_Project Site.mxd (3/23/2022)

ATTACHMENT C

RECORD SEARCH RESULTS SUMMARY LETTER

California Historical Resources Information System

Fresno
Kern
Kings
Madera
Tulare

Southern San Joaquin Valley Information Center
California State University, Bakersfield
Mail Stop: 72 DOB
9001 Stockdale Highway
Bakersfield, California 93311-1022
(661) 654-2289
E-mail: ssjvic@csub.edu
Website: www.csub.edu/ssjvic

4/4/2022

Kerrie Collison
LSA
285 South Street, Suite P
San Luis Obispo, CA 93401

Re: Casa de Villa Apartment Complex Project (CVN2201)
Records Search File No.: 22-128

The Southern San Joaquin Valley Information Center received your record search request for the project area referenced above, located on the Selma USGS 7.5' quad. The following reflects the results of the records search for the project area and the 0.5 mile radius:

As indicated on the data request form, the locations of non-archaeological resources and reports are provided in the following format: ☒ custom GIS maps ☐ GIS data

Resources within project area:	None
Non-arch. Resources within 0.5 mile radius:	P-10-005193, 005194, 005195, 005812
Reports within project area:	None
Reports within 0.5 mile radius:	FR-00521, 00573, 02353, 02414, 02452

Note: 4 non-arch resources from the radius were omitted from all results, as per request.

Resource Database Printout (list): ☐ enclosed ☐ not requested ☒ nothing listed

Resource Database Printout (details): ☐ enclosed ☐ not requested ☒ nothing listed

Resource Digital Database Records: ☐ enclosed ☒ not requested ☐ nothing listed

Report Database Printout (list): ☒ enclosed ☐ not requested ☐ nothing listed

Report Database Printout (details): ☒ enclosed ☐ not requested ☐ nothing listed

Report Digital Database Records: ☐ enclosed ☒ not requested ☐ nothing listed

Resource Record Copies: ☐ enclosed ☐ not requested ☒ nothing listed

Report Copies: ☐ enclosed ☒ not requested ☐ nothing listed

OHP Built Environment Resources Directory: ☐ enclosed ☒ not requested ☐ nothing listed

Archaeological Determinations of Eligibility: ☐ enclosed ☐ not requested ☒ nothing listed

CA Inventory of Historic Resources (1976): ☐ enclosed ☐ not requested ☒ nothing listed

Caltrans Bridge Survey: Not available at SSJVIC; please see https://dot.ca.gov/programs/environmental-analysis/cultural-studies/california-historical-bridges-tunnels

Ethnographic Information: Not available at SSJVIC

Historical Literature: Not available at SSJVIC

Historical Maps: Not available at SSJVIC; please see http://historicalmaps.arcgis.com/usgs/

Local Inventories: Not available at SSJVIC

GLO and/or Rancho Plat Maps: Not available at SSJVIC; please see http://www.glorecords.blm.gov/search/default.aspx#searchTabIndex=0&searchByTypeIndex=1 and/or http://www.oac.cdlib.org/view?docId=hb8489p15p;developer=local;style=oac4;doc.view=items

Shipwreck Inventory: Not available at SSJVIC; please see https://www.slc.ca.gov/shipwrecks/

Soil Survey Maps: Not available at SSJVIC; please see http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx

Please forward a copy of any resulting reports from this project to the office as soon as possible. Due to the sensitive nature of archaeological site location data, we ask that you do not include resource location maps and resource location descriptions in your report if the report is for public distribution. If you have any questions regarding the results presented herein, please contact the office at the phone number listed above.

The provision of CHRIS Data via this records search response does not in any way constitute public disclosure of records otherwise exempt from disclosure under the California Public Records Act or any other law, including, but not limited to, records related to archeological site information maintained by or on behalf of, or in the possession of, the State of California, Department of Parks and Recreation, State Historic Preservation Officer, Office of Historic Preservation, or the State Historical Resources Commission.

Due to processing delays and other factors, not all of the historical resource reports and resource records that have been submitted to the Office of Historic Preservation are available via this records search. Additional information may be available through the federal, state, and local agencies that produced or paid for historical resource management work in the search area. Additionally, Native American tribes have historical resource information not in the CHRIS Inventory, and you should contact the California Native American Heritage Commission for information on local/regional tribal contacts.

Should you require any additional information for the above referenced project, reference the record search number listed above when making inquiries. Invoices for Information Center services will be sent under separate cover from the California State University, Bakersfield Accounting Office.

Thank you for using the California Historical Resources Information System (CHRIS).

Sincerely,

Jeremy E David
Assistant Coordinator

ATTACHMENT D

RESULT OF NATIVE AMERICAN HERITAGE COMMISSION SACRED LANDS FILE SEARCH

NATIVE AMERICAN HERITAGE COMMISSION

NAHC HEADQUARTERS
1550 Harbor Boulevard
Suite 100
West Sacramento,
California 95691
(916) 373-3710

May 25, 2022

Kerrie Collison
LSA

Via Email to: Kerrie.Collison@lsa.net

Re: Casa De Villa Apartment Complex Project, Fresno County

Dear Ms. Collison:

A record search of the Native American Heritage Commission (NAHC) Sacred Lands File (SLF) was completed for the information you have submitted for the above referenced project. The results were negative. However, the absence of specific site information in the SLF does not indicate the absence of cultural resources in any project area. Other sources of cultural resources should also be contacted for information regarding known and recorded sites.

Attached is a list of Native American tribes who may also have knowledge of cultural resources in the project area. This list should provide a starting place in locating areas of potential adverse impact within the proposed project area. I suggest you contact all of those indicated; if they cannot supply information, they might recommend others with specific knowledge. By contacting all those listed, your organization will be better able to respond to claims of failure to consult with the appropriate tribe. If a response has not been received within two weeks of notification, the Commission requests that you follow-up with a telephone call or email to ensure that the project information has been received.

If you receive notification of change of addresses and phone numbers from tribes, please notify me. With your assistance, we can assure that our lists contain current information.

If you have any questions or need additional information, please contact me at my email address: Cameron.Vela@nahc.ca.gov.

Sincerely,

Cameron Vela

Cameron Vela
Cultural Resources Analyst

Attachment

Native American Heritage Commission
Native American Contact List
Fresno County
5/25/2022

Big Sandy Rancheria of Western Mono Indians
Elizabeth Kipp, Chairperson
P.O. Box 337
Auberry, CA, 93602
Phone: (559) 374 - 0066
Fax: (559) 374-0055
lkipp@bsrnation.com
Western Mono

Cold Springs Rancheria of Mono Indians
Jared Aldern,
P. O. Box 209
Tollhouse, CA, 93667
Phone: (559) 855 - 5043
Fax: (559) 855-4445
csrepa@netptc.net
Mono

Cold Springs Rancheria of Mono Indians
Carol Bill, Chairperson
P.O. Box 209
Tollhouse, CA, 93667
Phone: (559) 855 - 5043
Fax: (559) 855-4445
coldsprgstribe@netptc.net
Mono

Dumna Wo-Wah Tribal Government
Robert Ledger, Chairperson
2191 West Pico Ave.
Fresno, CA, 93705
Phone: (559) 540 - 6346
ledgerrobert@ymail.com
Foothill Yokut
Mono

Kings River Choinumni Farm Tribe
Stan Alec,
3515 East Fedora Avenue
Fresno, CA, 93726
Phone: (559) 647 - 3227
Foothill Yokut

Santa Rosa Rancheria Tachi Yokut Tribe
Leo Sisco, Chairperson
P.O. Box 8
Lemoore, CA, 93245
Phone: (559) 924 - 1278
Fax: (559) 924-3583
Southern Valley Yokut

Table Mountain Rancheria
Bob Pennell, Cultural Resource Director
P.O. Box 410
Friant, CA, 93626
Phone: (559) 325 - 0351
Fax: (559) 325-0394
rpennell@tmr.org
Yokut

Table Mountain Rancheria
Brenda Lavell, Chairperson
P.O. Box 410
Friant, CA, 93626
Phone: (559) 822 - 2587
Fax: (559) 822-2693
rpennell@tmr.org
Yokut

Traditional Choinumni Tribe
David Alvarez, Chairperson
2415 E. Houston Avenue
Fresno, CA, 93720
Phone: (559) 217 - 0396
Fax: (559) 292-5057
davealvarez@sbcglobal.net
Foothill Yokut

Tule River Indian Tribe
Neil Peyron, Chairperson
P.O. Box 589
Porterville, CA, 93258
Phone: (559) 781 - 4271
Fax: (559) 781-4610
neil.peyron@tulerivertribe-nsn.gov
Yokut

Tule River Indian Tribe
Joey Garfield, Tribal Archaeologist
P. O. Box 589
Porterville, CA, 93258
Phone: (559) 783 - 8892
Fax: (559) 783-8932
joey.garfield@tulerivertribe-nsn.gov
Yokut

Tule River Indian Tribe
Kerri Vera, Environmental Department
P. O. Box 589
Porterville, CA, 93258
Phone: (559) 783 - 8892
Fax: (559) 783-8932
kerri.vera@tulerivertribe-nsn.gov
Yokut

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 Resource Section 5097.98 of the Public Resources Code.

This list is only applicable for contacting local Native Americans with regard to cultural resources assessment for the proposed Casa De Villa Apartment Complex Project, Fresno County.

Native American Heritage Commission
Native American Contact List
Fresno County
5/25/2022

Wuksache Indian Tribe/Eshom Valley Band
Kenneth Woodrow, Chairperson
1179 Rock Haven Ct.
Salinas, CA, 93906
Phone: (831) 443 - 9702
kwood8934@aol.com

Foothill Yokut
Mono

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 Resource Section 5097.98 of the Public Resources Code.

This list is only applicable for contacting local Native Americans with regard to cultural resources assessment for the proposed Casa De Villa Apartment Complex Project, Fresno County.

APPENDIX D

TRAFFIC STUDY

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TRAFFIC STUDY

Proposed Casa De Villa Project

Southwest of the Intersection of
Nebraska and Thompson Avenues

Selma, California

Prepared For:

Central Valley Engineering & Surveying, Inc.
2511 Logan Street
Selma, California 93662

Date:

July 21, 2023

Job No.:

22-020.01

PETERS ENGINEERING GROUP
A CALIFORNIA CORPORATION

PETERS ENGINEERING GROUP
A CALIFORNIA CORPORATION

Ms. Brenda N. Ramirez
Central Valley Engineering & Surveying, Inc.
2511 Logan Street
Selma, California 93662

July 21, 2023

Subject: Traffic Study
Proposed Casa De Villa Project
Southwest of the Intersection of Nebraska and Thompson Avenues
Selma, California

1.0 INTRODUCTION

This report presents the results of a traffic study for the subject project in Selma, California. The study focuses primarily on the anticipated effect of vehicle traffic resulting from the Project. This report supersedes a previous report for the Project dated April 20, 2023.

2.0 PROJECT DESCRIPTION

The proposed Casa De Villa Project (hereinafter referred to as the Project) covers approximately 3.29 acres located southwest of the intersection of Nebraska and Thompson Avenues in Selma, California. The Project consists of 40 multi-family residential units (Phase 1) and a 3,000-square-foot commercial building that is likely to include medical/dental offices, general offices, or a laundromat (Phase 2). The Project requires a General Plan Amendment (GPA) to change the land use from Medium Low Density Residential (R-1-7 zoning with an average density of approximately 5.0 dwelling units per acres) to a land use compatible with the Project. Site access will be on Nebraska Avenue.

The Project site location is presented in the attached Figure 1, Site Vicinity Map, and a Project site plan is presented in the attached Figure 2, Site Plan.

3.0 STUDY AREA AND TIME PERIOD

A scoping letter requesting agency comments on the scope of the traffic study was prepared and is presented in the attached Appendix A, along with agency responses. This report includes analysis of the following intersections:

1. Highland Avenue (SR 43) / Nebraska Avenue
2. Mitchell Avenue / Nebraska Avenue
3. Thompson Avenue / Nebraska Avenue

The study time periods include the weekday a.m. and p.m. peak hours determined between 7:00 and 9:00 a.m. and between 4:00 and 6:00 p.m. on a typical weekday. The peak hours are analyzed for the following conditions:

1. Existing Conditions
2. Existing-Plus-Project Conditions
3. Near-Term With-Project Conditions (includes known pending and approved projects)
4. Cumulative (Year 2044) No-Project Conditions (assumes buildout of the site per the current zoning); and
5. Cumulative (Year 2044) With-Project Conditions.

4.0 LANE CONFIGURATIONS AND INTERSECTION CONTROL

The lane configurations and intersection control at the study intersection are illustrated in Figure 3, Existing Lane Configurations.

5.0 EXISTING TRAFFIC VOLUMES

Existing traffic volumes were determined by performing manual turning movement counts at the study intersections between 7:00 and 9:00 a.m. and between 4:00 and 6:00 p.m. The counts also included determination of the number of pedestrians, bicycles, and trucks. The data sheets are presented in the attached Appendix B and include the dates the counts were performed. The existing peak hour turning movement volumes are presented in Figure 4, Existing Peak Hour Traffic Volumes.

6.0 TRIP GENERATION

6.1 Project Trip Generation

Data provided in the Institute of Transportation Engineers (ITE) *Trip Generation Manual, 11th Edition*, was used to estimate the number of trips anticipated to be generated by the Project. Table 1 presents the vehicle trip generation estimates for the Project utilizing ITE Land Use 220, Multifamily Housing (Low-Rise) and Land Use 720, Medical-Dental Office Building – Stand Alone. Of the allowed uses for the commercial building, Land Use 720 is expected to estimate the worst-case peak-hour traffic volumes.

Table 1
Project Trip Generation Estimate

Land Use	Units	Weekday		A.M. Peak Hour					P.M. Peak Hour				
		Rate	Total	Rate	In:Out	In	Out	Total	Rate	In:Out	In	Out	Total
Medical-Dental Office Building – Stand Alone (720)	3,000 sq. ft.	36.00	108	3.10	79:21	8	2	10	3.93	30:70	4	8	12
Multifamily Housing (Low Rise) (937)	40	6.74	270	0.40	24:76	4	12	16	0.51	63:37	12	8	20
TOTAL:			**378**			**12**	**14**	**26**			**16**	**16**	**32**

Reference: *Trip Generation Manual, 11th Edition,* Institute of Transportation Engineers 2021
Rates are reported in trips per dwelling unit or per 1,000 square feet of building area, as applicable.

6.2 Trip Generation – Current Zoning

Table 2 presents vehicle trip generation estimates assuming the site were developed in accordance with the current R-1-7 zoning at approximately 5.0 single-family dwelling units per acre 3.29 acres. The estimates are based on ITE Land Use 210, Single-Family Detached Housing.

Table 2
Trip Generation Estimate – Current Zoning

Land Use	Units	Daily		A.M. Peak Hour					P.M. Peak Hour				
		Rate	Total	Rate	In:Out	In	Out	Total	Rate	In:Out	In	Out	Total
210	16	9.43	152	0.70	26:74	3	9	12	0.94	63:37	10	6	16

Reference: *Trip Generation Manual, 11th Edition,* Institute of Transportation Engineers 2021
Rates are reported in trips per dwelling unit.

6.3 Trip Distribution and Assignment

The Project trips were distributed to the adjacent road network using engineering judgment considering the distribution of existing traffic volumes and complementary land uses in the Project vicinity. The anticipated percentage distribution of Project traffic volumes is presented in Figure 5, Project Trip Distribution Percentages. The assignments of Project traffic volumes at the study intersections are presented in Figure 6, Peak-Hour Project Traffic Volumes.

6.4 CEQA Impact Analysis and Vehicle Miles Traveled (VMT)

Senate Bill 743 (Steinberg, 2013), which was codified in California Public Resources Code § 21099, required changes to the guidelines implementing the California Environmental Quality Act (CEQA Guidelines) (Cal. Code Regs., Title 14, Div. 6, Ch. 3, § 1500, et seq.) as to the analysis of transportation impacts. Per Public Resources Code § 21099(b)(1):

> "The Office of Planning and Research shall prepare, develop, and transmit to the Secretary of the Natural Resources Agency for certification and adoption proposed revisions to the guidelines adopted pursuant to Section 21083 establishing criteria for determining the significance of transportation impacts of projects within transit priority areas. Those criteria shall promote the reduction of greenhouse gas emissions, the development of multimodal transportation networks, and a diversity of land uses. In developing the criteria, the office shall recommend potential metrics to measure transportation impacts that may include, but are not limited to, vehicle miles traveled, vehicle miles traveled per capita, automobile trip generation rates, or automobile trips generated. The office may also establish criteria for models used to analyze transportation impacts to ensure the models are accurate, reliable, and consistent with the intent of this section."

In January 2019, the Natural Resources Agency certified the Office of Planning and Research's (OPR) proposed revisions, which resulted in the creation of Section 15064.3 of the CEQA Guidelines. Section 15064.3(a) describes its purpose as:

> "This section describes specific considerations for evaluating a project's transportation impacts. Generally, vehicle miles traveled is the most appropriate

> measure of transportation impacts. For the purposes of this section, 'vehicle miles traveled' refers to the amount and distance of automobile travel attributable to a project. Other relevant considerations may include the effects of the project on transit and non-motorized travel. Except as provided in subdivision (b)(2) below (regarding roadway capacity), a project's effect on automobile delay shall not constitute a significant environmental impact."

OPR created a Technical Advisory (December 2018) (TA)[1] as guidance for evaluating vehicle miles traveled (VMT) impacts. The Fresno Council of Governments (COG) prepared the Fresno County SB743 Implementation Regional Guidelines dated January 2021 (COG Guidelines)[2] that includes substantial evidence for local significance criteria. The COG Guidelines state:

> "A common GHG emissions threshold is 3,000 metric tons (MT) of carbon dioxide equivalent (CO_2e) per year. The vehicle emissions are typically more than 50 percent of the total project GHG emissions. Thus, a project with 500 ADT would generally have total project emissions that could be less than 1,300 MT CO_2e/year (i.e., 50 percent or 643 MT CO_2e/year from vehicle emissions and the other 50 percent coming from other project activities). As this level of GHG emissions would be less than 3,000 MT CO_2e/year, the emissions of GHG from a project up to 500 ADT would typically be less than significant. Therefore, it is recommended that projects be screened out if they generate fewer than 500 ADT."

The City of Selma adopted the COG Guidelines on November 15, 2021. Based on the criteria in the COG Guidelines, the Project will "screen out" (i.e., may be presumed to cause a less-than-significant transportation impact) because it will generate fewer than 500 trips per day.

7.0 EXISTING-PLUS-PROJECT TRAFFIC VOLUMES

Peak hour existing-plus-Project traffic volumes are presented in Figure 7, Existing-Plus-Project Peak Hour Traffic Volumes. These values are obtained by adding the values in Figures 4 and 6.

8.0 PENDING PROJECTS AND NEAR-TERM TRAFFIC VOLUMES

The trips associated with known pending projects were included in the analyses and are summarized in Table 3. Peak hour near-term traffic volumes (existing plus approved and pending projects plus Project) are presented in Figure 8, Near-Term Peak Hour Traffic Volumes.

[1] https://opr.ca.gov/docs/20190122-743_Technical_Advisory.pdf
[2] https://fresnocog.wpenginepowered.com/wp-content/uploads/2021/01/Fresno-COG-VMT-Report_01-08-2021.pdf

Table 3
Pending Projects

Project	Location
Gas Station and Retail Building	Southeast of the Intersection of SR 43 and Mountain View Avenue (APN 393-10-34S)
Canales Estates Phases 1 through 3 (unfinished portions)	Northeast and southeast of the intersection of SR 43 and Saginaw Avenue (APN 390-020-12, 390-020-12, 393-170-36)
Hinesley Development (120 single-family homes on 40 acres)	Nebraska Avenue west of Highland Avenue (APN 385-072-02S)
Highland Multi-Family (144 apartment units on approximately 13 acres)	Northeast of Nebraska Avenue and Highland Avenue (APN 388-030-26)
Josan Development (Mixed Use Project on approximately 40 acres)	Southwest of Nebraska Avenue and Highland Avenue (includes APN 385-072-05 & 06 plus the 20 acres south of them)

9.0 CUMULATIVE TRAFFIC VOLUMES (YEAR 2044)

The Council of Fresno County Governments (COG) maintains a travel model that is typically used to forecast traffic volumes. The baseline traffic volumes for the year 2044 no-Project conditions were determined using the travel model data obtained from the COG's year 2035 model, extrapolating to 2044, and using the COG Increment Method (described in a document available from the COG entitled "*Model Steering Committee Recommended Procedures for Using Traffic Projections from the Fresno COG Travel Model*" dated December 2002). The Increment Method forecasts future traffic volumes by determining the growth projected by the model between the base year and the horizon year. This growth is then added to the existing traffic volumes. Based on regional growth projected by the model, a one-percent annual growth in background traffic volumes was assumed for roadways not in the travel model and for approaches on which the model predicted less than one percent annual growth. The travel model output is presented in the attached Appendix C.

Future turning movements were forecast based on the methods presented in Chapter 8 of the Transportation Research Board National Cooperative Highway Research Program Report 255 entitled "*Highway Traffic Data for Urbanized Area Project Planning and Design*." The 2044 No-Project traffic volumes (which include the assumption that the project site is developed in accordance with the current zoning) are presented in Figure 9, Cumulative Year 2044 No-Project Peak Hour Traffic Volumes. The 2044 with-Project traffic volumes are presented in Figure 10, Cumulative Year 2044 With-Project Peak Hour Traffic Volumes.

10.0 OPERATIONAL ANALYSES CRITERIA

The Transportation Research Board *Highway Capacity Manual, 7th Edition,* (HCM) defines level of service (LOS) as, "a quantitative stratification of a performance measure or measures representing quality of service. The measures used to determine LOS for transportation system elements are called *service measures*. The HCM defines six levels of service, ranging from A to F, for each service measure or combination of service measures. LOS A represents the best operating conditions from the traveler's perspective and LOS F the worst.

Automobile mode LOS characteristics for both unsignalized and signalized intersections are presented in Tables 4 and 5.

Table 4
Level of Service Characteristics for Unsignalized Intersections

Level of Service	Average Vehicle Delay (seconds)
A	0-10
B	>10-15
C	>15-25
D	>25-35
E	>35-50
F	>50

Reference: *Highway Capacity Manual, 7th Edition,* Transportation Research Board, 2022

Table 5
Level of Service Characteristics for Signalized Intersections

Level of Service	Description	Average Vehicle Delay (seconds)
A	Volume-to-capacity ratio is low. Progression is exceptionally favorable or the cycle length is very short.	<10
B	Volume-to-capacity ratio is low. Progression is highly favorable or the cycle length is very short.	>10-20
C	Volume-to-capacity ratio is no greater than 1.0. Progression is favorable or cycle length is moderate.	>20-35
D	Volume-to-capacity ratio is high but no greater than 1.0. Progression is ineffective or cycle length is long. Many vehicles stop and individual cycle failures are noticeable.	>35-55
E	Volume-to-capacity ratio is high but no greater than 1.0. Progression is unfavorable and cycle length is long. Individual cycle failures are frequent.	>55-80
F	Volume-to-capacity ratio is greater than 1.0. Progression is very poor and cycle length is long. Most cycles fail to clear the queue.	>80

Reference: *Highway Capacity Manual, 7th Edition,* Transportation Research Board, 2022

The State of California does not recognize traffic congestion and delay as an environmental impact per CEQA. However, the City of Selma 2035 General Plan states as an objective:

> "Maintain a roadway level of service (LOS) of D or better for intersections and road segments for Minor Collectors, Collectors, Arterials, Major Arterials, and Highways; where other jurisdictions control and manage roadways, their respective level of service standards shall prevail on applicable segments. In order to avoid using Local streets for excessive through traffic, an LOS of B is established for Local streets."

For purposes of this traffic study, a traffic issue may be identified if the addition of the traffic generated by the Project results in any one of the following:

- Triggers an intersection operating at acceptable LOS (A, B, C, or D) to operate at unacceptable levels of service (E or F);
- Increases the average delay for a study intersection that is already operating at unacceptable LOS (E or F) by 5.0 seconds or more.

Queues will be considered in the analyses, particularly to determine if excessive queues are expected to block through lanes or adjacent intersections. Blocking typically results in congested conditions that may cause worse conditions at the blocked location than those identified by the LOS analyses alone. Excessive queues may also contribute to safety concerns.

11.0 INTERSECTION OPERATIONAL ANALYSES

11.1 Level of Service

The intersection levels of service (LOS) were determined using the computer program Synchro 11, which is based on *Highway Capacity Manual* procedures for calculating levels of service. The intersection analysis sheets are presented in the attached Appendix D.

Tables 6 through 10 present the results of the intersection analyses. Levels of service below the City's target LOS D and the associated delays are indicated in bold type and are underlined.

Table 6
Intersection LOS Summary – Existing Conditions

Intersection	Control	A.M. Peak Hour		P.M. Peak Hour	
		Delay (sec)	LOS	Delay (sec)	LOS
Highland / Nebraska	Signals	10.0	B	11.9	B
Mitchell / Nebraska	All-way stop	9.3	A	10.5	B
Thompson / Nebraska	All-way stop	12.0	B	11.8	B

Table 7
Intersection LOS Summary – Existing-Plus-Project Conditions

Intersection	Control	A.M. Peak Hour		P.M. Peak Hour	
		Delay (sec)	LOS	Delay (sec)	LOS
Highland / Nebraska	Signals	10.1	B	12.0	B
Mitchell / Nebraska	All-way stop	9.4	A	10.6	B
Thompson / Nebraska	All-way stop	12.3	B	12.2	B

Table 8
Intersection LOS Summary – Near-Term With-Project Conditions

Intersection	Control	A.M. Peak Hour		P.M. Peak Hour	
		Delay (sec)	LOS	Delay (sec)	LOS
Highland / Nebraska	Signals	13.4	B	**111.0**	**F**
Mitchell / Nebraska	All-way stop	10.5	B	14.0	B
Thompson / Nebraska	All-way stop	15.5	C	17.2	C

Table 9
Intersection LOS Summary – Cumulative 2044 No-Project Conditions

Intersection	Control	A.M. Peak Hour		P.M. Peak Hour	
		Delay (sec)	LOS	Delay (sec)	LOS
Highland / Nebraska	Signals	16.0	B	**150.7**	**F**
Mitchell / Nebraska	All-way stop	11.8	B	18.5	C
Thompson / Nebraska	All-way stop	24.2	C	28.6	D

Table 10
Intersection LOS Summary – Cumulative 2044 With-Project Conditions

Intersection	Control	A.M. Peak Hour		P.M. Peak Hour	
		Delay (sec)	LOS	Delay (sec)	LOS
Highland / Nebraska	Signals	16.1	B	**152.5**	**F**
Mitchell / Nebraska	All-way stop	11.9	B	18.7	C
Thompson / Nebraska	All-way stop	25.4	D	30.2	D

11.2 Queuing

The results of the intersection operational analyses include an estimate of the 95th-percentile queue lengths at the study intersections. The existing storage capacity and the calculated 95th-percentile queue lengths are presented in Tables 11 through 15.

Table 11
Intersection Queuing Summary – Existing Conditions

Intersection		Storage and Queue Length (feet)											
		EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Highland / Nebraska	Storage	S	*	200	S	*	S	190+	*	S	125+	*	S
	A.M.		85	3		93		24	102		24	77	
	P.M.		132	0		136		33	163		78	144	
Mitchell / Nebraska	Storage	S	*	S	S	*	300	S	*	S	S	800	S
	A.M.		23			23	13		13			23	
	P.M.		50			40	5		10			15	
Thompson / Nebraska	Storage	S	*	S	S	750	S	S	*	S	S	800	55
	A.M.		50			55			35			23	3
	P.M.		58			63			28			8	0

Table 12
Intersection Queuing Summary – Existing-Plus-Project Conditions

Intersection		Storage and Queue Length (feet)											
		EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Highland / Nebraska	Storage	S	*	200	S	*	S	190+	*	S	125+	*	S
	A.M.		86	3		95		24	102		26	77	
	P.M.		134	0		140		34	164		81	145	
Mitchell / Nebraska	Storage	S	*	S	S	*	300	S	*	S	S	800	S
	A.M.		23			25	13		13			23	
	P.M.		50			40	5		10			15	
Thompson / Nebraska	Storage	S	*	S	S	750	S	S	*	S	S	800	55
	A.M.		55			58			35			23	3
	P.M.		63			68			28			8	0

S - Shared lane
* Nearest major intersection is greater than 1,000 feet away.
\+ Connects to two-way left-turn lane that provides additional storage.
Left-turn storage lengths reported are the length of the lane and do not consider deceleration distance.

Table 13
Intersection Queuing Summary – Near-Term With-Project Conditions

Intersection		Storage and Queue Length (feet)											
		EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Highland / Nebraska	Storage	S	*	200	S	*	S	190+	*	S	125+	*	S
	A.M.		156	27		173		88	163		46	166	
	P.M.		401	42		294		203	423		191	406	
Mitchell / Nebraska	Storage	S	*	S	S	*	300	S	*	S	S	800	S
	A.M.		33			43	13		18			25	
	P.M.		103			75	5		18			18	
Thompson / Nebraska	Storage	S	*	S	S	750	S	S	*	S	S	800	55
	A.M.		88			103			45			25	3
	P.M.		130			120			38			10	3

Table 14
Intersection Queuing Summary – Cumulative 2044 No-Project Conditions

Intersection		Storage and Queue Length (feet)											
		EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Highland / Nebraska	Storage	S	*	200	S	*	S	190+	*	S	125+	*	S
	A.M.		221	27		241		114	236		63	246	
	P.M.		489	42		378		241	541		243	496	
Mitchell / Nebraska	Storage	S	*	S	S	*	300	S	*	S	S	800	S
	A.M.		45			58	18		23			35	
	P.M.		163			110	8		23			28	
Thompson / Nebraska	Storage	S	*	S	S	750	S	S	*	S	S	800	55
	A.M.		158			183			78			40	5
	P.M.		233			215			55			15	3

Table 15
Intersection Queuing Summary – Cumulative 2044 With-Project Conditions

Intersection		Storage and Queue Length (feet)											
		EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Highland / Nebraska	Storage	S	*	200	S	*	S	190+	*	S	125+	*	S
	A.M.		221	27		243		114	236		64	246	
	P.M.		491	42		386		241	541		245	496	
Mitchell / Nebraska	Storage	S	*	S	S	*	300	S	*	S	S	800	S
	A.M.		45			58	18		23			35	
	P.M.		165			113	8		23			28	
Thompson / Nebraska	Storage	S	*	S	S	750	S	S	*	S	S	800	55
	A.M.		165			195			78			40	5
	P.M.		245			225			58			15	3

S - Shared lane
* Nearest major intersection is greater than 1,000 feet away.
\+ Connects to two-way left-turn lane that provides additional storage.
Left-turn storage lengths reported are the length of the lane and do not consider deceleration distance.

12.0 DISCUSSION OF ANALYSES

12.1 Existing Conditions

The results of the Existing Conditions intersection analyses indicate that the study intersections are operating at acceptable LOS with acceptable calculated 95th-percentile queues.

12.2 Existing-Plus-Project Conditions

The results of the Existing-Plus-Project Conditions intersection analyses, which isolates the specific effects of Project trips, indicates that the study intersections will continue to operate at acceptable LOS with acceptable calculated 95th-percentile queues. The increases in delay and queuing are minimal and may not be perceptible to most drivers.

12.3 Near-Term With-Project Conditions

The Near-Term With-Project Conditions intersection analyses include the assumption that all of the pending projects plus the proposed Project have been constructed. The analyses indicate that the intersection of Highland and Nebraska Avenues is expected to operate at LOS F during the p.m. peak hour. The other two study intersections will continue to operate at acceptable LOS with acceptable calculated 95th-percentile queues.

Considering the results of the existing-plus-Project scenario analyses, it can be determined that the Project is not responsible for creating the near-term traffic issues at the intersection of Highland and Nebraska Avenues or for constructing improvements to alleviate the issues. Therefore, the following discussion is for informational purposes. The intersection is currently signalized with permissive left turns in the eastbound and westbound directions. The intersection is expected to be highly affected by the pending projects located west of Highland Avenue, and those affects should be investigated more extensively in traffic studies for those projects. Since the intersection is already signalized, and the north and south legs are generally improved to four lanes with left-turn lanes, it is anticipated that intersection

widening with eight-phase traffic signals would be the most practical improvement. In the Near-Term With-Project Conditions scenario, in order to operate at acceptable LOS, the intersection should be widened to the following:

Eastbound: one left-turn lane, one through lane, and one right-turn lane
Westbound: one left-turn lane and one shared through/right-turn lane
Northbound: one left-turn lane and two through lanes with a shared right turn (same as existing)
Southbound: one left-turn lane and two through lanes with a shared right turn (same as existing).

As mentioned above, considering that the existing-plus-Project scenario indicates the Project does not worsen the LOS, the Project should not be responsible for constructing the improvements.

Tables 16 and 17 present the results of the intersection analyses for the improved conditions. The intersection analysis sheets for the improved conditions are presented in the attached Appendix E.

Table 16
Improved Intersection LOS Summary – Near-Term With-Project Conditions

Intersection	Control	A.M. Peak Hour		P.M. Peak Hour	
		Delay (sec)	LOS	Delay (sec)	LOS
Highland / Nebraska	Signals	18.5	B	27.2	C

Table 17
Improved Intersection Queuing Summary – Near-Term With-Project Conditions

Intersection		Storage and Queue Length (feet)											
		EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Highland / Nebraska	Storage	TBD	*	TBD	TBD	*	S	190+	*	S	125+	*	S
	A.M.	125	94	3	90	165		109	202		58	214	
	P.M.	213	158	51	100	253		184	364		173	350	

S - Shared lane
* Nearest major intersection is greater than 1,000 feet away.
Left-turn storage lengths reported are the length of the lane and do not consider deceleration distance.

12.4 Cumulative 2044 No-Project Conditions

The cumulative year 2044 no-Project analyses include the assumption that regional growth has occurred as generally predicted by the Fresno County travel model and that the Project site has been developed with 14 single-family residences. The analyses indicate that the intersection of Highland and Nebraska Avenues is expected to operate at LOS F during the p.m. peak hour. The other two study intersections will continue to operate at acceptable LOS with acceptable calculated 95th-percentile queues.

12.5 Cumulative 2044 With-Project Conditions

The Cumulative 2044 With-Project Conditions intersection analyses estimate the long-term cumulative conditions with the Project. The intersection of Highland and Nebraska Avenues

is expected to operate at LOS F during the p.m. peak hour. The other two study intersections will continue to operate at acceptable LOS with acceptable calculated 95th-percentile queues.

The discussion of the intersection of Highland and Nebraska Avenues presented above for the near-term scenario is applicable to the cumulative year 2044 conditions with the Project. In order to operate at acceptable LOS in the year 2044 scenario, the intersection should be widened to the following (which are identical to those recommended for the Near-Term With-Project Conditions):

Eastbound: one left-turn lane, one through lane, and one right-turn lane
Westbound: one left-turn lane and one shared through/right-turn lane
Northbound: one left-turn lane and two through lanes with a shared right turn (same as existing)
Southbound: one left-turn lane and two through lanes with a shared right turn (same as existing).

Tables 18 and 19 present the results of the intersection analyses for the improved conditions. The intersection analysis sheets for the improved conditions are presented in the attached Appendix E.

Table 18
Improved Intersection LOS Summary – Cumulative 2044 With-Project Conditions

Intersection	Control	A.M. Peak Hour		P.M. Peak Hour	
		Delay (sec)	LOS	Delay (sec)	LOS
Highland / Nebraska	Signals	20.4	C	34.5	C

Table 19
Improved Intersection Queuing Summary – Cumulative 2044 With-Project Conditions

Intersection		Storage and Queue Length (feet)											
		EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Highland / Nebraska	Storage	TBD	*	TBD	TBD	*	S	190+	*	S	125+	*	S
	A.M.	150	114	5	106	204		123	253		67	257	
	P.M.	258	197	54	117	334		210	476		221	457	

S - Shared lane
* Nearest major intersection is greater than 1,000 feet away.
Left-turn storage lengths reported are the length of the lane and do not consider deceleration distance.

13.0 EQUITABLE SHARE CALCULATIONS

Where required improvements for the cumulative conditions are not included in a traffic impact fee, the Project's financial responsibility for the improvements can be determined based on equitable share calculations as presented in the Caltrans *Guide for the Preparation of Traffic Impact Studies* dated December 2002, which includes the following equation to determine a project's equitable share of the cost of improvements:

$$P = \frac{T}{T_B - T_E}$$

where:

P = The equitable share of the project's traffic impact;
T = The project trips generated during the peak hour of the adjacent facility;
T_B = The forecasted (future with project) traffic volume on the impacted facility;
T_E = The existing traffic on the facility plus approved projects traffic (cumulative).

Table 20 presents equitable share responsibility calculations for the recommended cumulative 2044 improvements.

Table 20
Equitable Share Responsibility Calculations – Weekday P.M. Peak Hour

Location	Project Trips	Existing Traffic Volume	2044 Traffic Volume	Equitable Share (Percent)
Highland / Nebraska	8	1,706	3,169	0.5%

14.0 CONCLUSIONS

Generally-accepted traffic engineering principles and methods were employed to estimate the number of trips expected to be generated by the Project, to analyze the existing traffic conditions, and to analyze the traffic conditions projected to occur in the future.

With respect to CEQA VMT impacts, the Project will "screen out" (i.e., may be presumed to cause a less-than-significant transportation impact) because it will generate fewer than 500 trips per day.

Existing Conditions

The study intersections are currently operating at acceptable LOS with acceptable calculated 95th-percentile queues.

Existing-Plus-Project Conditions

The study intersections will continue to operate at acceptable LOS with acceptable calculated 95th-percentile queues. The increases in delay and queuing are minimal and may not be perceptible to most drivers. Therefore, the Project does not create traffic issues requiring improvements at the study intersections.

Near-Term With-Project Conditions

The intersection of Highland and Nebraska Avenues is expected to operate at LOS F during the p.m. peak hour. The other two study intersections will continue to operate at acceptable LOS with acceptable calculated 95th-percentile queues.

Considering the results of the existing-plus-Project scenario analyses, it can be determined that the Project is not responsible for creating the near-term traffic issues at the intersection of Highland and Nebraska Avenues or for constructing improvements to alleviate the issues. Therefore, the following discussion is for informational purposes. The intersection is currently signalized with permissive left turns in the eastbound and westbound directions. The intersection is expected to be highly affected by the pending projects located west of Highland Avenue, and those affects should be investigated more extensively in traffic studies

for those projects. It is anticipated that intersection widening with eight-phase traffic signals would be the most practical improvement. In the Near-Term With-Project Conditions scenario, the intersection should be widened to the following:

Eastbound: one left-turn lane, one through lane, and one right-turn lane
Westbound: one left-turn lane and one shared through/right-turn lane
Northbound: one left-turn lane and two through lanes with a shared right turn (same as existing)
Southbound: one left-turn lane and two through lanes with a shared right turn (same as existing).

Cumulative 2044 No-Project Conditions

The cumulative year 2044 no-Project analyses include the assumption that regional growth has occurred as generally predicted by the Fresno County travel model and that the Project site has been developed with 14 single-family residences. The intersection of Highland and Nebraska Avenues is expected to operate at LOS F during the p.m. peak hour. The other two study intersections will continue to operate at acceptable LOS with acceptable calculated 95th-percentile queues.

Cumulative 2044 With-Project Conditions

The Cumulative 2044 With-Project Conditions intersection analyses estimate the long-term cumulative conditions with the Project. The intersection of Highland and Nebraska Avenues is expected to operate at LOS F during the p.m. peak hour. The other two study intersections will continue to operate at acceptable LOS with acceptable calculated 95th-percentile queues.

The discussion of the intersection of Highland and Nebraska Avenues presented above for the near-term scenario is applicable to the cumulative year 2044 conditions with the Project. In order to operate at acceptable LOS in the year 2044 scenario, the intersection should be widened to the configuration described above.

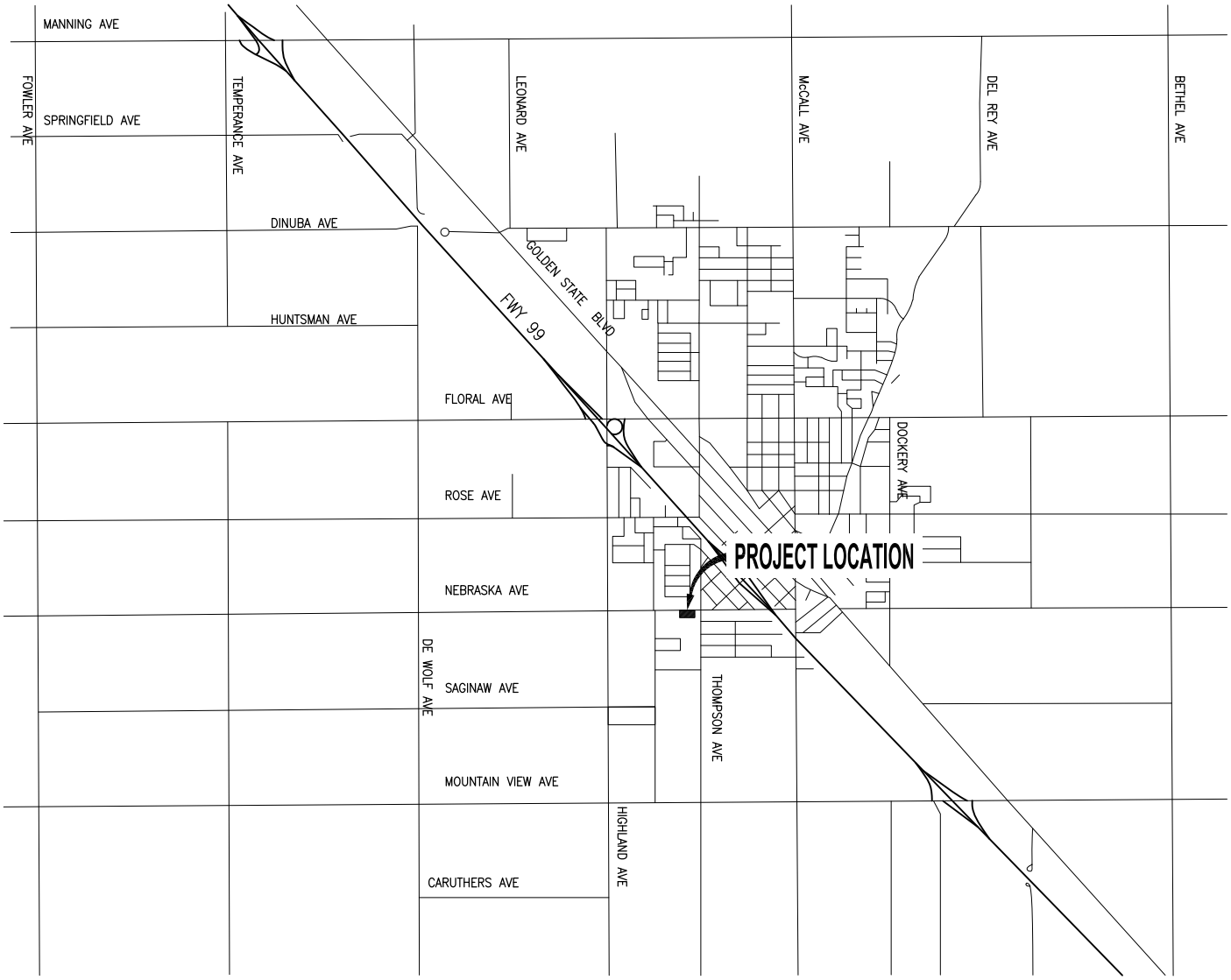
Thank you for the opportunity to perform this traffic study. Please feel free to call our office if you have any questions.

PETERS ENGINEERING GROUP

John Rowland, PE, TE

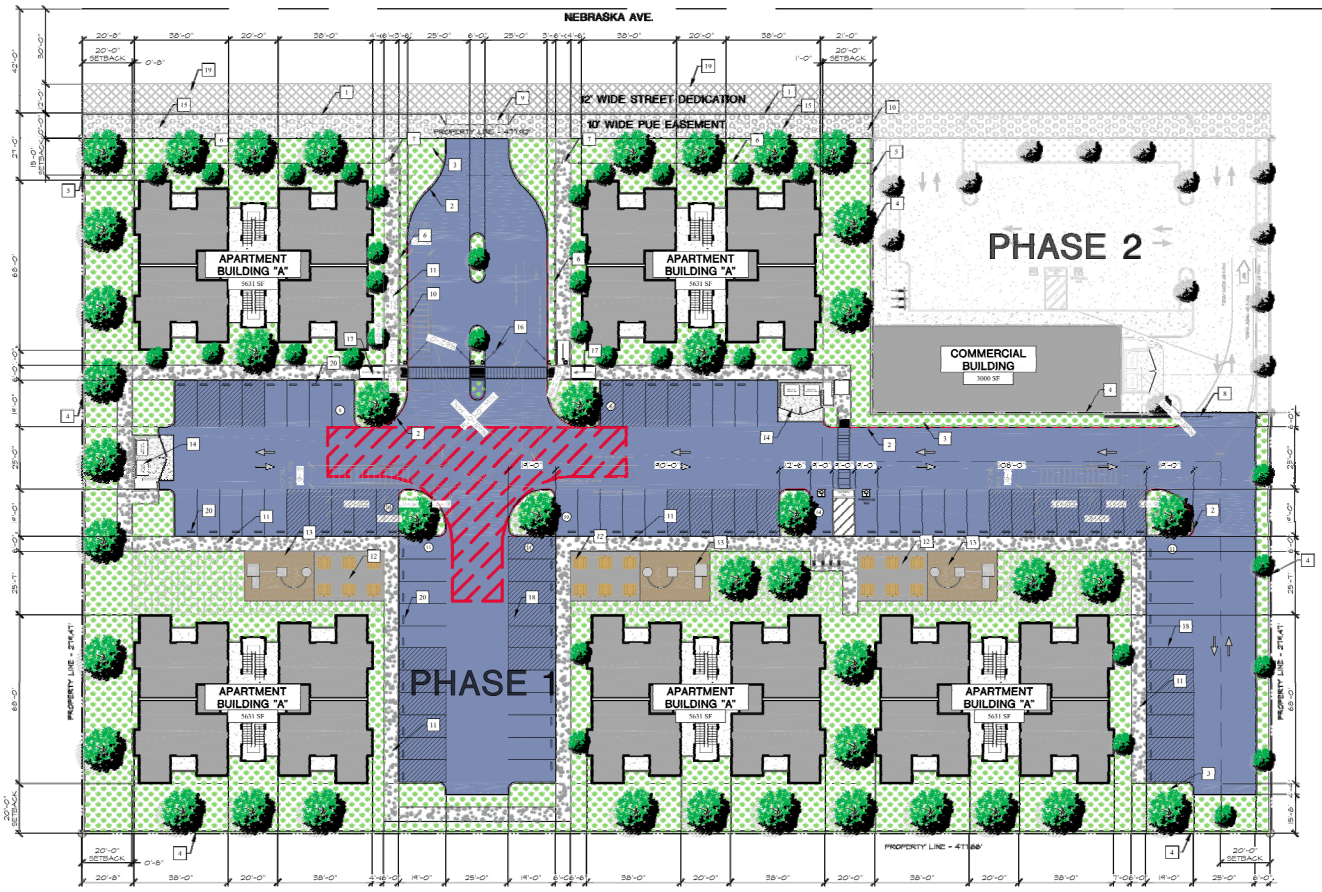
Attachments: Figures 1 through 10
Appendix A - Scoping Letter and Agency Responses
Appendix B - Traffic Count Data Sheets
Appendix C - Fresno County Travel Model Output
Appendix D - Intersection Analysis Sheets
Appendix E - Intersection Analysis Sheets – Improved Conditions

FIGURES



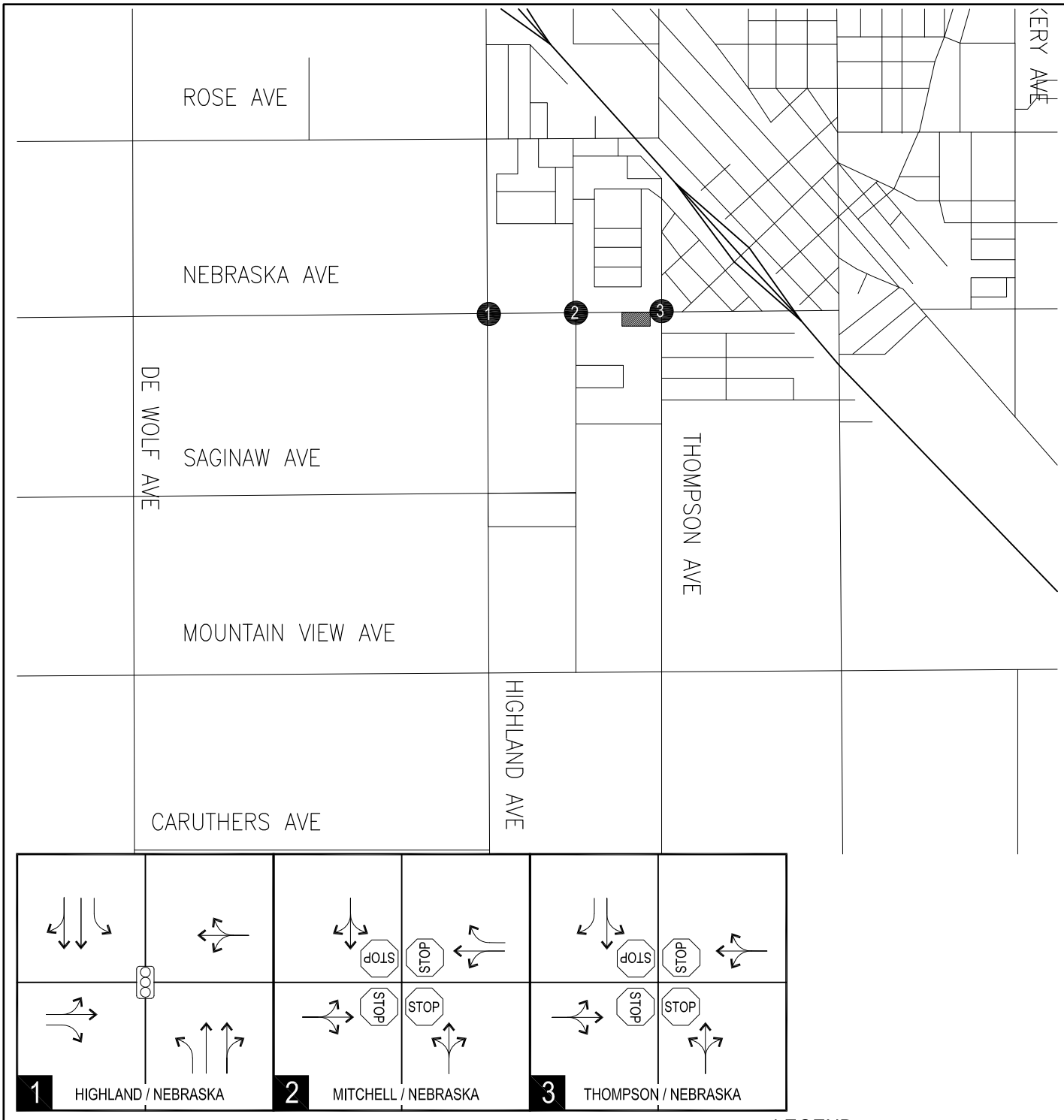
Proposed Casa De Villa
Selma, California

VICINITY MAP



Proposed Casa De Villa
Selma, California

SITE PLAN



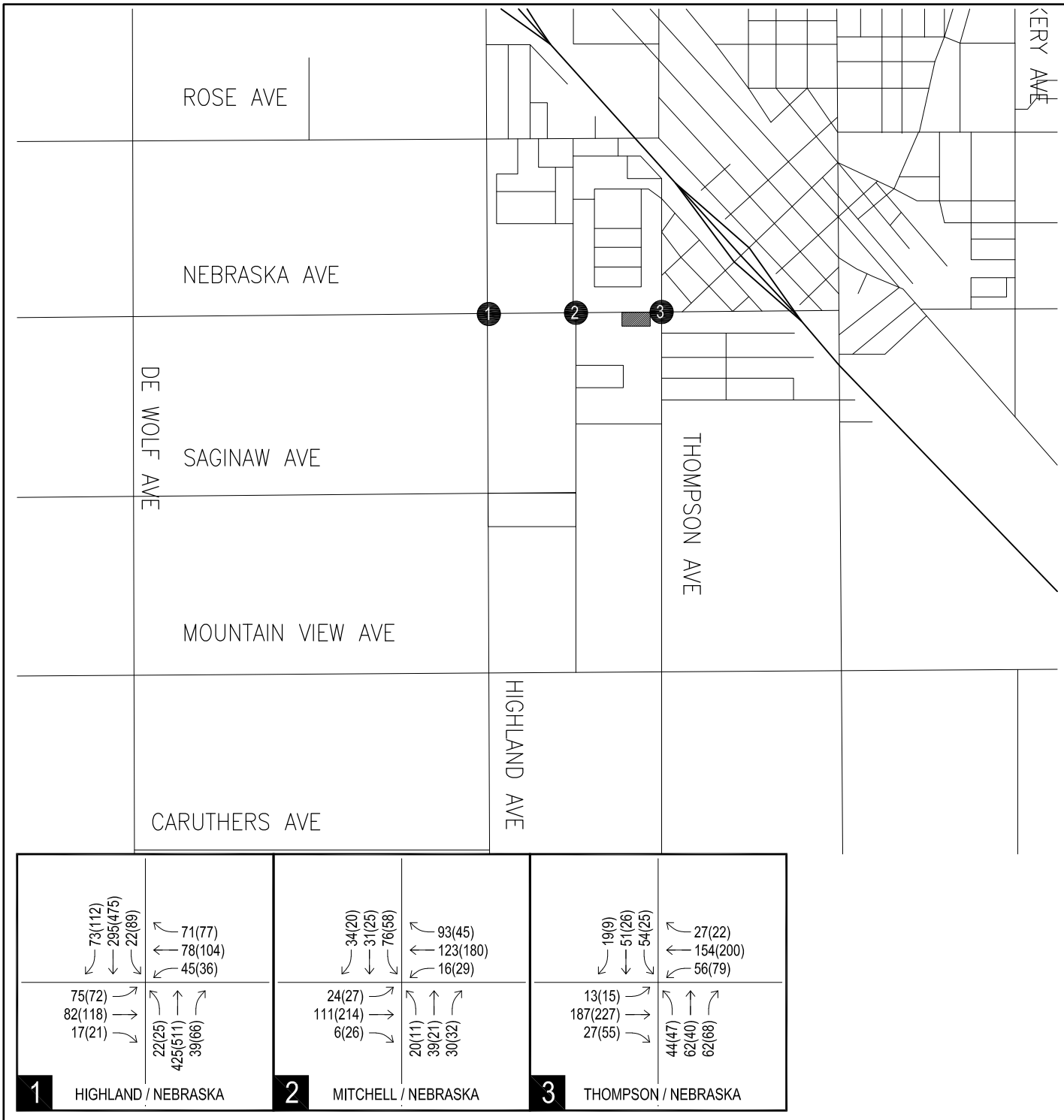
LEGEND

- XX STUDY AREA INTERSECTIONS
- PROJECT SITE
- SIGNALIZED INTERSECTION
- STOP STOP SIGN
- DIRECTION OF TRAVEL

Proposed Casa De Villa
Selma, California

EXISTING LANE CONFIGURATIONS AND INTERSECTION CONTROL

Not to Scale



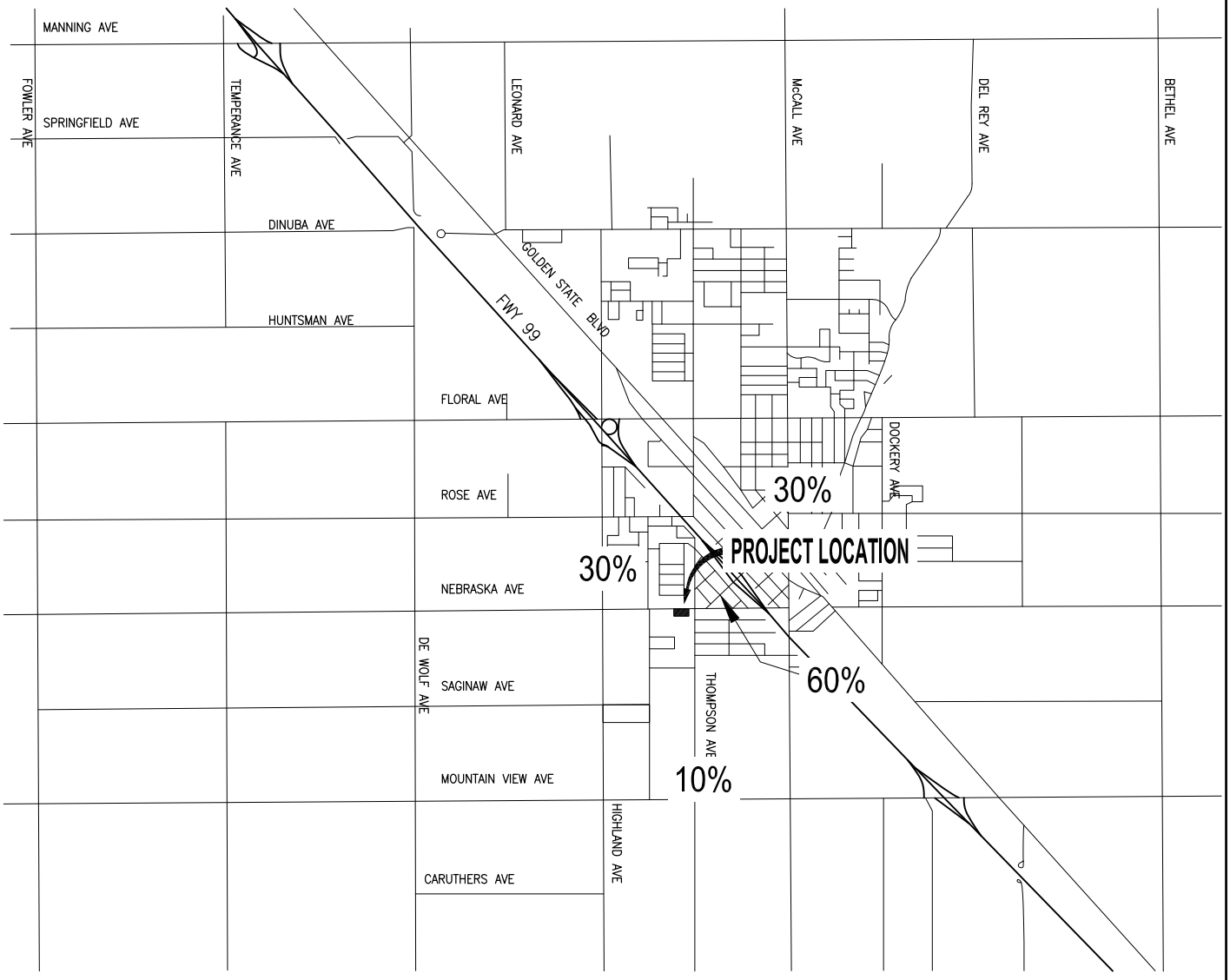
LEGEND

X	STUDY AREA INTERSECTIONS
XX (YY)	AM (PM) VOLUMES
	PROJECT SITE

Proposed Casa De Villa
Selma, California

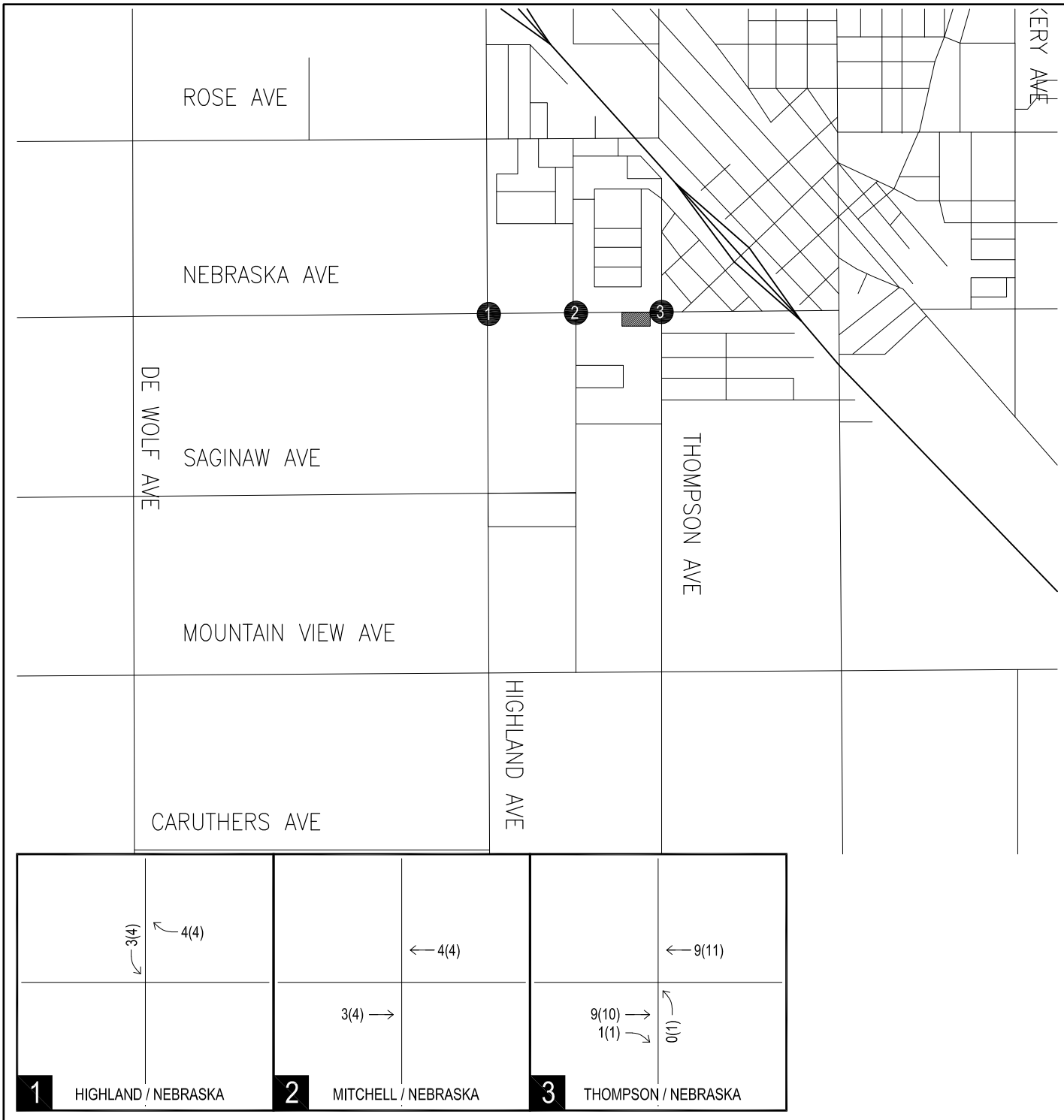
EXISTING PEAK HOUR TRAFFIC VOLUMES

Not to Scale



Proposed Casa De Villa
Selma, California

PROJECT TRIP DISTRIBUTION PERCENTAGES



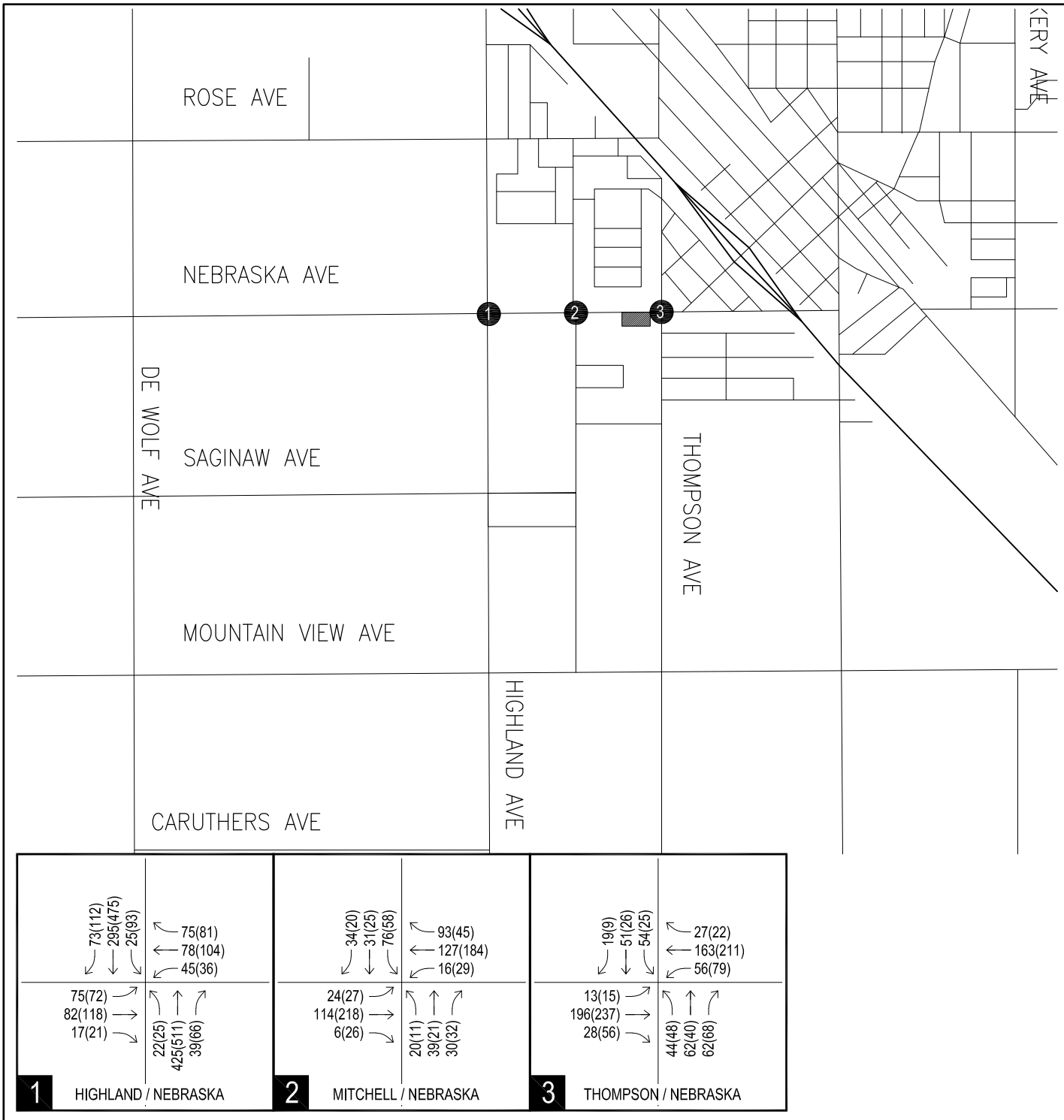
LEGEND

(X)	STUDY AREA INTERSECTIONS
XX (YY)	AM (PM) VOLUMES
	PROJECT SITE

Proposed Casa De Villa
Selma, California

PEAK-HOUR PROJECT TRAFFIC VOLUMES

Not to Scale



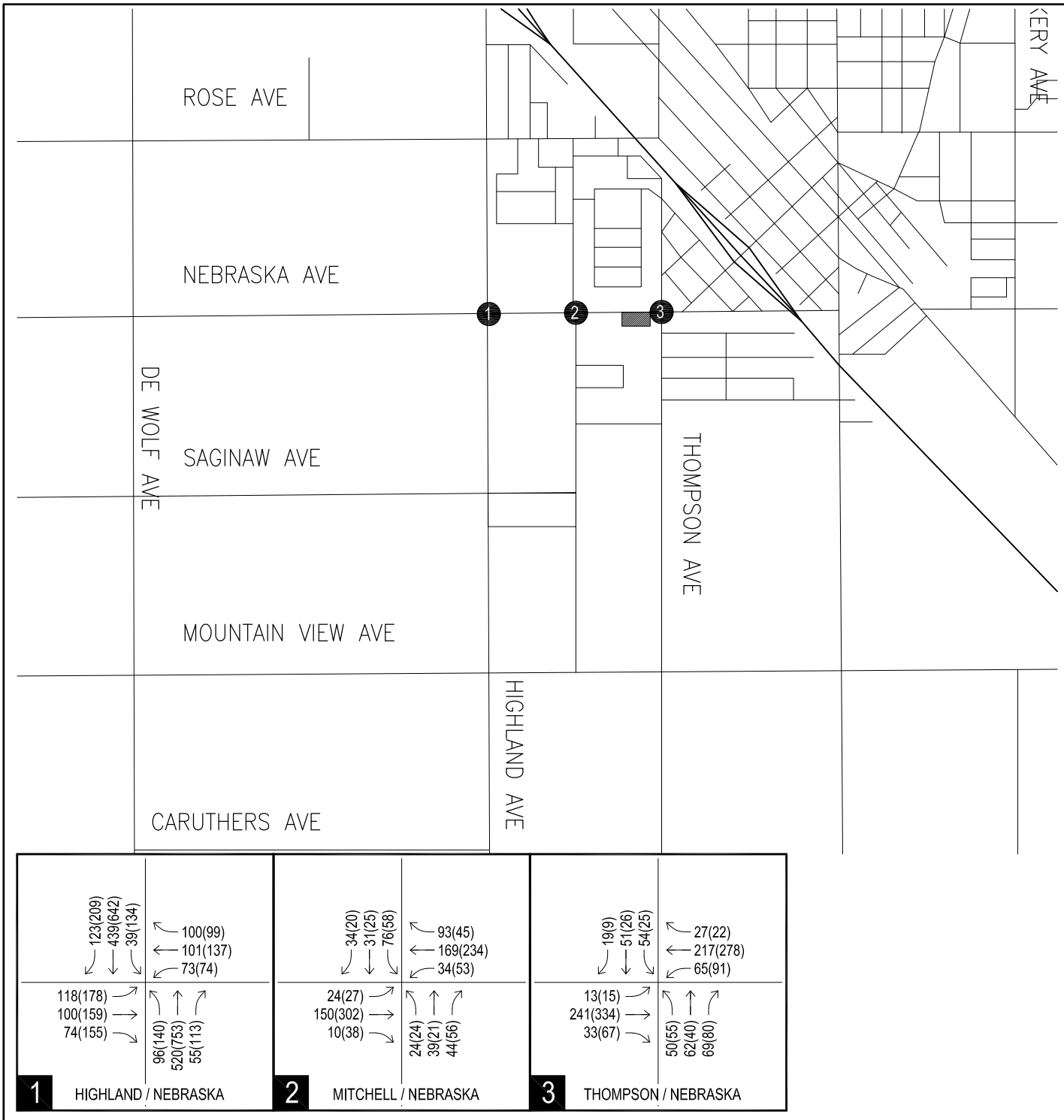
LEGEND

X	STUDY AREA INTERSECTIONS
XX (YY)	AM (PM) VOLUMES
	PROJECT SITE

Proposed Casa De Villa
Selma, California

EXISTING PLUS PROJECT PEAK-HOUR TRAFFIC VOLUMES

Not to Scale



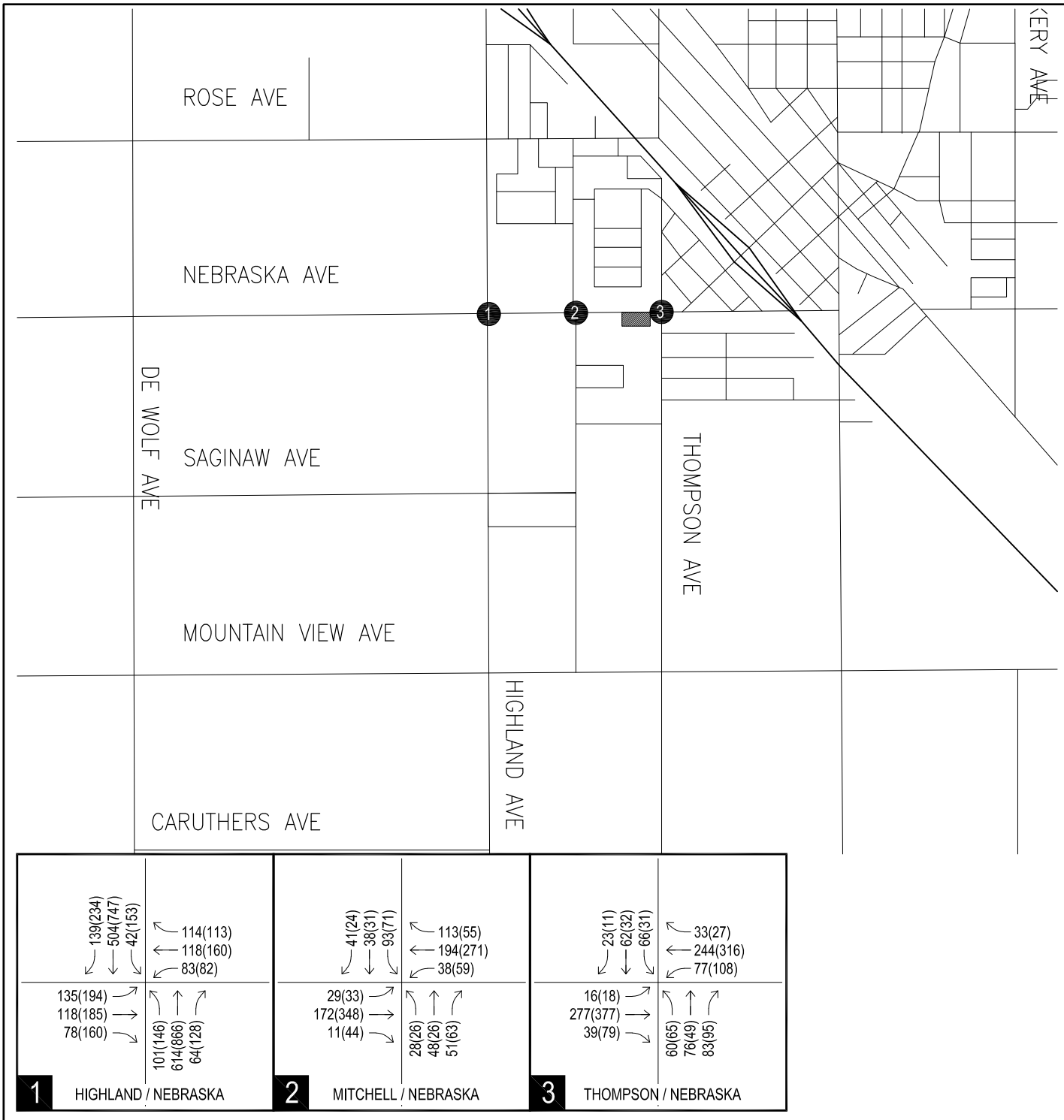
LEGEND

X	STUDY AREA INTERSECTIONS
XX (YY)	AM (PM) VOLUMES
	PROJECT SITE

Proposed Casa De Villa
Selma, California

NEAR-TERM WITH PROJECT PEAK-HOUR TRAFFIC VOLUMES

Not to Scale



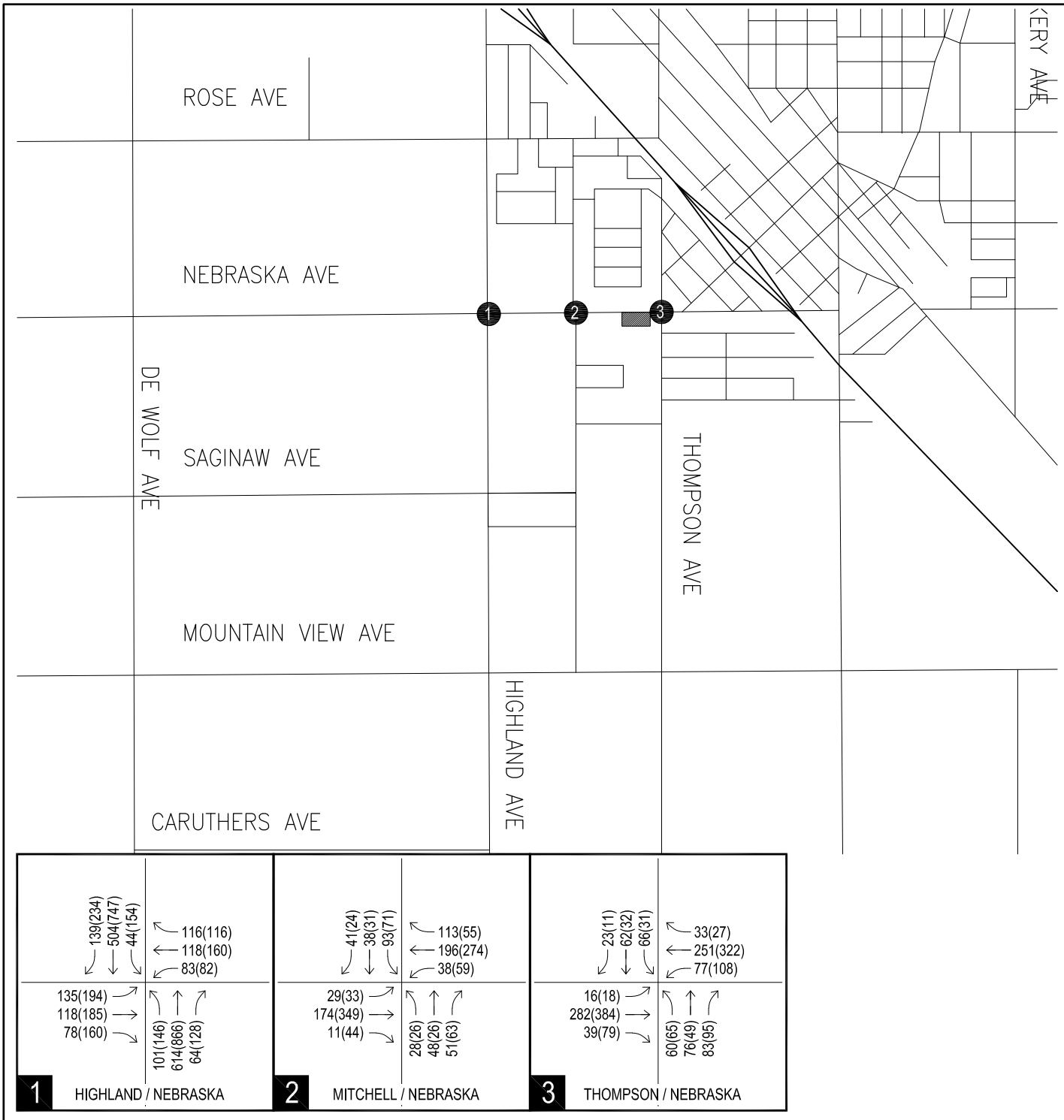
LEGEND

(X)	STUDY AREA INTERSECTIONS
XX (YY)	AM (PM) VOLUMES
	PROJECT SITE

Proposed Casa De Villa
Selma, California

CUMULATIVE YEAR 2044 NO-PROJECT PEAK-HOUR TRAFFIC VOLUMES

Not to Scale



LEGEND

X	STUDY AREA INTERSECTIONS
XX (YY)	AM (PM) VOLUMES
	PROJECT SITE

Proposed Casa De Villa
Selma, California

CUMULATIVE YEAR 2044 WITH-PROJECT PEAK-HOUR TRAFFIC VOLUMES

Not to Scale

APPENDIX A
SCOPING LETTER AND AGENCY RESPONSES

PETERS ENGINEERING GROUP
A CALIFORNIA CORPORATION

Mr. Fernando Santillan
City of Selma
1710 Tucker Street
Selma, California 93662

June 17, 2022

Subject: Scope of Traffic Study
Proposed Casa De Villa Apartment Complex
Southwest of the Intersection of Nebraska and Thompson Avenues
Selma, California

Dear Mr. Santillan:

Peters Engineering Group has been retained to perform a traffic study for the subject project. The purpose of this letter is to provide the City of Selma and other affected agencies with an opportunity to comment on the scope of the traffic study and to provide an analysis of the vehicle miles traveled (VMT) for purposes of the CEQA transportation impact analysis. We are requesting that the City provide any comments related to the scope of the study to Peters Engineering Group, including approval of the trip generation calculations, determination of the intersections to be studied, and the required study time periods.

PROJECT DESCRIPTION

The proposed Casa De Villa Apartment Complex (Project) covers approximately 3.29 acres located southwest of the intersection of Nebraska and Thompson Avenues in Selma, California (APN 390-030-71). The project consists of 40 multi-family residential units (Phase 1) and a 3,000-square-foot commercial development (Phase 2). The project requires a General Plan Amendment (GPA) to change the land use from Medium Low Density Residential (R-1-7 zoning with an average density of approximately 5.0 dwelling units per acres) to a land use compatible with the project description. Site access will be on Nebraska Avenue.

A vicinity map is presented in the attached Figure 1, Vicinity Map, and a site plan is presented in Figure 2, Site Plan.

TRIP GENERATION

Phase 1

Data provided in the Institute of Transportation Engineers (ITE) *Trip Generation Manual, 11th Edition*, are typically used to estimate the number of trips anticipated to be generated by proposed projects. Table 1 presents the vehicle trip generation estimates for the Project utilizing ITE Land Use 220, Multifamily Housing (Low-Rise), and ITE Land Use 822, Strip Retail Plaza (<40k).

Table 1
Project Trip Generation Estimate

Land Use	Units	Daily		A.M. Peak Hour					P.M. Peak Hour				
		Rate	Total	Rate	In:Out	In	Out	Total	Rate	In:Out	In	Out	Total
220	40	6.74	270	0.40	24:76	4	12	16	0.51	63:37	12	8	20
822	3 ksf	54.45	164	2.36	60:40	4	3	7	6.59	50:50	10	10	20
Totals:			**434**			**8**	**15**	**23**			**22**	**18**	**40**

Reference: *Trip Generation Manual, 11th Edition*, Institute of Transportation Engineers 2021
Rates are reported in trips per dwelling unit for residential uses and trips per 1,000 square feet of building area for commercial uses.

Table 2 presents vehicle trip generation estimates assuming the site were developed in accordance with the current R-1-7 zoning at approximately 5.0 single-family dwelling units per acre. The estimates are based on ITE Land Use 210, Single-Family Detached Housing.

Table 2
Trip Generation Estimate – Current Zoning

Land Use	Units	Daily		A.M. Peak Hour					P.M. Peak Hour				
		Rate	Total	Rate	In:Out	In	Out	Total	Rate	In:Out	In	Out	Total
210	16	9.43	152	0.70	26:74	3	8	11	0.94	63:37	9	6	15

Reference: *Trip Generation Manual, 11th Edition*, Institute of Transportation Engineers 2021
Rates are reported in trips per dwelling unit.

PROJECT TRIP DISTRIBUTION AND ASSIGNMENT

The Project trips were distributed to the adjacent road network using engineering judgment considering the distribution of existing traffic volumes and complementary land uses in the Project vicinity. The anticipated percentage distribution of Project traffic volumes is presented in Figure 3, Project Trip Distribution Percentages. Project trips are presented in Figure 4, Project Peak-Hour Traffic Volumes.

CEQA TRANSPORTATION IMPACT ANALYSIS (VEHICLE MILES TRAVELED)

Senate Bill 743 (Steinberg, 2013), which was codified in California Public Resources Code § 21099, required changes to the guidelines implementing the California Environmental Quality Act (CEQA Guidelines) (Cal. Code Regs., Title 14, Div. 6, Ch. 3, § 1500, et seq.) as to the analysis of transportation impacts. Per Public Resources Code § 21099(b)(1):

> "The Office of Planning and Research shall prepare, develop, and transmit to the Secretary of the Natural Resources Agency for certification and adoption proposed revisions to the guidelines adopted pursuant to Section 21083 establishing criteria for determining the significance of transportation impacts of projects within transit priority areas. Those criteria shall promote the reduction of greenhouse gas emissions, the development of multimodal transportation networks, and a diversity of land uses. In developing the criteria, the office shall recommend potential metrics to measure transportation impacts that may include, but are not limited to, vehicle miles traveled, vehicle miles traveled per capita, automobile trip generation rates, or automobile trips generated. The office may also establish criteria for

models used to analyze transportation impacts to ensure the models are accurate, reliable, and consistent with the intent of this section."

In January 2019, the Natural Resources Agency certified the Office of Planning and Research's (OPR) proposed revisions, which resulted in the creation of Section 15064.3 of the CEQA Guidelines. Section 15064.3(a) describes its purpose as:

> "This section describes specific considerations for evaluating a project's transportation impacts. Generally, vehicle miles traveled is the most appropriate measure of transportation impacts. For the purposes of this section, 'vehicle miles traveled' refers to the amount and distance of automobile travel attributable to a project. Other relevant considerations may include the effects of the project on transit and non-motorized travel. Except as provided in subdivision (b)(2) below (regarding roadway capacity), a project's effect on automobile delay shall not constitute a significant environmental impact."

OPR created a Technical Advisory (December 2018) (TA)[1] as guidance for evaluating vehicle miles traveled (VMT) impacts. The Fresno Council of Governments (COG) prepared the Fresno County SB743 Implementation Regional Guidelines dated January 2021 (COG Guidelines)[2] that includes substantial evidence for local significance criteria. The COG Guidelines state:

> "A common GHG emissions threshold is 3,000 metric tons (MT) of carbon dioxide equivalent (CO_2e) per year. The vehicle emissions are typically more than 50 percent of the total project GHG emissions. Thus, a project with 500 ADT would generally have total project emissions that could be less than 1,300 MT CO_2e/year (i.e., 50 percent or 643 MT CO_2e/year from vehicle emissions and the other 50 percent coming from other project activities). As this level of GHG emissions would be less than 3,000 MT CO_2e/year, the emissions of GHG from a project up to 500 ADT would typically be less than significant. Therefore, it is recommended that projects be screened out if they generate fewer than 500 ADT."

It is our understanding that the City of Selma has not yet adopted guidelines for VMT analyses. It is proposed to utilize the local information presented in the COG Guidelines and the substantial evidence presented therein. Based on the criteria in the COG Guidelines, the Project will "screen out" (i.e., may be presumed to cause a less-than-significant transportation impact) because it will generate fewer than 500 trips per day.

LEVEL OF SERVICE AND INTERSECTION OPERATIONAL ANALYSES

The Transportation Research Board *Highway Capacity Manual*, *6th Edition*, (HCM) defines level of service (LOS) as, "A quantitative stratification of a performance measure or measures that represent quality of service, measured on an A-F scale, with LOS A representing the best operating conditions from the traveler's perspective and LOS F the worst." Automobile mode LOS characteristics for both unsignalized and signalized intersections are presented in Tables 3 and 4.

[1] https://opr.ca.gov/docs/20190122-743_Technical_Advisory.pdf
[2] https://2ave3l244ex63mgdyc1u2mfp-wpengine.netdna-ssl.com/wp-content/uploads/2021/01/Fresno-COG-VMT-Report_01-08-2021.pdf

Table 3
Level of Service Characteristics for Unsignalized Intersections

Level of Service	Average Vehicle Delay (seconds)
A	0-10
B	>10-15
C	>15-25
D	>25-35
E	>35-50
F	>50

Table 4
Level of Service Characteristics for Signalized Intersections

Level of Service	Description	Average Vehicle Delay (seconds)
A	Volume-to-capacity ratio is no greater than 1.0. Progression is exceptionally favorable or the cycle length is very short.	<10
B	Volume-to-capacity ratio is no greater than 1.0. Progression is highly favorable or the cycle length is very short.	>10-20
C	Volume-to-capacity ratio is no greater than 1.0. Progression is favorable or cycle length is moderate.	>20-35
D	Volume-to-capacity ratio is high but no greater than 1.0. Progression is ineffective or cycle length is long. Many vehicles stop and individual cycle failures are noticeable.	>35-55
E	Volume-to-capacity ratio is high but no greater than 1.0. Progression is unfavorable and cycle length is long. Individual cycle failures are frequent.	>55-80
F	Volume-to-capacity ratio is greater than 1.0. Progression is very poor and cycle length is long. Most cycles fail to clear the queue.	>80

Reference for Tables 3 and 4: *Highway Capacity Manual, 6th Edition,* Transportation Research Board, 2016

The State of California does not recognize traffic congestion and delay as an environmental impact per CEQA. However, the City of Selma 2035 General Plan states as an objective:

> "Maintain a roadway level of service (LOS) of D or better for intersections and road segments for Minor Collectors, Collectors, Arterials, Major Arterials, and Highways; where other jurisdictions control and manage roadways, their respective level of service standards shall prevail on applicable segments. In order to avoid using Local streets for excessive through traffic, an LOS of B is established for Local streets."

For purposes of the traffic study, it is proposed that a traffic issue may be identified if the addition of the traffic generated by the Project results in any one of the following:

- Triggers an intersection operating at acceptable LOS (A, B, C, or D) to operate at unacceptable levels of service (E or F);
- Increases the average delay for a study intersection that is already operating at unacceptable LOS (E or F) by 5.0 seconds or more.

STUDY SCENARIOS AND ANALYSES

Intersection operational analyses (to determine LOS and 95th-percentile queue lengths) will be performed for the following time periods:

- Weekday a.m. peak hour between 7:00 and 9:00 a.m.;
- Weekday p.m. peak hour between 4:00 and 6:00 p.m.

It is anticipated that analyses would be required for the following scenarios:

A. Existing Conditions
B. Existing-Plus-Project Conditions
C. Near-Term With-Project Conditions (includes known pending and approved projects)
D. Cumulative (Year 2043) No-Project Conditions (assumes buildout of the site per the current zoning); and
E. Cumulative (Year 2043) With-Project Conditions.

Traffic signal warrants analyses and collision history and are not proposed for this study and would only be performed if required by the City of Selma. If traffic signal warrants are required for existing unsignalized intersections, then 24-hour traffic counts would be performed on each approach to the intersection. If collision history information is required, it would be obtained from the Statewide Integrated Traffic Records System (SWITRS).

TRAFFIC COUNTS

Weekday intersection turning movement counts will be performed between 7:00 and 9:00 a.m. and between 4:00 and 6:00 p.m. at the required study intersections. Twenty-four-hour counts are not proposed.

STUDY AREA

Peters Engineering Group is requesting that the City of Selma identify a list of study intersections to be counted and analyzed.

Since intersection operations typically govern with respect to the required number of through lanes on roadway, road segment analyses are not proposed.

PENDING AND APPROVED PROJECTS

The analyses for the near-term and long-term conditions consider the effects of traffic expected to be generated by pending and approved projects in the study area. Peters Engineering Group is requesting that the City of Selma and other affected agencies provide information related to pending and approved projects in the vicinity of the study intersections to be included in the traffic analysis.

CLOSING

We are requesting written comments and/or confirmation of the contents of this letter. Specifically, we are requesting confirmation of the following items from all affected agencies before continuing with the analyses:

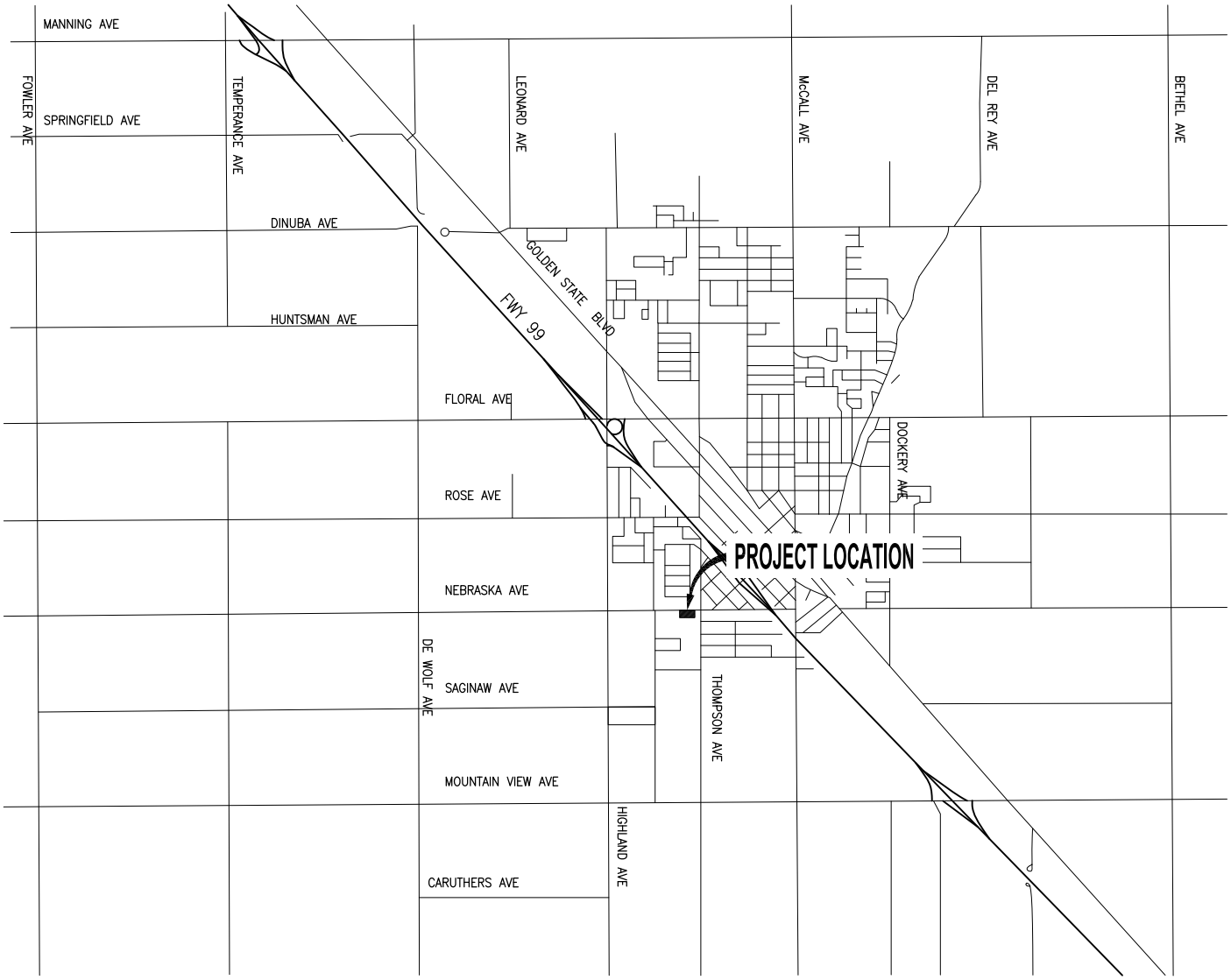
- General confirmation of the approach to the study
- Trip generation assumptions and calculations
- No further VMT analyses or traffic modeling required
- Criteria for determining a traffic issue
- The time periods requiring intersection turning movement counts and analyses
- The study scenarios
- Study intersections to be counted and analyzed
- 24-hour counts for traffic signal warrants not proposed
- Collision history research not proposed
- Pending and approved projects

Thank you for the opportunity to work with you to complete the traffic study. Please feel free to contact our office if you have any questions.

PETERS ENGINEERING GROUP

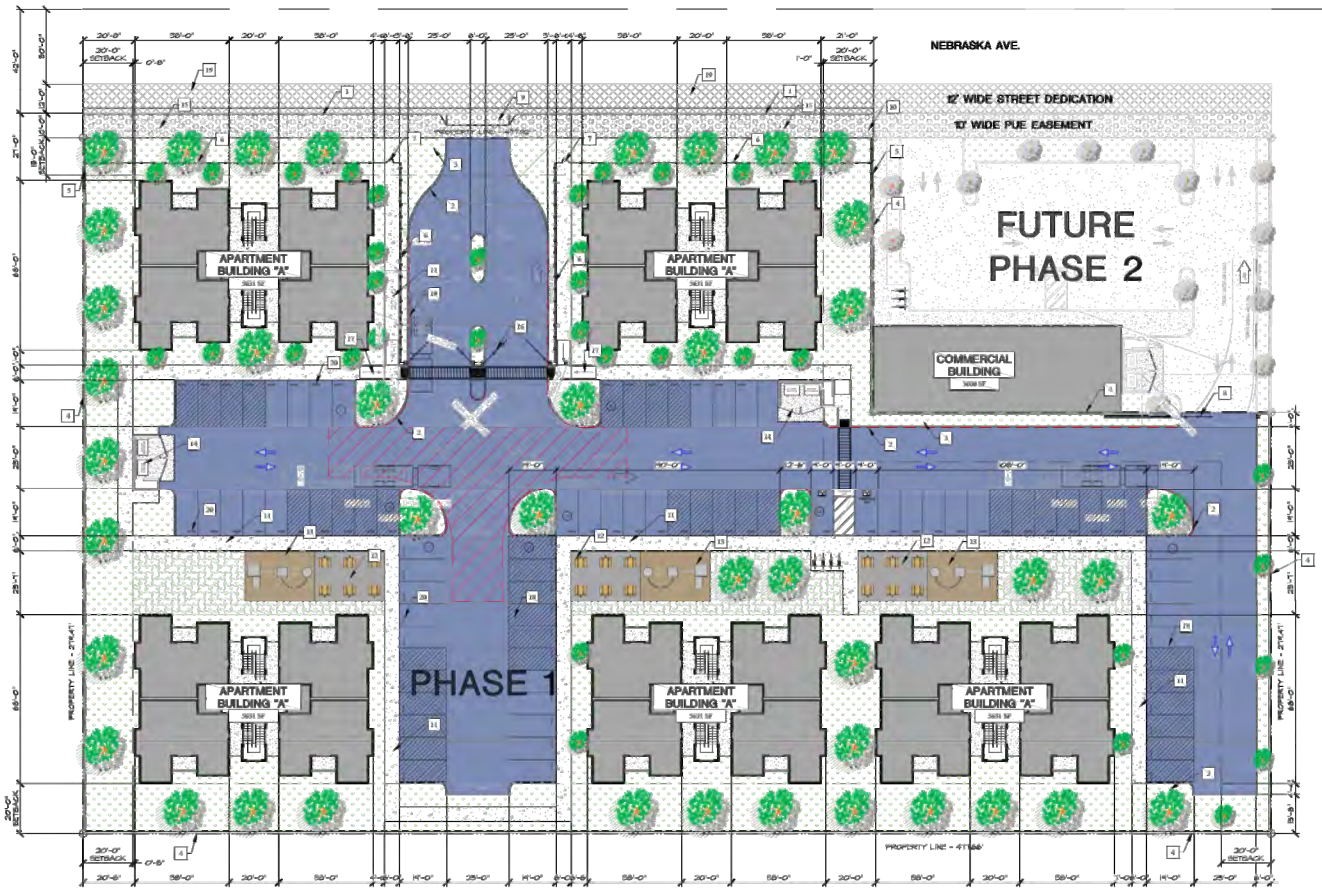
John Rowland, PE, TE

Attachments: Figures 1 through 4



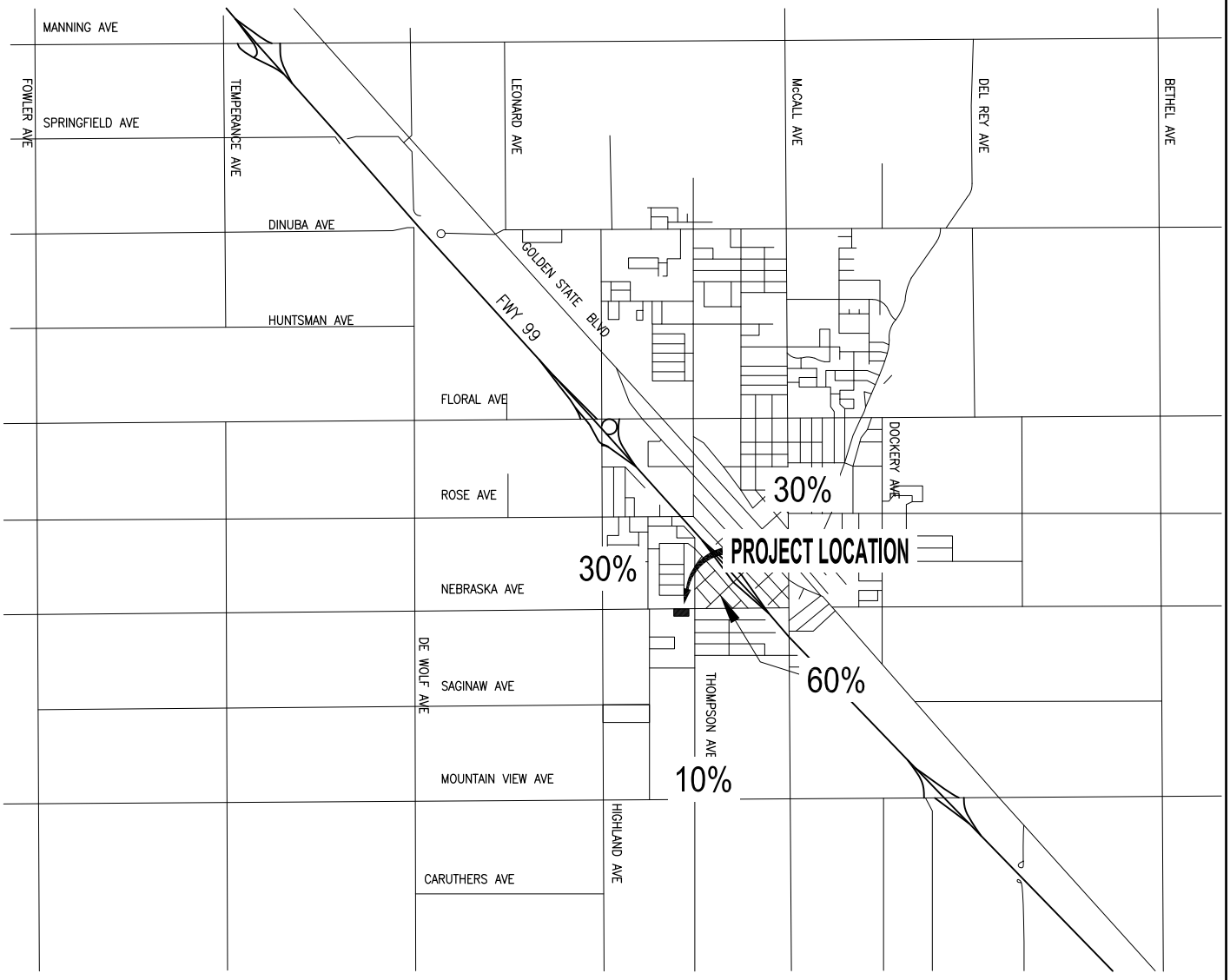
Proposed Casa De Villa Apartment Complex
Selma, California

VICINITY MAP



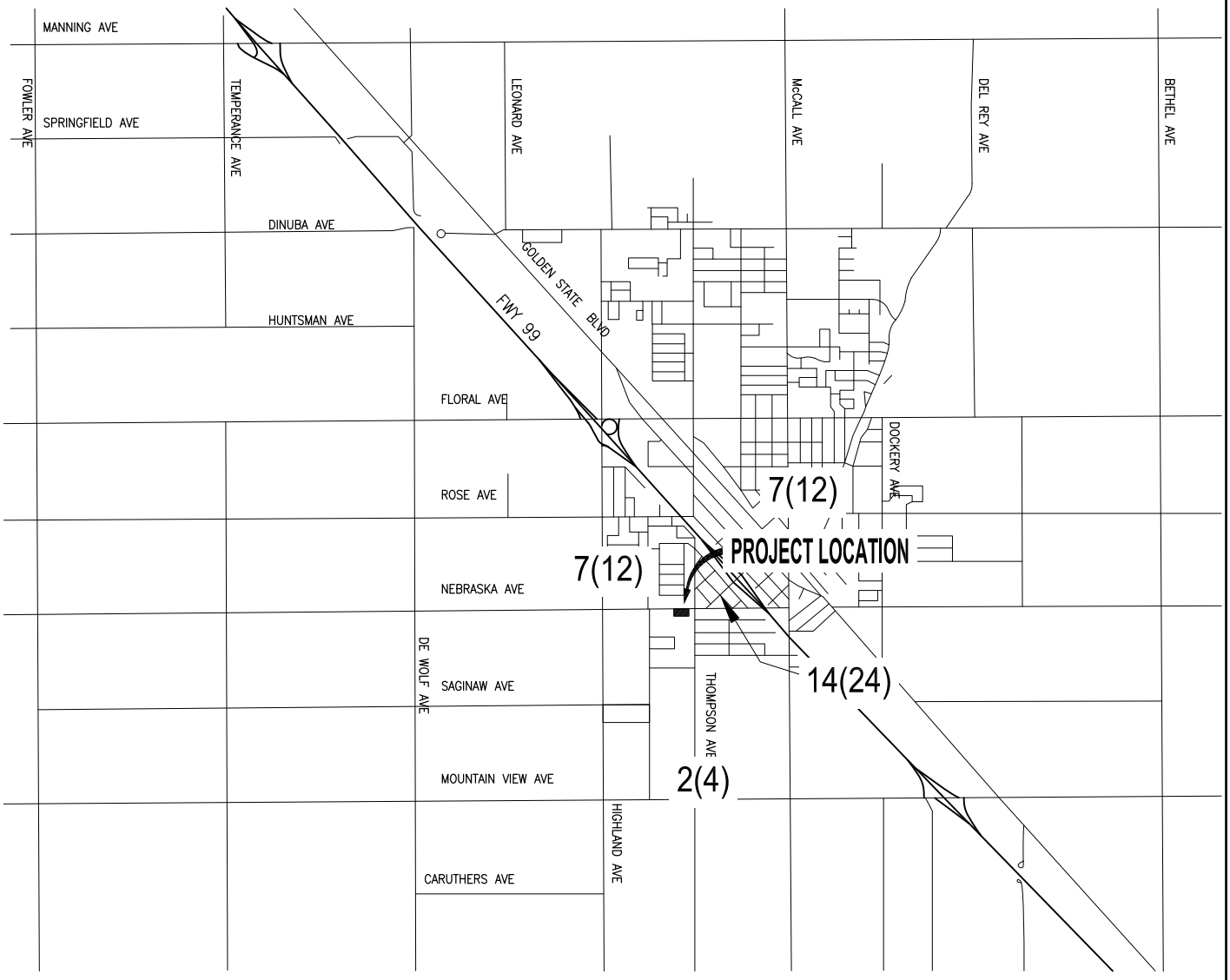
Proposed Casa De Villa Apartment Complex
Selma, California

SITE PLAN



Proposed Casa De Villa Apartment Complex
Selma, California

PROJECT TRIP DISTRIBUTION PERCENTAGES



Proposed Casa De Villa Apartment Complex
Selma, California

PROJECT PEAK-HOUR TRAFFIC VOLUMES

John Rowland

From: Trevor Stearns <Trevor.Stearns@qkinc.com>
Sent: Monday, December 19, 2022 12:34 PM
To: bramirez@cveas.com; Rob Terry; Nick Sahota; Planning Department
Cc: Fernando Santillan; John Rowland
Subject: RE: [EXTERNAL]:RE: Casa de Villa (21058)

Hi Brenda,

The City proposes to remove two intersections from the traffic impact analysis. The two intersections are 2nd/Whitson and Highland/Rose. This is in addition to the recommendation from CalTrans in the 9/30 email to also remove the SR99/ 2nd interchange.

Therefore, the intersections needing traffic counts and analysis are:

- Nebraska/Thompson Avenue
- Nebraska/Mitchell Avenue
- Nebraska/Highland Avenue

Please let your traffic consultant know.

If you have any questions please let me know.

Thanks

Trevor Stearns
Senior Associate Planner
(559) 449-2400 Office
(559) 307-8939 Mobile
www.QKinc.com

From: bramirez@cveas.com <bramirez@cveas.com>
Sent: Monday, December 5, 2022 9:51 AM
To: Rob Terry <RobT@cityofselma.com>; Trevor Stearns <Trevor.Stearns@qkinc.com>; Nick Sahota <Nsahota@cveas.com>; Planning Department <PlanningDept@cityofselma.com>
Cc: Fernando Santillan <FernandoS@cityofselma.com>; John Rowland <johnrowland@peters-engineering.com>
Subject: RE: [EXTERNAL]:RE: Casa de Villa (21058)

Good morning Rob,
Do you have any updates on the intersections needed for the TIS?

Thank you,
Brenda N. Ramirez
Assistant Project Manager
Central Valley Engineering & Surveying, Inc.
2511 Logan Street
Selma CA. 93662
Tel: (559) 891-8811 ex.1011

John Rowland

From: Hernandez, Edgar@DOT <Edgar.Hernandez@dot.ca.gov>
Sent: Friday, September 30, 2022 11:24 AM
To: bramirez@cveas.com; Nick Sahota
Cc: Padilla, Dave@DOT; John Rowland
Subject: RE: Casa De Villa -Selma (21058)
Attachments: Casa_de_Villa_Traffic_Study_Scope_Request_Letter (1) (002).pdf

Hello again Nick and Brenda,

After further discussion, the Scope of work does not need to be revised. Even though it was mentioned the Phase 2 (3,000 sf commercia) may be put on hold at this time, it still being accounted for as part of Table 1 in the submitted scope of work. Therefore, the Applicant may proceed without needing to include the SR 99/2nd interchange.

Please let me know if you have any questions.

Regards,

Edgar Hernandez
District 6 Office of Planning
Associate Transportation Planner
Work Cell: (559) 981-7436

From: bramirez@cveas.com <bramirez@cveas.com>
Sent: Friday, September 30, 2022 10:12 AM
To: Hernandez, Edgar@DOT <Edgar.Hernandez@dot.ca.gov>; Nick Sahota <Nsahota@cveas.com>
Subject: RE: Casa De Villa -Selma (21058)

Connecting right now.

From: Hernandez, Edgar@DOT <Edgar.Hernandez@dot.ca.gov>
Sent: Friday, September 30, 2022 10:05 AM
To: Nick Sahota <Nsahota@cveas.com>
Cc: bramirez@cveas.com
Subject: Casa De Villa -Selma (21058)

Good morning Nick and Brenda,

Are you able to utilize the teams meeting link included in the invite?

Edgar Hernandez
District 6 Office of Planning
Associate Transportation Planner
Work Cell: (559) 981-7436

APPENDIX B
TRAFFIC COUNT DATA SHEETS

Metro Traffic Data Inc.
310 N. Irwin Street - Suite 20
Hanford, CA 93230

800-975-6938 Phone/Fax
www.metrotrafficdata.com

Turning Movement Report

Prepared For:

Peters Engineering Group
862 Pollasky Ave
Clovis, CA 93612

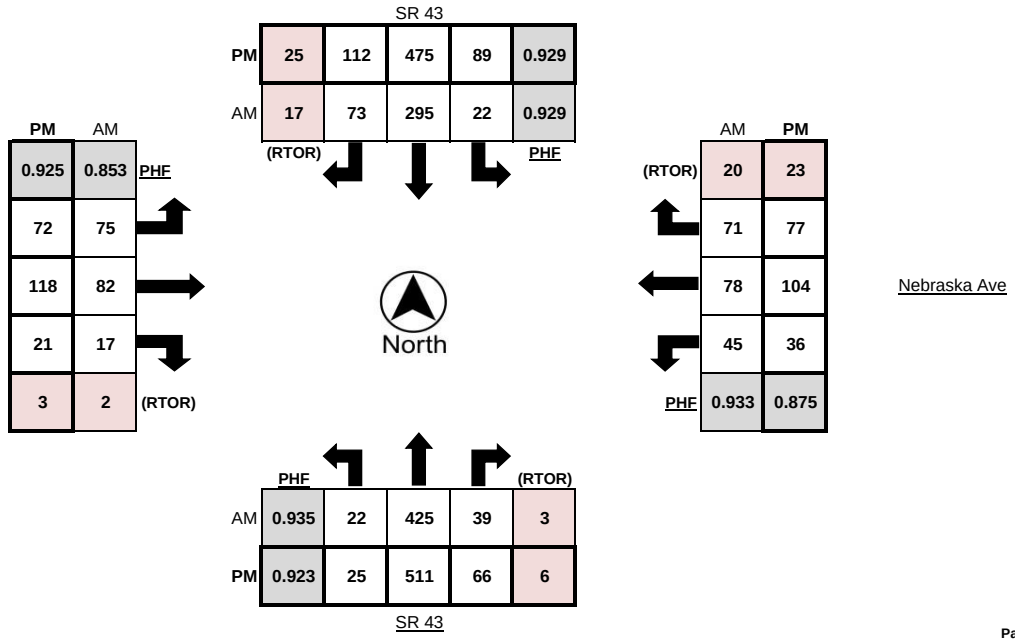
LOCATION SR 43 @ Nebraska Ave
LATITUDE 36.5617
COUNTY Fresno
LONGITUDE -119.6288
COLLECTION DATE Thursday, January 26, 2023
WEATHER Clear

	Northbound					Southbound					Eastbound					Westbound				
Time	**Left**	**Thru**	**Right**	**(RTOR)**	**Trucks**	**Left**	**Thru**	**Right**	**(RTOR)**	**Trucks**	**Left**	**Thru**	**Right**	**(RTOR)**	**Trucks**	**Left**	**Thru**	**Right**	**(RTOR)**	**Trucks**
7:00 AM - 7:15 AM	2	100	1	0	7	2	93	7	1	12	11	5	0	0	0	2	13	15	3	1
7:15 AM - 7:30 AM	4	119	5	0	8	2	102	15	2	16	10	11	2	0	2	7	11	12	3	4
7:30 AM - 7:45 AM	7	112	9	0	11	4	85	16	4	7	12	14	6	1	1	10	24	15	4	3
7:45 AM - 8:00 AM	5	111	14	0	9	4	71	14	3	10	20	29	2	1	7	10	18	15	5	2
8:00 AM - 8:15 AM	4	96	8	2	8	9	71	19	4	10	24	21	4	0	7	12	19	21	4	1
8:15 AM - 8:30 AM	6	106	8	1	12	5	68	24	6	14	19	18	5	0	2	13	17	20	7	0
8:30 AM - 8:45 AM	3	69	5	0	6	9	83	13	4	15	22	19	2	0	2	7	18	10	2	1
8:45 AM - 9:00 AM	5	92	3	0	9	4	74	5	2	14	15	18	3	0	2	10	14	19	5	3
TOTAL	**36**	**805**	**53**	**3**	**70**	**39**	**647**	**113**	**26**	**98**	**133**	**135**	**24**	**2**	**23**	**71**	**134**	**127**	**33**	**15**

	Northbound					Southbound					Eastbound					Westbound				
Time	**Left**	**Thru**	**Right**	**(RTOR)**	**Trucks**	**Left**	**Thru**	**Right**	**(RTOR)**	**Trucks**	**Left**	**Thru**	**Right**	**(RTOR)**	**Trucks**	**Left**	**Thru**	**Right**	**(RTOR)**	**Trucks**
4:00 PM - 4:15 PM	2	133	15	1	5	32	121	29	6	4	14	30	4	1	1	15	24	23	6	0
4:15 PM - 4:30 PM	4	118	20	2	6	27	113	26	5	5	23	25	7	1	2	6	36	20	7	0
4:30 PM - 4:45 PM	12	138	13	1	7	13	113	29	6	6	14	36	7	1	4	9	24	17	5	1
4:45 PM - 5:00 PM	7	122	18	2	3	17	128	28	8	5	21	27	3	0	1	6	20	17	5	0
5:00 PM - 5:15 PM	5	119	16	1	7	23	109	24	5	2	22	35	8	0	2	11	26	28	10	3
5:15 PM - 5:30 PM	6	121	17	3	4	23	113	35	12	3	24	27	8	2	0	13	29	23	7	0
5:30 PM - 5:45 PM	6	116	18	1	5	27	126	19	3	3	18	24	4	0	2	14	24	11	4	0
5:45 PM - 6:00 PM	7	76	11	2	2	19	89	14	3	3	22	22	3	1	0	16	13	25	7	0
TOTAL	**49**	**943**	**128**	**13**	**39**	**181**	**912**	**204**	**48**	**31**	**158**	**226**	**44**	**6**	**12**	**90**	**196**	**164**	**51**	**4**

	Northbound					Southbound					Eastbound					Westbound				
PEAK HOUR	**Left**	**Thru**	**Right**	**(RTOR)**	**Trucks**	**Left**	**Thru**	**Right**	**(RTOR)**	**Trucks**	**Left**	**Thru**	**Right**	**(RTOR)**	**Trucks**	**Left**	**Thru**	**Right**	**(RTOR)**	**Trucks**
7:30 AM - 8:30 AM	22	425	39	3	40	22	295	73	17	41	75	82	17	2	17	45	78	71	20	6
4:00 PM - 5:00 PM	25	511	66	6	21	89	475	112	25	20	72	118	21	3	8	36	104	77	23	1

	PHF	Trucks
AM	0.990	8.4%
PM	0.965	2.9%



Metro Traffic Data Inc.
310 N. Irwin Street - Suite 20
Hanford, CA 93230

800-975-6938 Phone/Fax
www.metrotrafficdata.com

Turning Movement Report

Prepared For:

Peters Engineering Group
862 Pollasky Ave
Clovis, CA 93612

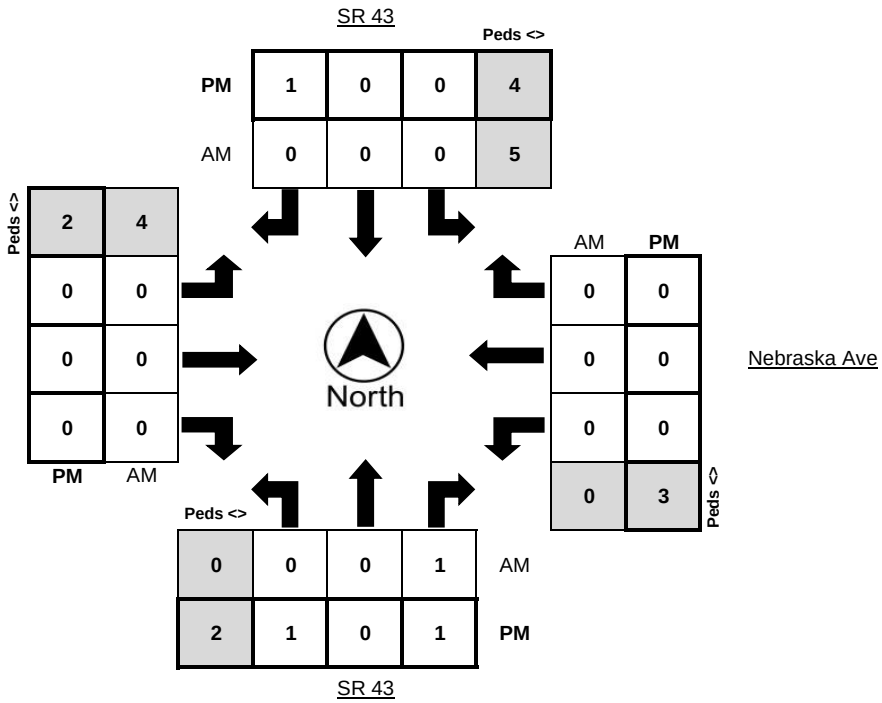
LOCATION SR 43 @ Nebraska Ave
LATITUDE 36.5617
COUNTY Fresno
LONGITUDE -119.6288
COLLECTION DATE Thursday, January 26, 2023
WEATHER Clear

	Northbound Bikes			N.Leg	Southbound Bikes			S.Leg	Eastbound Bikes			E.Leg	Westbound Bikes			W.Leg
Time	**Left**	**Thru**	**Right**	**Peds**	**Left**	**Thru**	**Right**	**Peds**	**Left**	**Thru**	**Right**	**Peds**	**Left**	**Thru**	**Right**	**Peds**
7:00 AM - 7:15 AM	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0
7:15 AM - 7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM - 7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM - 8:00 AM	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	2
8:00 AM - 8:15 AM	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	2
8:15 AM - 8:30 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM - 8:45 AM	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	1
8:45 AM - 9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	**0**	**0**	**1**	**6**	**0**	**1**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**5**

	Northbound Bikes			N.Leg	Southbound Bikes			S.Leg	Eastbound Bikes			E.Leg	Westbound Bikes			W.Leg
Time	**Left**	**Thru**	**Right**	**Peds**	**Left**	**Thru**	**Right**	**Peds**	**Left**	**Thru**	**Right**	**Peds**	**Left**	**Thru**	**Right**	**Peds**
4:00 PM - 4:15 PM	1	0	0	2	0	0	0	0	0	0	0	0	0	0	0	1
4:15 PM - 4:30 PM	0	0	0	2	0	0	1	0	0	0	0	1	0	0	0	1
4:30 PM - 4:45 PM	0	0	1	0	0	0	0	2	0	0	0	2	0	0	0	0
4:45 PM - 5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM - 5:15 PM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
5:15 PM - 5:30 PM	0	0	1	0	0	0	0	0	0	0	0	1	0	0	0	0
5:30 PM - 5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
5:45 PM - 6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
TOTAL	**1**	**0**	**2**	**5**	**0**	**0**	**1**	**2**	**0**	**0**	**0**	**4**	**0**	**1**	**1**	**3**

	Northbound Bikes			N.Leg	Southbound Bikes			S.Leg	Eastbound Bikes			E.Leg	Westbound Bikes			W.Leg
PEAK HOUR	**Left**	**Thru**	**Right**	**Peds**	**Left**	**Thru**	**Right**	**Peds**	**Left**	**Thru**	**Right**	**Peds**	**Left**	**Thru**	**Right**	**Peds**
7:30 AM - 8:30 AM	0	0	1	5	0	0	0	0	0	0	0	0	0	0	0	4
4:00 PM - 5:00 PM	1	0	1	4	0	0	1	2	0	0	0	3	0	0	0	2

	Bikes	Peds
AM Peak Total	1	9
PM Peak Total	**3**	**11**



Metro Traffic Data Inc.
310 N. Irwin Street - Suite 20
Hanford, CA 93230

800-975-6938 Phone/Fax
www.metrotrafficdata.com

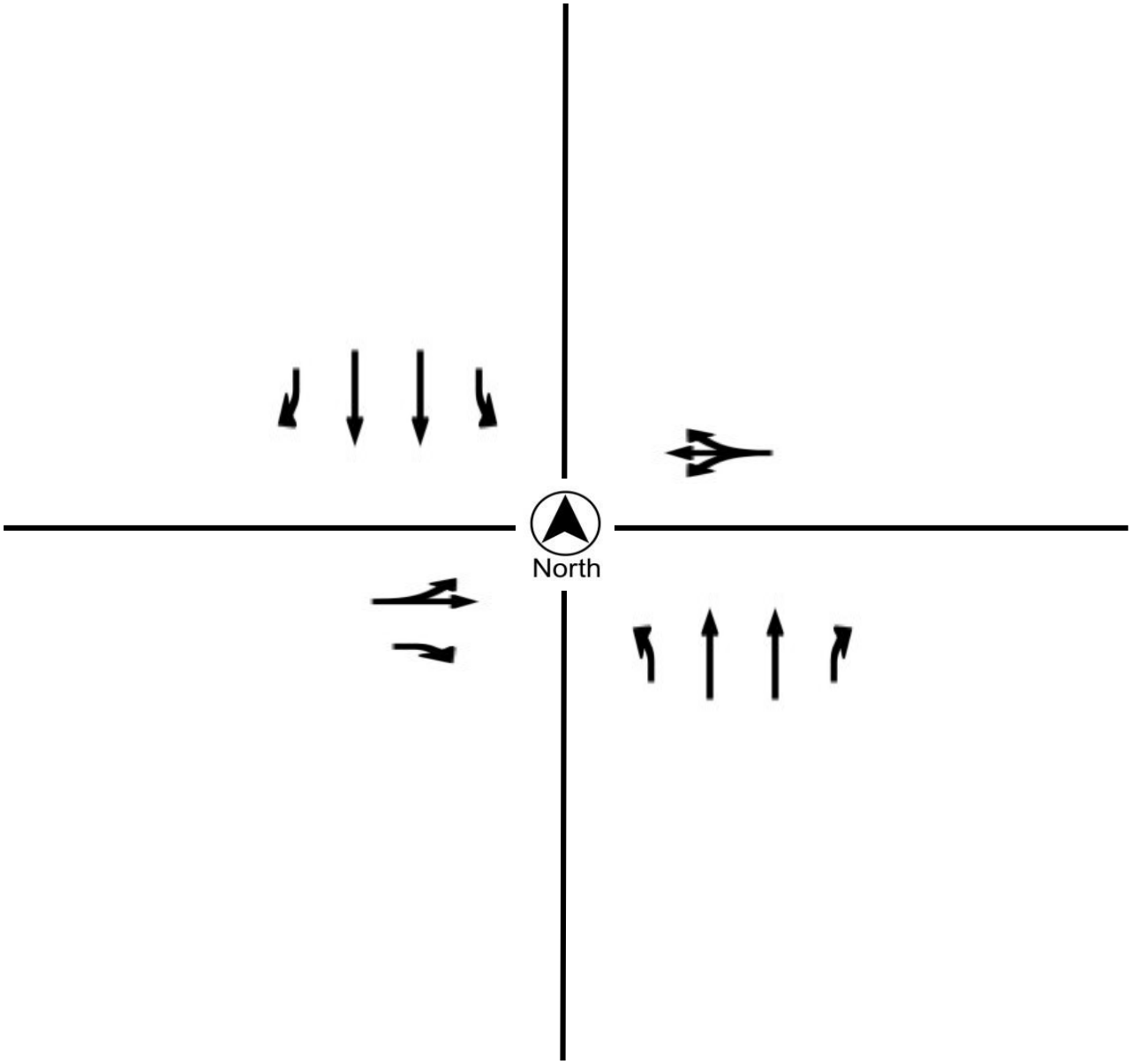
Turning Movement Report

Prepared For:

Peters Engineering Group
862 Pollasky Ave
Clovis, CA 93612

LOCATION	SR 43 @ Nebraska Ave	**N/S STREET**	SR 43
COUNTY	Fresno	**E/W STREET**	Nebraska Ave
COLLECTION DATE	Thursday, January 26, 2023	**WEATHER**	Clear
CYCLE TIME	127 Seconds	**CONTROL TYPE**	Signal

COMMENTS Northbound/southbound left turns are protected.
Eastbound/westbound left turns are permitted.



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Turning Movement Report

Prepared For:

Peters Engineering Group
862 Pollasky Avenue
Clovis, CA 93612

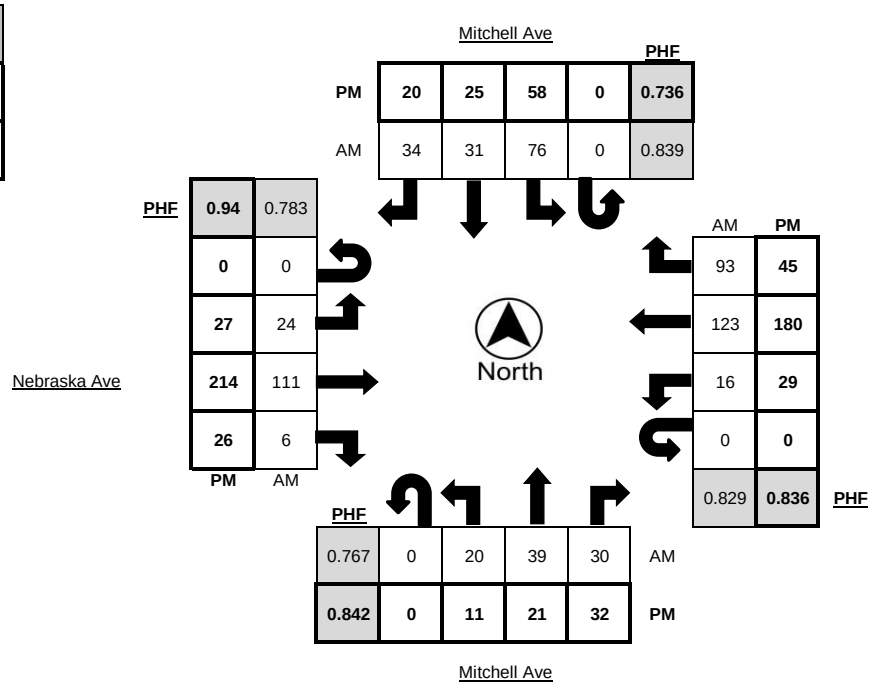
LOCATION Mitchell Ave @ Nebraska Ave
LATITUDE 36.5617
COUNTY Fresno
LONGITUDE -119.6243
COLLECTION DATE Thursday, January 26, 2023
WEATHER Clear

	Northbound					Southbound					Eastbound					Westbound				
Time	**U-Turn**	**Left**	**Thru**	**Right**	**Trucks**	**U-Turn**	**Left**	**Thru**	**Right**	**Trucks**	**U-Turn**	**Left**	**Thru**	**Right**	**Trucks**	**U-Turn**	**Left**	**Thru**	**Right**	**Trucks**
7:00 AM - 7:15 AM	0	7	0	1	2	0	2	1	2	0	0	3	4	0	0	0	2	17	1	0
7:15 AM - 7:30 AM	0	2	1	2	0	0	2	0	1	0	0	0	15	4	2	0	0	21	5	0
7:30 AM - 7:45 AM	0	7	8	6	1	0	15	7	7	0	0	7	17	2	3	0	3	30	27	0
7:45 AM - 8:00 AM	0	6	12	11	0	0	20	5	5	0	0	6	38	1	1	0	3	28	23	0
8:00 AM - 8:15 AM	0	4	12	8	0	0	24	8	8	0	0	7	31	1	5	0	5	34	31	0
8:15 AM - 8:30 AM	0	3	7	5	0	0	17	11	14	0	0	4	25	2	0	0	5	31	12	0
8:30 AM - 8:45 AM	0	2	1	4	1	0	8	4	8	0	0	7	26	4	2	0	5	21	7	0
8:45 AM - 9:00 AM	0	2	4	3	0	0	1	5	1	0	0	2	23	1	2	0	2	33	1	0
TOTAL	**0**	**33**	**45**	**40**	**4**	**0**	**89**	**41**	**46**	**0**	**0**	**36**	**179**	**15**	**15**	**0**	**25**	**215**	**107**	**0**

	Northbound					Southbound					Eastbound					Westbound				
Time	**U-Turn**	**Left**	**Thru**	**Right**	**Trucks**	**U-Turn**	**Left**	**Thru**	**Right**	**Trucks**	**U-Turn**	**Left**	**Thru**	**Right**	**Trucks**	**U-Turn**	**Left**	**Thru**	**Right**	**Trucks**
4:00 PM - 4:15 PM	0	5	5	5	0	0	11	5	11	0	0	10	73	11	1	0	11	44	22	0
4:15 PM - 4:30 PM	0	0	0	2	0	0	8	1	10	0	0	3	51	9	2	0	6	43	9	0
4:30 PM - 4:45 PM	0	1	2	10	0	0	11	4	4	0	0	5	53	10	1	0	8	41	11	0
4:45 PM - 5:00 PM	0	3	8	8	0	0	14	7	2	0	0	7	52	4	0	0	6	35	12	0
5:00 PM - 5:15 PM	0	4	3	7	0	0	14	5	7	0	0	9	57	5	1	0	7	49	9	0
5:15 PM - 5:30 PM	0	3	8	7	0	0	19	9	7	0	0	6	52	7	2	0	8	55	13	0
5:30 PM - 5:45 PM	0	3	3	4	0	0	13	5	5	0	0	2	53	11	0	0	5	40	15	0
5:45 PM - 6:00 PM	0	2	2	7	0	0	17	5	6	0	0	10	41	7	0	0	4	38	6	0
TOTAL	**0**	**21**	**31**	**50**	**0**	**0**	**107**	**41**	**52**	**0**	**0**	**52**	**432**	**64**	**7**	**0**	**55**	**345**	**97**	**0**

	Northbound					Southbound					Eastbound					Westbound				
PEAK HOUR	**U-Turn**	**Left**	**Thru**	**Right**	**Trucks**	**U-Turn**	**Left**	**Thru**	**Right**	**Trucks**	**U-Turn**	**Left**	**Thru**	**Right**	**Trucks**	**U-Turn**	**Left**	**Thru**	**Right**	**Trucks**
7:30 AM - 8:30 AM	0	20	39	30	1	0	76	31	34	0	0	24	111	6	9	0	16	123	93	0
4:30 PM - 5:30 PM	0	11	21	32	0	0	58	25	20	0	0	27	214	26	4	0	29	180	45	0

	PHF	Trucks
AM	0.871	1.7%
PM	0.887	0.6%



Metro Traffic Data Inc.
310 N. Irwin Street - Suite 20
Hanford, CA 93230

800-975-6938 Phone/Fax
www.metrotrafficdata.com

Turning Movement Report

Prepared For:

JLB Traffic Engineering, Inc.
516 W. Shaw Ave, Suite 103
Fresno, CA 93704

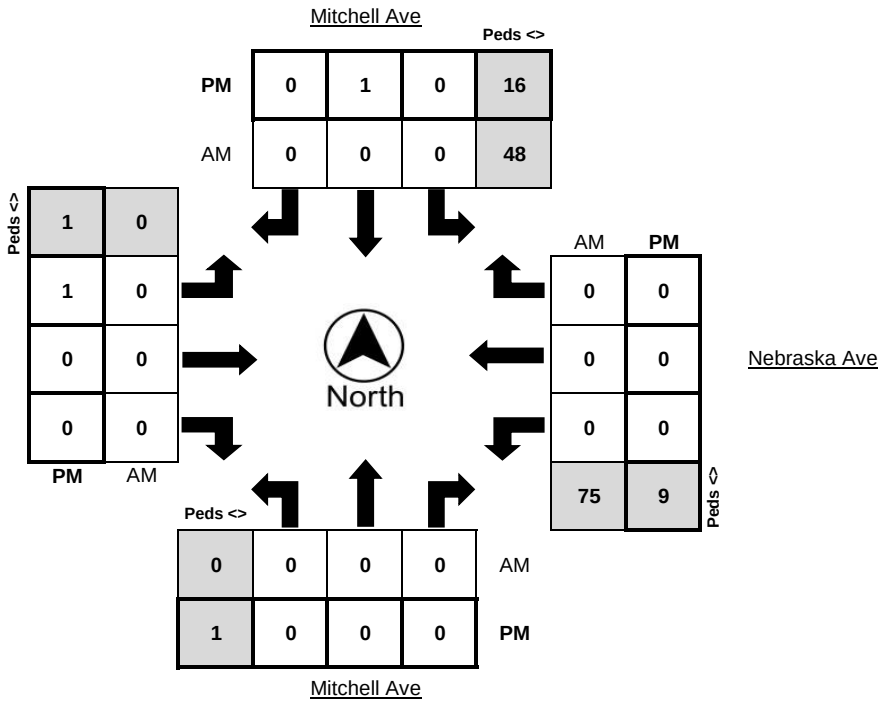
LOCATION Mitchell Ave @ Nebraska Ave
LATITUDE 36.5617
COUNTY Fresno
LONGITUDE -119.6243
COLLECTION DATE Thursday, January 26, 2023
WEATHER Clear

	Northbound Bikes			N.Leg	Southbound Bikes			S.Leg	Eastbound Bikes			E.Leg	Westbound Bikes			W.Leg
Time	**Left**	**Thru**	**Right**	**Peds**	**Left**	**Thru**	**Right**	**Peds**	**Left**	**Thru**	**Right**	**Peds**	**Left**	**Thru**	**Right**	**Peds**
7:00 AM - 7:15 AM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0
7:15 AM - 7:30 AM	0	0	0	3	0	0	0	0	0	0	0	3	0	0	0	0
7:30 AM - 7:45 AM	0	0	0	18	0	0	0	0	0	0	0	41	0	0	0	0
7:45 AM - 8:00 AM	0	0	0	14	0	0	0	0	0	0	0	23	0	0	0	0
8:00 AM - 8:15 AM	0	0	0	9	0	0	0	0	0	0	0	9	0	0	0	0
8:15 AM - 8:30 AM	0	0	0	7	0	0	0	0	0	0	0	2	0	0	0	0
8:30 AM - 8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM - 9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	**0**	**0**	**0**	**51**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**79**	**0**	**0**	**0**	**0**

	Northbound Bikes			N.Leg	Southbound Bikes			S.Leg	Eastbound Bikes			E.Leg	Westbound Bikes			W.Leg
Time	**Left**	**Thru**	**Right**	**Peds**	**Left**	**Thru**	**Right**	**Peds**	**Left**	**Thru**	**Right**	**Peds**	**Left**	**Thru**	**Right**	**Peds**
4:00 PM - 4:15 PM	0	0	1	2	0	0	0	0	0	0	0	6	0	0	0	0
4:15 PM - 4:30 PM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM - 4:45 PM	0	0	0	4	0	0	0	0	0	0	0	4	0	0	0	0
4:45 PM - 5:00 PM	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM - 5:15 PM	0	0	0	7	0	1	0	1	0	0	0	4	0	0	0	1
5:15 PM - 5:30 PM	0	0	0	1	0	0	0	0	1	0	0	1	0	0	0	0
5:30 PM - 5:45 PM	0	0	0	4	0	0	0	0	0	0	0	4	0	0	0	0
5:45 PM - 6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	**0**	**0**	**1**	**23**	**0**	**1**	**0**	**1**	**1**	**0**	**0**	**19**	**0**	**0**	**0**	**1**

	Northbound Bikes			N.Leg	Southbound Bikes			S.Leg	Eastbound Bikes			E.Leg	Westbound Bikes			W.Leg
PEAK HOUR	**Left**	**Thru**	**Right**	**Peds**	**Left**	**Thru**	**Right**	**Peds**	**Left**	**Thru**	**Right**	**Peds**	**Left**	**Thru**	**Right**	**Peds**
7:30 AM - 8:30 AM	0	0	0	48	0	0	0	0	0	0	0	75	0	0	0	0
4:30 PM - 5:30 PM	0	0	0	16	0	1	0	1	1	0	0	9	0	0	0	1

	Bikes	Peds
AM Peak Total	0	123
PM Peak Total	**2**	**27**



Metro Traffic Data Inc.
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Hanford, CA 93230

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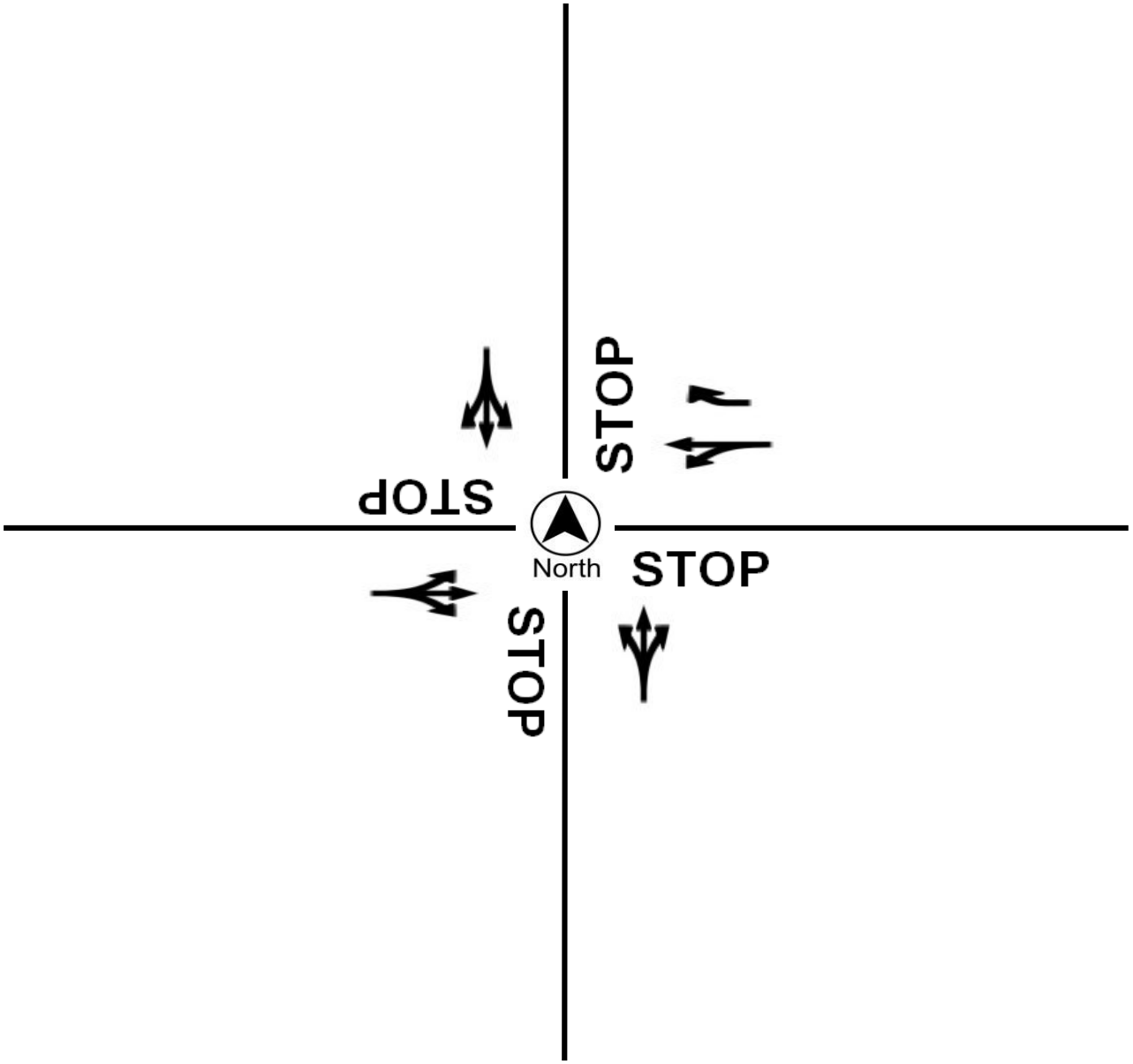
Turning Movement Report

Prepared For:

Peters Engineering Group
862 Pollasky Avenue
Clovis, CA 93612

LOCATION	Mitchell Ave @ Nebraska Ave	**N/S STREET**	Mitchell Ave
COUNTY	Fresno	**E/W STREET**	Nebraska Ave
COLLECTION DATE	Thursday, January 26, 2023	**WEATHER**	Clear
CYCLE TIME	N/A	**CONTROL TYPE**	All-Way Stop

COMMENTS



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Turning Movement Report

Prepared For:

Peters Engineering Group
862 Pollasky Avenue
Clovis, CA 93612

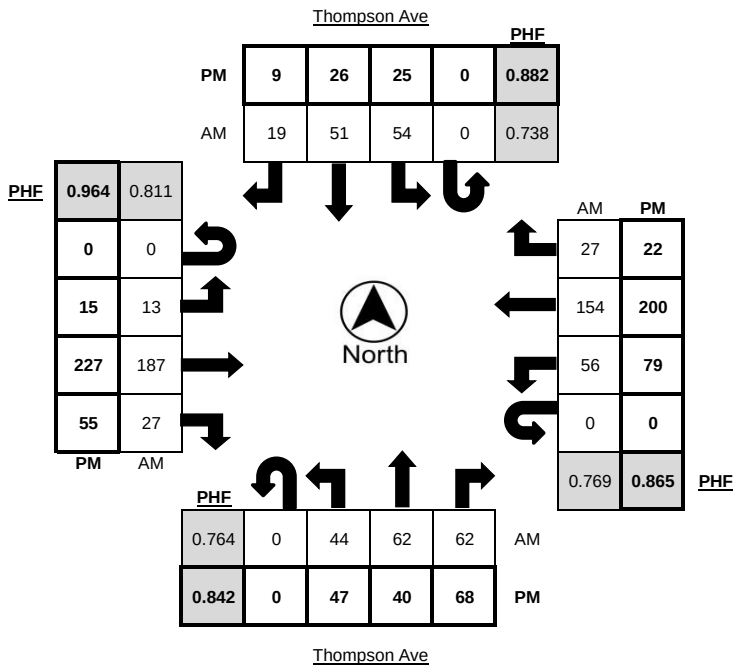
LOCATION Thompson Ave @ Nebraska Ave
LATITUDE 36.5616
COUNTY Fresno
LONGITUDE -119.6199
COLLECTION DATE Thursday, January 26, 2023
WEATHER Clear

	Northbound					Southbound					Eastbound					Westbound				
Time	**U-Turn**	**Left**	**Thru**	**Right**	**Trucks**	**U-Turn**	**Left**	**Thru**	**Right**	**Trucks**	**U-Turn**	**Left**	**Thru**	**Right**	**Trucks**	**U-Turn**	**Left**	**Thru**	**Right**	**Trucks**
7:00 AM - 7:15 AM	0	3	2	11	0	0	6	0	0	0	0	0	10	0	2	0	4	14	3	2
7:15 AM - 7:30 AM	0	1	3	8	0	0	5	2	2	0	0	1	19	1	2	0	4	26	0	7
7:30 AM - 7:45 AM	0	11	20	16	2	0	12	8	5	1	0	0	38	3	4	0	5	41	5	2
7:45 AM - 8:00 AM	0	16	19	20	1	0	24	12	6	0	0	3	63	4	2	0	13	26	8	1
8:00 AM - 8:15 AM	0	10	15	17	1	0	12	19	8	0	0	6	50	14	8	0	18	50	9	1
8:15 AM - 8:30 AM	0	7	8	9	0	0	6	12	0	0	0	4	36	6	0	0	20	37	5	1
8:30 AM - 8:45 AM	0	6	1	12	0	0	4	7	2	0	0	2	36	1	4	0	12	30	2	4
8:45 AM - 9:00 AM	0	2	2	3	0	0	1	1	1	0	0	0	26	1	2	0	1	33	3	2
TOTAL	**0**	**56**	**70**	**96**	**4**	**0**	**70**	**61**	**24**	**1**	**0**	**16**	**278**	**30**	**24**	**0**	**77**	**257**	**35**	**20**

	Northbound					Southbound					Eastbound					Westbound				
Time	**U-Turn**	**Left**	**Thru**	**Right**	**Trucks**	**U-Turn**	**Left**	**Thru**	**Right**	**Trucks**	**U-Turn**	**Left**	**Thru**	**Right**	**Trucks**	**U-Turn**	**Left**	**Thru**	**Right**	**Trucks**
4:00 PM - 4:15 PM	0	17	10	15	0	0	5	14	3	0	0	6	65	7	1	0	26	67	5	1
4:15 PM - 4:30 PM	0	8	5	15	0	0	2	18	2	0	0	3	47	16	2	0	18	54	2	0
4:30 PM - 4:45 PM	0	14	10	19	0	0	5	10	2	0	0	5	54	15	1	0	22	45	4	1
4:45 PM - 5:00 PM	0	6	8	11	0	0	7	4	4	0	0	2	58	14	0	0	21	36	4	0
5:00 PM - 5:15 PM	0	14	9	23	0	0	6	8	2	0	0	6	56	15	1	0	14	60	8	2
5:15 PM - 5:30 PM	0	13	13	15	0	0	7	4	1	0	0	2	59	11	2	0	22	59	6	0
5:30 PM - 5:45 PM	0	11	10	15	0	0	6	5	0	0	0	2	42	17	0	0	15	42	3	0
5:45 PM - 6:00 PM	0	10	3	20	0	0	5	10	3	0	0	4	49	14	0	0	20	35	4	1
TOTAL	**0**	**93**	**68**	**133**	**0**	**0**	**43**	**73**	**17**	**0**	**0**	**30**	**430**	**109**	**7**	**0**	**158**	**398**	**36**	**5**

	Northbound					Southbound					Eastbound					Westbound				
PEAK HOUR	**U-Turn**	**Left**	**Thru**	**Right**	**Trucks**	**U-Turn**	**Left**	**Thru**	**Right**	**Trucks**	**U-Turn**	**Left**	**Thru**	**Right**	**Trucks**	**U-Turn**	**Left**	**Thru**	**Right**	**Trucks**
7:30 AM - 8:30 AM	0	44	62	62	4	0	54	51	19	1	0	13	187	27	14	0	56	154	27	5
4:30 PM - 5:30 PM	0	47	40	68	0	0	25	26	9	0	0	15	227	55	4	0	79	200	22	3

	PHF	Trucks
AM	0.829	3.2%
PM	0.920	0.9%



Metro Traffic Data Inc.
310 N. Irwin Street - Suite 20
Hanford, CA 93230

800-975-6938 Phone/Fax
www.metrotrafficdata.com

Turning Movement Report

Prepared For:

JLB Traffic Engineering, Inc.
516 W. Shaw Ave, Suite 103
Fresno, CA 93704

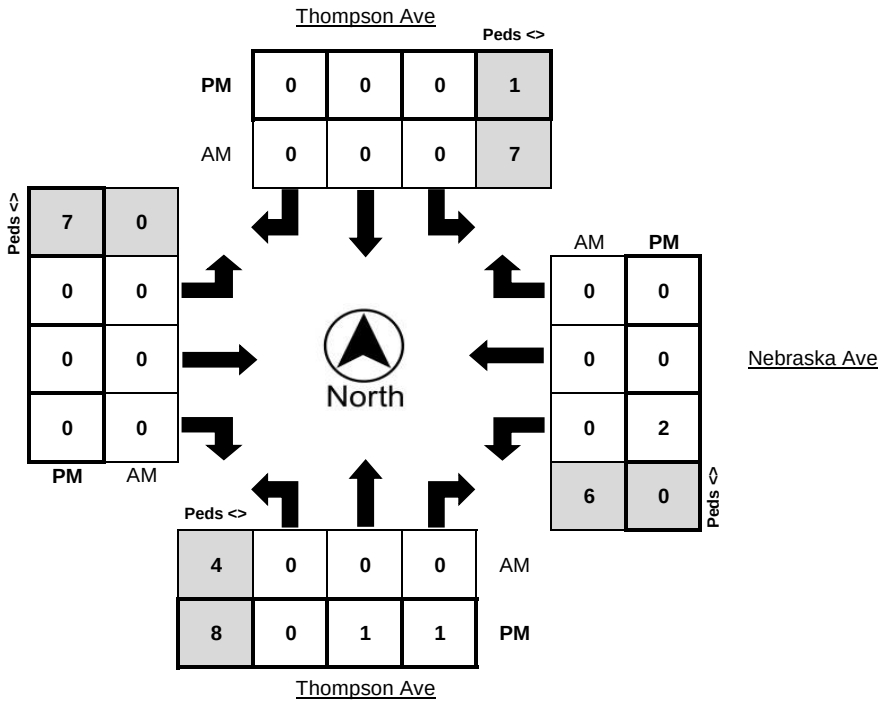
LOCATION Thompson Ave @ Nebraska Ave
LATITUDE 36.5616
COUNTY Fresno
LONGITUDE -119.6199
COLLECTION DATE Thursday, January 26, 2023
WEATHER Clear

	Northbound Bikes			N.Leg	Southbound Bikes			S.Leg	Eastbound Bikes			E.Leg	Westbound Bikes			W.Leg
Time	**Left**	**Thru**	**Right**	**Peds**	**Left**	**Thru**	**Right**	**Peds**	**Left**	**Thru**	**Right**	**Peds**	**Left**	**Thru**	**Right**	**Peds**
7:00 AM - 7:15 AM	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	1
7:15 AM - 7:30 AM	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	9
7:30 AM - 7:45 AM	0	0	0	0	0	0	0	3	0	0	0	2	0	0	0	0
7:45 AM - 8:00 AM	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0
8:00 AM - 8:15 AM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM - 8:30 AM	0	0	0	5	0	0	0	0	0	0	0	4	0	0	0	0
8:30 AM - 8:45 AM	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0
8:45 AM - 9:00 AM	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0
TOTAL	**0**	**0**	**0**	**8**	**0**	**0**	**0**	**11**	**0**	**0**	**0**	**7**	**0**	**0**	**0**	**10**

	Northbound Bikes			N.Leg	Southbound Bikes			S.Leg	Eastbound Bikes			E.Leg	Westbound Bikes			W.Leg
Time	**Left**	**Thru**	**Right**	**Peds**	**Left**	**Thru**	**Right**	**Peds**	**Left**	**Thru**	**Right**	**Peds**	**Left**	**Thru**	**Right**	**Peds**
4:00 PM - 4:15 PM	0	0	1	1	0	0	0	9	0	0	0	2	0	0	0	4
4:15 PM - 4:30 PM	0	0	1	0	0	0	0	4	0	0	0	1	0	1	0	0
4:30 PM - 4:45 PM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	1
4:45 PM - 5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	2
5:00 PM - 5:15 PM	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	1
5:15 PM - 5:30 PM	0	0	1	0	0	0	0	5	0	0	0	0	1	0	0	3
5:30 PM - 5:45 PM	0	0	0	0	0	0	1	1	0	0	0	0	1	1	0	0
5:45 PM - 6:00 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	**0**	**1**	**4**	**2**	**0**	**0**	**1**	**22**	**0**	**0**	**0**	**3**	**3**	**2**	**0**	**11**

	Northbound Bikes			N.Leg	Southbound Bikes			S.Leg	Eastbound Bikes			E.Leg	Westbound Bikes			W.Leg
PEAK HOUR	**Left**	**Thru**	**Right**	**Peds**	**Left**	**Thru**	**Right**	**Peds**	**Left**	**Thru**	**Right**	**Peds**	**Left**	**Thru**	**Right**	**Peds**
7:30 AM - 8:30 AM	0	0	0	7	0	0	0	4	0	0	0	6	0	0	0	0
4:30 PM - 5:30 PM	0	1	1	1	0	0	0	8	0	0	0	0	2	0	0	7

	Bikes	Peds
AM Peak Total	0	17
PM Peak Total	**4**	**16**



Metro Traffic Data Inc.
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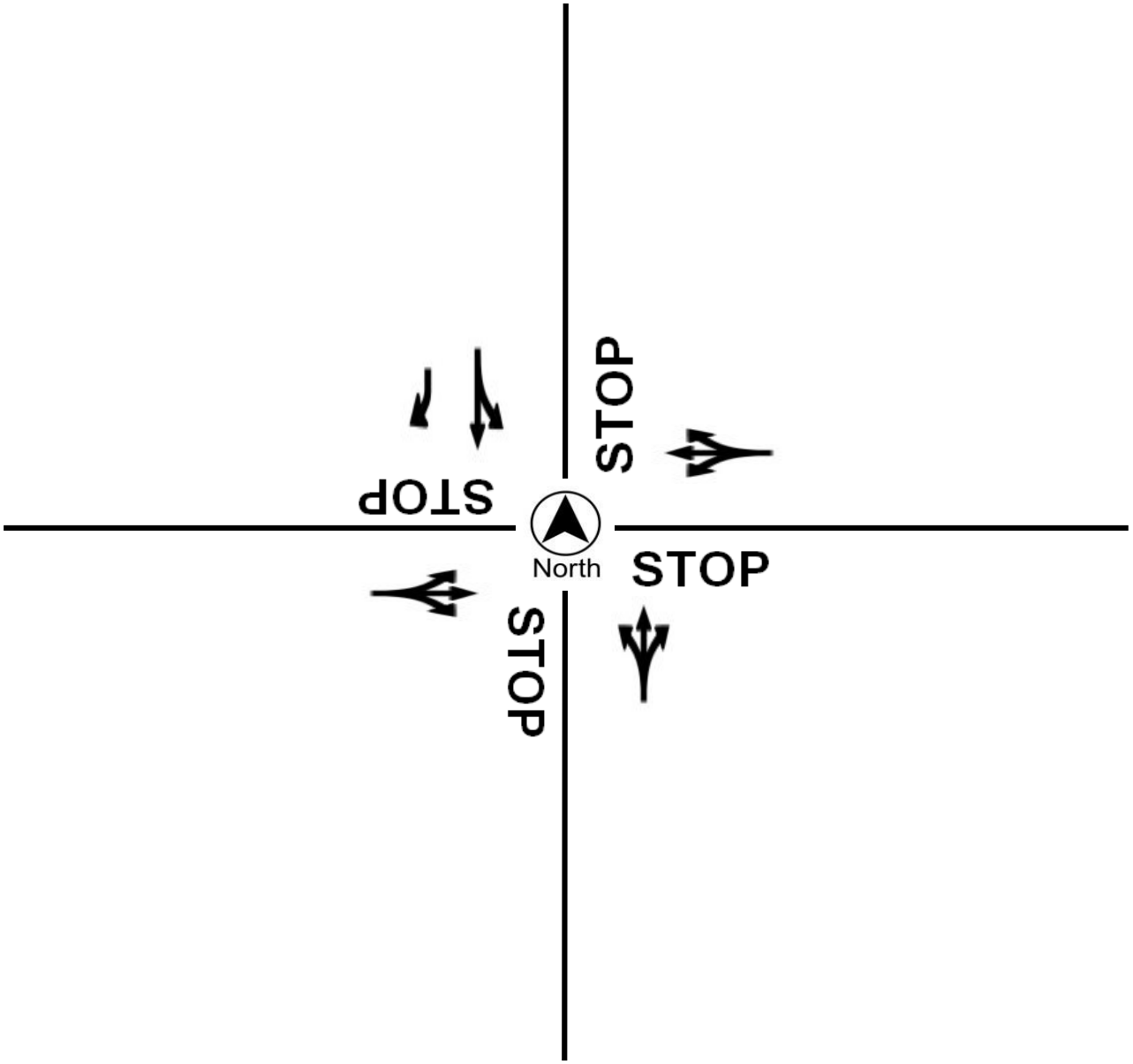
Turning Movement Report

Prepared For:

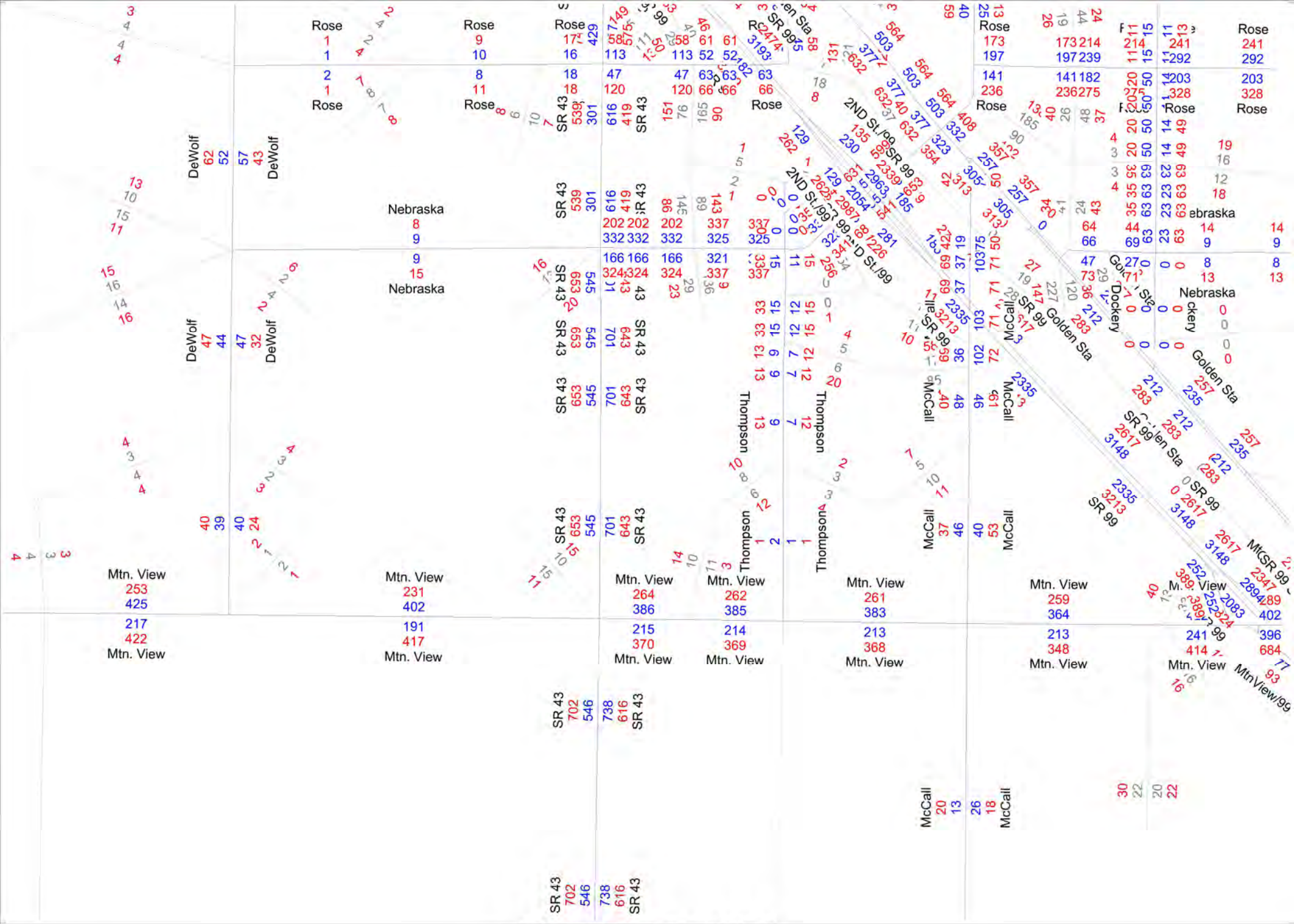
Peters Engineering Group
862 Pollasky Avenue
Clovis, CA 93612

LOCATION	Thompson Ave @ Nebraska Ave	**N/S STREET**	Thompson Ave
COUNTY	Fresno	**E/W STREET**	Nebraska Ave
COLLECTION DATE	Thursday, January 26, 2023	**WEATHER**	Clear
CYCLE TIME	N/A	**CONTROL TYPE**	All-Way Stop

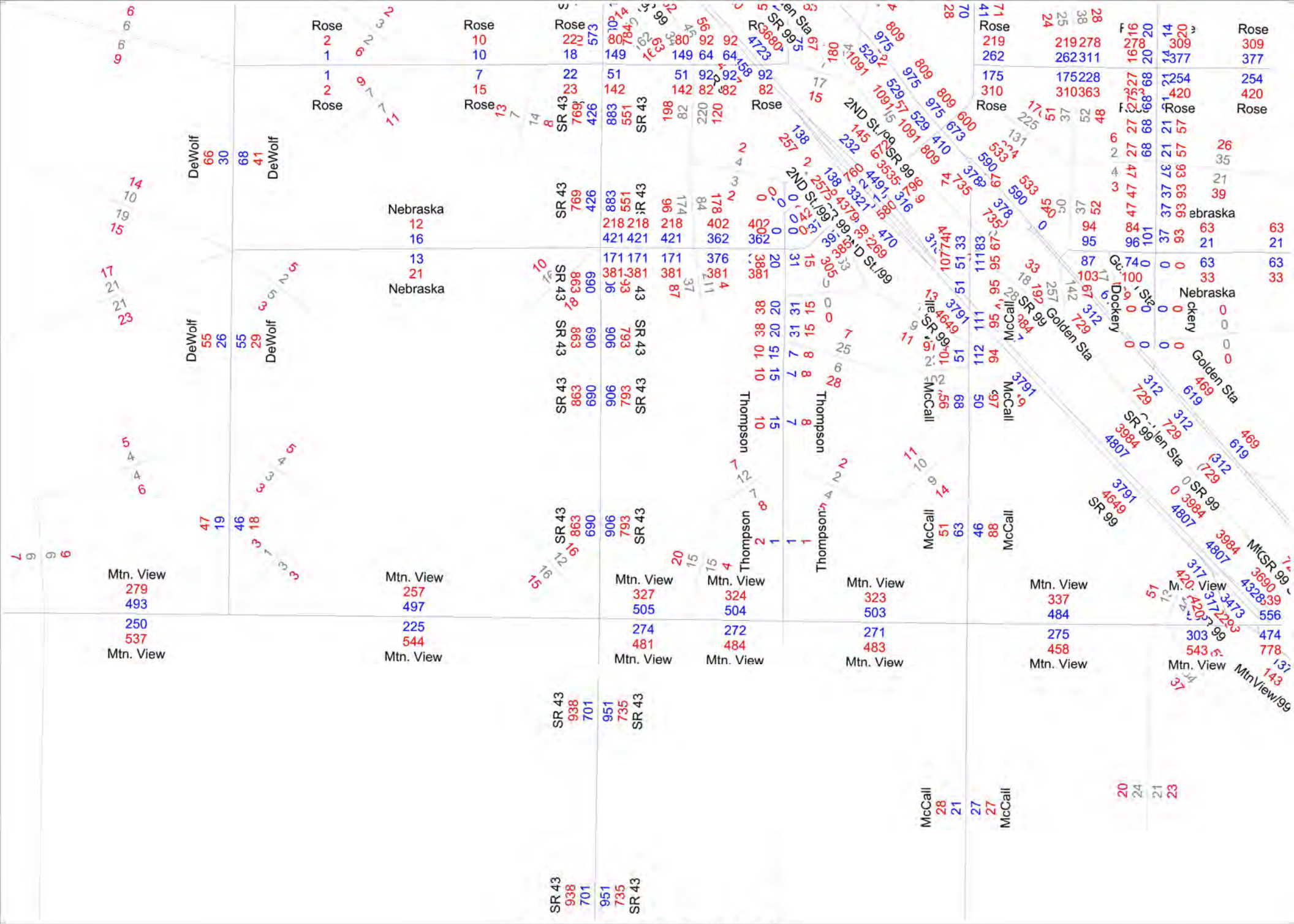
COMMENTS



APPENDIX C
FRESNO COUNTY TRAVEL MODEL OUTPUT

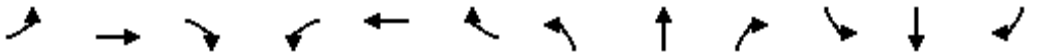


2019 Fresno County Travel Model
AM and PM Peak Hour Traffic Volumes



2035 Fresno County Travel Model
AM and PM Peak Hour Traffic Volumes

APPENDIX D
INTERSECTION ANALYSIS SHEETS



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	75	82	17	45	78	71	22	425	39	22	295	73
Future Volume (veh/h)	75	82	17	45	78	71	22	425	39	22	295	73
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.97	0.99		0.97	1.00		0.96	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1781	1781	1781	1781	1781	1781	1781	1781	1781	1781	1781	1781
Adj Flow Rate, veh/h	76	83	15	45	79	52	22	429	36	22	298	57
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	8	8	8	8	8	8	8	8	8	8	8	8
Cap, veh/h	301	228	327	206	186	102	47	917	77	47	821	154
Arrive On Green	0.22	0.22	0.22	0.22	0.22	0.22	0.03	0.29	0.29	0.03	0.29	0.29
Sat Flow, veh/h	557	1020	1464	253	834	456	1697	3150	263	1697	2820	530
Grp Volume(v), veh/h	159	0	15	176	0	0	22	230	235	22	177	178
Grp Sat Flow(s),veh/h/ln	1578	0	1464	1542	0	0	1697	1692	1720	1697	1692	1658
Q Serve(g_s), s	0.0	0.0	0.2	0.6	0.0	0.0	0.4	3.4	3.4	0.4	2.5	2.6
Cycle Q Clear(g_c), s	2.3	0.0	0.2	2.9	0.0	0.0	0.4	3.4	3.4	0.4	2.5	2.6
Prop In Lane	0.48		1.00	0.26		0.30	1.00		0.15	1.00		0.32
Lane Grp Cap(c), veh/h	529	0	327	494	0	0	47	493	501	47	493	483
V/C Ratio(X)	0.30	0.00	0.05	0.36	0.00	0.00	0.46	0.47	0.47	0.46	0.36	0.37
Avail Cap(c_a), veh/h	2646	0	2483	2716	0	0	732	2757	2802	732	2757	2701
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	10.0	0.0	9.2	10.2	0.0	0.0	14.4	8.8	8.8	14.4	8.5	8.5
Incr Delay (d2), s/veh	0.3	0.0	0.1	0.4	0.0	0.0	6.9	0.7	0.7	6.9	0.4	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	0.0	0.1	0.7	0.0	0.0	0.2	0.7	0.7	0.2	0.5	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	10.3	0.0	9.2	10.6	0.0	0.0	21.4	9.4	9.5	21.4	8.9	9.0
LnGrp LOS	B	A	A	B	A	A	C	A	A	C	A	A
Approach Vol, veh/h		174			176			487			377	
Approach Delay, s/veh		10.2			10.6			10.0			9.7	
Approach LOS		B			B			A			A	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	4.8	13.7		11.6	4.8	13.7		11.6				
Change Period (Y+Rc), s	4.0	4.9		4.9	4.0	4.9		4.9				
Max Green Setting (Gmax), s	13.0	49.1		51.1	13.0	49.1		51.1				
Max Q Clear Time (g_c+I1), s	2.4	5.4		4.3	2.4	4.6		4.9				
Green Ext Time (p_c), s	0.0	2.6		1.0	0.0	1.9		1.1				

Intersection Summary			
HCM 6th Ctrl Delay		10.0	
HCM 6th LOS		B	

Lane Group	EBT	EBR	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	159	17	196	22	468	22	372
v/c Ratio	0.36	0.03	0.41	0.07	0.40	0.07	0.32
Control Delay	13.8	1.1	12.6	17.8	11.2	17.8	10.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	13.8	1.1	12.6	17.8	11.2	17.8	10.2
Queue Length 50th (ft)	20	0	21	3	28	3	21
Queue Length 95th (ft)	85	3	93	24	102	24	77
Internal Link Dist (ft)	1279		1248		1576		1284
Turn Bay Length (ft)		200		190		125	
Base Capacity (vph)	1375	1411	1434	649	3188	649	3112
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.12	0.01	0.14	0.03	0.15	0.03	0.12

Intersection Summary

Intersection	
Intersection Delay, s/veh	9.3
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	24	111	6	16	123	93	20	39	30	76	31	34
Future Vol, veh/h	24	111	6	16	123	93	20	39	30	76	31	34
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	28	128	7	18	141	107	23	45	34	87	36	39
Number of Lanes	0	1	0	0	1	1	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	2	1
HCM Control Delay	9.6	9.2	8.9	9.6
HCM LOS	A	A	A	A

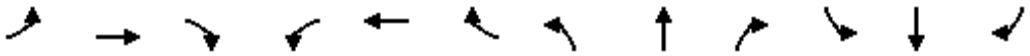
Lane	NBLn1	EBLn1	WBLn1	WBLn2	SBLn1
Vol Left, %	22%	17%	12%	0%	54%
Vol Thru, %	44%	79%	88%	0%	22%
Vol Right, %	34%	4%	0%	100%	24%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	89	141	139	93	141
LT Vol	20	24	16	0	76
Through Vol	39	111	123	0	31
RT Vol	30	6	0	93	34
Lane Flow Rate	102	162	160	107	162
Geometry Grp	2	5	7	7	2
Degree of Util (X)	0.143	0.226	0.24	0.138	0.227
Departure Headway (Hd)	5.02	5.029	5.416	4.652	5.05
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	708	708	658	764	707
Service Time	3.095	3.102	3.183	2.419	3.118
HCM Lane V/C Ratio	0.144	0.229	0.243	0.14	0.229
HCM Control Delay	8.9	9.6	9.9	8.2	9.6
HCM Lane LOS	A	A	A	A	A
HCM 95th-tile Q	0.5	0.9	0.9	0.5	0.9

Intersection	
Intersection Delay, s/veh	12
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	13	187	27	56	154	27	44	62	62	54	51	19
Future Vol, veh/h	13	187	27	56	154	27	44	62	62	54	51	19
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	16	225	33	67	186	33	53	75	75	65	61	23
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	2	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	2	1	1
HCM Control Delay	12.3	12.6	11.5	11.1
HCM LOS	B	B	B	B

Lane	NBLn1	EBLn1	WBLn1	SBLn1	SBLn2
Vol Left, %	26%	6%	24%	51%	0%
Vol Thru, %	37%	82%	65%	49%	0%
Vol Right, %	37%	12%	11%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	168	227	237	105	19
LT Vol	44	13	56	54	0
Through Vol	62	187	154	51	0
RT Vol	62	27	27	0	19
Lane Flow Rate	202	273	286	127	23
Geometry Grp	5	2	2	7	7
Degree of Util (X)	0.322	0.412	0.432	0.235	0.036
Departure Headway (Hd)	5.725	5.424	5.441	6.675	5.701
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	625	662	660	536	625
Service Time	3.782	3.477	3.493	4.437	3.462
HCM Lane V/C Ratio	0.323	0.412	0.433	0.237	0.037
HCM Control Delay	11.5	12.3	12.6	11.5	8.7
HCM Lane LOS	B	B	B	B	A
HCM 95th-tile Q	1.4	2	2.2	0.9	0.1



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	72	118	21	36	104	77	25	511	66	89	475	112
Future Volume (veh/h)	72	118	21	36	104	77	25	511	66	89	475	112
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.97	0.99		0.97	1.00		0.96	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1781	1781	1781	1781	1781	1781	1781	1781	1781	1781	1781	1781
Adj Flow Rate, veh/h	74	122	20	37	107	58	26	527	65	92	490	97
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	8	8	8	8	8	8	8	8	8	8	8	8
Cap, veh/h	237	270	336	153	216	102	54	943	116	141	1018	200
Arrive On Green	0.23	0.23	0.23	0.23	0.23	0.23	0.03	0.31	0.31	0.08	0.36	0.36
Sat Flow, veh/h	444	1176	1465	164	941	445	1697	3018	371	1697	2798	550
Grp Volume(v), veh/h	196	0	20	202	0	0	26	295	297	92	295	292
Grp Sat Flow(s),veh/h/ln	1620	0	1465	1550	0	0	1697	1692	1696	1697	1692	1656
Q Serve(g_s), s	0.0	0.0	0.4	0.7	0.0	0.0	0.6	5.3	5.4	1.9	4.9	5.0
Cycle Q Clear(g_c), s	3.5	0.0	0.4	4.2	0.0	0.0	0.6	5.3	5.4	1.9	4.9	5.0
Prop In Lane	0.38		1.00	0.18		0.29	1.00		0.22	1.00		0.33
Lane Grp Cap(c), veh/h	507	0	336	471	0	0	54	529	530	141	615	602
V/C Ratio(X)	0.39	0.00	0.06	0.43	0.00	0.00	0.48	0.56	0.56	0.65	0.48	0.48
Avail Cap(c_a), veh/h	1939	0	1756	1965	0	0	461	2213	2217	969	2719	2661
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	12.3	0.0	11.1	12.5	0.0	0.0	17.5	10.5	10.5	16.4	9.0	9.0
Incr Delay (d2), s/veh	0.5	0.0	0.1	0.6	0.0	0.0	6.6	0.9	0.9	5.1	0.6	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	0.0	0.1	1.2	0.0	0.0	0.3	1.3	1.3	0.7	1.1	1.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	12.8	0.0	11.1	13.1	0.0	0.0	24.1	11.4	11.5	21.4	9.6	9.6
LnGrp LOS	B	A	B	B	A	A	C	B	B	C	A	A
Approach Vol, veh/h		216			202			618			679	
Approach Delay, s/veh		12.6			13.1			12.0			11.2	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.0	16.4		13.3	5.2	18.3		13.3				
Change Period (Y+Rc), s	4.0	4.9		4.9	4.0	4.9		4.9				
Max Green Setting (Gmax), s	21.0	48.1		44.1	10.0	59.1		44.1				
Max Q Clear Time (g_c+I1), s	3.9	7.4		5.5	2.6	7.0		6.2				
Green Ext Time (p_c), s	0.2	3.4		1.3	0.0	3.4		1.3				

Intersection Summary												
HCM 6th Ctrl Delay			11.9									
HCM 6th LOS			B									

Lane Group	EBT	EBR	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	196	22	223	26	595	92	605
v/c Ratio	0.50	0.05	0.51	0.12	0.56	0.31	0.42
Control Delay	23.6	0.2	21.2	27.8	18.4	26.3	12.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	23.6	0.2	21.2	27.8	18.4	26.3	12.1
Queue Length 50th (ft)	53	0	54	8	80	26	46
Queue Length 95th (ft)	132	0	136	33	163	78	144
Internal Link Dist (ft)	1279		1248		1576		1284
Turn Bay Length (ft)		200		190		125	
Base Capacity (vph)	1156	1192	1243	348	2824	730	3056
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.17	0.02	0.18	0.07	0.21	0.13	0.20

Intersection Summary

Intersection	
Intersection Delay, s/veh	10.5
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	27	214	26	29	180	45	11	21	32	58	25	20
Future Vol, veh/h	27	214	26	29	180	45	11	21	32	58	25	20
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	30	240	29	33	202	51	12	24	36	65	28	22
Number of Lanes	0	1	0	0	1	1	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	2	1
HCM Control Delay	11.2	10.4	9	9.7
HCM LOS	B	B	A	A

Lane	NBLn1	EBLn1	WBLn1	WBLn2	SBLn1
Vol Left, %	17%	10%	14%	0%	56%
Vol Thru, %	33%	80%	86%	0%	24%
Vol Right, %	50%	10%	0%	100%	19%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	64	267	209	45	103
LT Vol	11	27	29	0	58
Through Vol	21	214	180	0	25
RT Vol	32	26	0	45	20
Lane Flow Rate	72	300	235	51	116
Geometry Grp	2	5	7	7	2
Degree of Util (X)	0.105	0.403	0.35	0.065	0.174
Departure Headway (Hd)	5.237	4.842	5.369	4.594	5.418
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	676	738	665	772	655
Service Time	3.336	2.912	3.142	2.366	3.509
HCM Lane V/C Ratio	0.107	0.407	0.353	0.066	0.177
HCM Control Delay	9	11.2	11	7.7	9.7
HCM Lane LOS	A	B	B	A	A
HCM 95th-tile Q	0.4	2	1.6	0.2	0.6

Intersection	
Intersection Delay, s/veh	11.8
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	15	227	55	79	200	22	47	40	68	25	26	9
Future Vol, veh/h	15	227	55	79	200	22	47	40	68	25	26	9
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	16	247	60	86	217	24	51	43	74	27	28	10
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	2	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	2	1	1
HCM Control Delay	12.1	12.5	10.7	10
HCM LOS	B	B	B	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1	SBLn2
Vol Left, %	30%	5%	26%	49%	0%
Vol Thru, %	26%	76%	66%	51%	0%
Vol Right, %	44%	19%	7%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	155	297	301	51	9
LT Vol	47	15	79	25	0
Through Vol	40	227	200	26	0
RT Vol	68	55	22	0	9
Lane Flow Rate	168	323	327	55	10
Geometry Grp	5	2	2	7	7
Degree of Util (X)	0.264	0.45	0.465	0.104	0.016
Departure Headway (Hd)	5.637	5.018	5.115	6.745	5.782
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	637	717	703	531	618
Service Time	3.676	3.051	3.147	4.489	3.526
HCM Lane V/C Ratio	0.264	0.45	0.465	0.104	0.016
HCM Control Delay	10.7	12.1	12.5	10.3	8.6
HCM Lane LOS	B	B	B	B	A
HCM 95th-tile Q	1.1	2.3	2.5	0.3	0

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	75	82	17	45	78	75	22	425	39	25	295	73
Future Volume (veh/h)	75	82	17	45	78	75	22	425	39	25	295	73
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.97	0.99		0.97	1.00		0.96	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1781	1781	1781	1781	1781	1781	1781	1781	1781	1781	1781	1781
Adj Flow Rate, veh/h	76	83	15	45	79	56	22	429	36	25	298	57
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	8	8	8	8	8	8	8	8	8	8	8	8
Cap, veh/h	300	230	329	204	184	108	47	913	76	53	827	156
Arrive On Green	0.22	0.22	0.22	0.22	0.22	0.22	0.03	0.29	0.29	0.03	0.29	0.29
Sat Flow, veh/h	555	1022	1465	248	819	482	1697	3150	263	1697	2820	530
Grp Volume(v), veh/h	159	0	15	180	0	0	22	230	235	25	177	178
Grp Sat Flow(s),veh/h/ln	1577	0	1465	1550	0	0	1697	1692	1720	1697	1692	1658
Q Serve(g_s), s	0.0	0.0	0.2	0.6	0.0	0.0	0.4	3.4	3.4	0.4	2.5	2.6
Cycle Q Clear(g_c), s	2.3	0.0	0.2	3.0	0.0	0.0	0.4	3.4	3.4	0.4	2.5	2.6
Prop In Lane	0.48		1.00	0.25		0.31	1.00		0.15	1.00		0.32
Lane Grp Cap(c), veh/h	529	0	329	496	0	0	47	491	499	53	496	486
V/C Ratio(X)	0.30	0.00	0.05	0.36	0.00	0.00	0.47	0.47	0.47	0.47	0.36	0.37
Avail Cap(c_a), veh/h	2621	0	2463	2693	0	0	726	2734	2779	726	2734	2679
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	10.0	0.0	9.2	10.3	0.0	0.0	14.5	8.9	8.9	14.5	8.5	8.5
Incr Delay (d2), s/veh	0.3	0.0	0.1	0.4	0.0	0.0	6.9	0.7	0.7	6.3	0.4	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	0.0	0.1	0.8	0.0	0.0	0.2	0.7	0.7	0.2	0.5	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	10.3	0.0	9.3	10.7	0.0	0.0	21.5	9.6	9.6	20.8	8.9	9.0
LnGrp LOS	B	A	A	B	A	A	C	A	A	C	A	A
Approach Vol, veh/h		174			180			487			380	
Approach Delay, s/veh		10.3			10.7			10.1			9.7	
Approach LOS		B			B			B			A	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	5.0	13.7		11.7	4.8	13.8		11.7				
Change Period (Y+Rc), s	4.0	4.9		4.9	4.0	4.9		4.9				
Max Green Setting (Gmax), s	13.0	49.1		51.1	13.0	49.1		51.1				
Max Q Clear Time (g_c+I1), s	2.4	5.4		4.3	2.4	4.6		5.0				
Green Ext Time (p_c), s	0.0	2.6		1.0	0.0	1.9		1.2				

Intersection Summary			
HCM 6th Ctrl Delay		10.1	
HCM 6th LOS		B	

Lane Group	EBT	EBR	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	159	17	200	22	468	25	372
v/c Ratio	0.36	0.03	0.41	0.07	0.40	0.08	0.33
Control Delay	13.8	1.1	12.6	17.9	11.3	17.8	10.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	13.8	1.1	12.6	17.9	11.3	17.8	10.2
Queue Length 50th (ft)	20	0	21	3	28	4	21
Queue Length 95th (ft)	86	3	95	24	102	26	77
Internal Link Dist (ft)	1279		1248		1576		1284
Turn Bay Length (ft)		200		190		125	
Base Capacity (vph)	1374	1411	1436	648	3186	648	3110
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.12	0.01	0.14	0.03	0.15	0.04	0.12

Intersection Summary

Intersection	
Intersection Delay, s/veh	9.4
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	24	114	6	16	127	93	20	39	30	76	31	34
Future Vol, veh/h	24	114	6	16	127	93	20	39	30	76	31	34
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	28	131	7	18	146	107	23	45	34	87	36	39
Number of Lanes	0	1	0	0	1	1	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	2	1
HCM Control Delay	9.6	9.3	9	9.7
HCM LOS	A	A	A	A

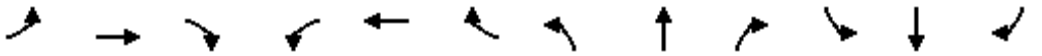
Lane	NBLn1	EBLn1	WBLn1	WBLn2	SBLn1
Vol Left, %	22%	17%	11%	0%	54%
Vol Thru, %	44%	79%	89%	0%	22%
Vol Right, %	34%	4%	0%	100%	24%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	89	144	143	93	141
LT Vol	20	24	16	0	76
Through Vol	39	114	127	0	31
RT Vol	30	6	0	93	34
Lane Flow Rate	102	166	164	107	162
Geometry Grp	2	5	7	7	2
Degree of Util (X)	0.143	0.231	0.247	0.138	0.228
Departure Headway (Hd)	5.039	5.034	5.418	4.656	5.069
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	705	707	659	763	703
Service Time	3.117	3.11	3.188	2.425	3.139
HCM Lane V/C Ratio	0.145	0.235	0.249	0.14	0.23
HCM Control Delay	9	9.6	10	8.2	9.7
HCM Lane LOS	A	A	A	A	A
HCM 95th-tile Q	0.5	0.9	1	0.5	0.9

Intersection	
Intersection Delay, s/veh	12.3
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	13	196	28	56	163	27	44	62	62	54	51	19
Future Vol, veh/h	13	196	28	56	163	27	44	62	62	54	51	19
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	16	236	34	67	196	33	53	75	75	65	61	23
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	2	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	2	1	1
HCM Control Delay	12.7	13	11.7	11.2
HCM LOS	B	B	B	B

Lane	NBLn1	EBLn1	WBLn1	SBLn1	SBLn2
Vol Left, %	26%	5%	23%	51%	0%
Vol Thru, %	37%	83%	66%	49%	0%
Vol Right, %	37%	12%	11%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	168	237	246	105	19
LT Vol	44	13	56	54	0
Through Vol	62	196	163	51	0
RT Vol	62	28	27	0	19
Lane Flow Rate	202	286	296	127	23
Geometry Grp	5	2	2	7	7
Degree of Util (X)	0.326	0.433	0.451	0.237	0.037
Departure Headway (Hd)	5.799	5.457	5.477	6.753	5.778
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	617	657	655	530	616
Service Time	3.862	3.513	3.532	4.519	3.543
HCM Lane V/C Ratio	0.327	0.435	0.452	0.24	0.037
HCM Control Delay	11.7	12.7	13	11.6	8.8
HCM Lane LOS	B	B	B	B	A
HCM 95th-tile Q	1.4	2.2	2.3	0.9	0.1



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	72	118	21	36	104	81	25	511	66	93	475	112
Future Volume (veh/h)	72	118	21	36	104	81	25	511	66	93	475	112
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.97	0.99		0.97	1.00		0.96	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1781	1781	1781	1781	1781	1781	1781	1781	1781	1781	1781	1781
Adj Flow Rate, veh/h	74	122	20	37	107	63	26	527	65	96	490	97
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	8	8	8	8	8	8	8	8	8	8	8	8
Cap, veh/h	236	272	339	152	213	110	54	940	115	144	1020	201
Arrive On Green	0.23	0.23	0.23	0.23	0.23	0.23	0.03	0.31	0.31	0.08	0.36	0.36
Sat Flow, veh/h	443	1177	1465	161	922	474	1697	3017	371	1697	2799	550
Grp Volume(v), veh/h	196	0	20	207	0	0	26	295	297	96	295	292
Grp Sat Flow(s),veh/h/ln	1619	0	1465	1557	0	0	1697	1692	1696	1697	1692	1656
Q Serve(g_s), s	0.0	0.0	0.4	0.8	0.0	0.0	0.6	5.4	5.4	2.0	5.0	5.0
Cycle Q Clear(g_c), s	3.6	0.0	0.4	4.3	0.0	0.0	0.6	5.4	5.4	2.0	5.0	5.0
Prop In Lane	0.38		1.00	0.18		0.30	1.00		0.22	1.00		0.33
Lane Grp Cap(c), veh/h	508	0	339	475	0	0	54	527	528	144	617	604
V/C Ratio(X)	0.39	0.00	0.06	0.44	0.00	0.00	0.48	0.56	0.56	0.67	0.48	0.48
Avail Cap(c_a), veh/h	1922	0	1744	1950	0	0	458	2197	2201	962	2699	2642
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	12.3	0.0	11.1	12.5	0.0	0.0	17.6	10.6	10.6	16.5	9.1	9.1
Incr Delay (d2), s/veh	0.5	0.0	0.1	0.6	0.0	0.0	6.6	0.9	0.9	5.3	0.6	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	0.0	0.1	1.2	0.0	0.0	0.3	1.3	1.3	0.8	1.1	1.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	12.8	0.0	11.2	13.2	0.0	0.0	24.2	11.6	11.6	21.7	9.6	9.7
LnGrp LOS	B	A	B	B	A	A	C	B	B	C	A	A
Approach Vol, veh/h		216			207			618			683	
Approach Delay, s/veh		12.6			13.2			12.1			11.4	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.1	16.4		13.5	5.2	18.4		13.5				
Change Period (Y+Rc), s	4.0	4.9		4.9	4.0	4.9		4.9				
Max Green Setting (Gmax), s	21.0	48.1		44.1	10.0	59.1		44.1				
Max Q Clear Time (g_c+I1), s	4.0	7.4		5.6	2.6	7.0		6.3				
Green Ext Time (p_c), s	0.2	3.4		1.3	0.0	3.4		1.3				

Intersection Summary												
HCM 6th Ctrl Delay			12.0									
HCM 6th LOS			B									

Lane Group	EBT	EBR	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	196	22	228	26	595	96	605
v/c Ratio	0.50	0.05	0.52	0.12	0.56	0.32	0.42
Control Delay	23.8	0.2	21.5	28.0	18.5	26.5	12.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	23.8	0.2	21.5	28.0	18.5	26.5	12.0
Queue Length 50th (ft)	53	0	55	8	80	28	46
Queue Length 95th (ft)	134	0	140	34	164	81	145
Internal Link Dist (ft)	1279		1248		1576		1284
Turn Bay Length (ft)		200		190		125	
Base Capacity (vph)	1144	1187	1236	346	2815	727	3047
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.17	0.02	0.18	0.08	0.21	0.13	0.20

Intersection Summary

Intersection	
Intersection Delay, s/veh	10.6
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	27	218	26	29	184	45	11	21	32	58	25	20
Future Vol, veh/h	27	218	26	29	184	45	11	21	32	58	25	20
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	30	245	29	33	207	51	12	24	36	65	28	22
Number of Lanes	0	1	0	0	1	1	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	2	1
HCM Control Delay	11.3	10.5	9	9.7
HCM LOS	B	B	A	A

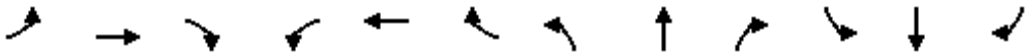
Lane	NBLn1	EBLn1	WBLn1	WBLn2	SBLn1
Vol Left, %	17%	10%	14%	0%	56%
Vol Thru, %	33%	80%	86%	0%	24%
Vol Right, %	50%	10%	0%	100%	19%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	64	271	213	45	103
LT Vol	11	27	29	0	58
Through Vol	21	218	184	0	25
RT Vol	32	26	0	45	20
Lane Flow Rate	72	304	239	51	116
Geometry Grp	2	5	7	7	2
Degree of Util (X)	0.105	0.41	0.357	0.065	0.175
Departure Headway (Hd)	5.263	4.851	5.375	4.601	5.442
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	672	737	665	771	653
Service Time	3.362	2.921	3.149	2.374	3.533
HCM Lane V/C Ratio	0.107	0.412	0.359	0.066	0.178
HCM Control Delay	9	11.3	11.1	7.7	9.7
HCM Lane LOS	A	B	B	A	A
HCM 95th-tile Q	0.4	2	1.6	0.2	0.6

Intersection	
Intersection Delay, s/veh	12.2
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	15	237	56	79	211	22	48	40	68	25	26	9
Future Vol, veh/h	15	237	56	79	211	22	48	40	68	25	26	9
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	16	258	61	86	229	24	52	43	74	27	28	10
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	2	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	2	1	1
HCM Control Delay	12.5	13	10.9	10.1
HCM LOS	B	B	B	B

Lane	NBLn1	EBLn1	WBLn1	SBLn1	SBLn2
Vol Left, %	31%	5%	25%	49%	0%
Vol Thru, %	26%	77%	68%	51%	0%
Vol Right, %	44%	18%	7%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	156	308	312	51	9
LT Vol	48	15	79	25	0
Through Vol	40	237	211	26	0
RT Vol	68	56	22	0	9
Lane Flow Rate	170	335	339	55	10
Geometry Grp	5	2	2	7	7
Degree of Util (X)	0.269	0.47	0.485	0.105	0.016
Departure Headway (Hd)	5.706	5.052	5.145	6.82	5.857
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	629	713	699	525	610
Service Time	3.75	3.087	3.18	4.57	3.606
HCM Lane V/C Ratio	0.27	0.47	0.485	0.105	0.016
HCM Control Delay	10.9	12.5	13	10.4	8.7
HCM Lane LOS	B	B	B	B	A
HCM 95th-tile Q	1.1	2.5	2.7	0.3	0



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	118	100	74	73	101	100	96	520	55	39	439	123
Future Volume (veh/h)	118	100	74	73	101	100	96	520	55	39	439	123
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.97	0.99		0.97	1.00		0.96	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1781	1781	1781	1781	1781	1781	1781	1781	1781	1781	1781	1781
Adj Flow Rate, veh/h	119	101	73	74	102	81	97	525	53	39	443	107
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	8	8	8	8	8	8	8	8	8	8	8	8
Cap, veh/h	326	234	422	187	195	123	139	1013	102	74	776	186
Arrive On Green	0.29	0.29	0.29	0.29	0.29	0.29	0.08	0.33	0.33	0.04	0.29	0.29
Sat Flow, veh/h	656	815	1470	250	680	428	1697	3091	311	1697	2683	641
Grp Volume(v), veh/h	220	0	73	257	0	0	97	287	291	39	278	272
Grp Sat Flow(s),veh/h/ln	1471	0	1470	1358	0	0	1697	1692	1710	1697	1692	1632
Q Serve(g_s), s	0.0	0.0	1.5	2.4	0.0	0.0	2.3	5.5	5.6	0.9	5.6	5.8
Cycle Q Clear(g_c), s	4.7	0.0	1.5	7.1	0.0	0.0	2.3	5.5	5.6	0.9	5.6	5.8
Prop In Lane	0.54		1.00	0.29		0.32	1.00		0.18	1.00		0.39
Lane Grp Cap(c), veh/h	560	0	422	505	0	0	139	554	560	74	490	472
V/C Ratio(X)	0.39	0.00	0.17	0.51	0.00	0.00	0.70	0.52	0.52	0.52	0.57	0.58
Avail Cap(c_a), veh/h	1892	0	1859	1923	0	0	546	2055	2077	546	2055	1982
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	11.8	0.0	10.8	12.6	0.0	0.0	18.1	11.0	11.0	18.9	12.2	12.3
Incr Delay (d2), s/veh	0.4	0.0	0.2	0.8	0.0	0.0	6.1	0.7	0.8	5.6	1.0	1.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	0.0	0.4	1.6	0.0	0.0	0.9	1.4	1.4	0.4	1.5	1.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	12.3	0.0	11.0	13.4	0.0	0.0	24.2	11.8	11.8	24.5	13.2	13.4
LnGrp LOS	B	A	B	B	A	A	C	B	B	C	B	B
Approach Vol, veh/h		293			257			675			589	
Approach Delay, s/veh		12.0			13.4			13.5			14.1	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	5.8	18.1		16.5	7.3	16.6		16.5				
Change Period (Y+Rc), s	4.0	4.9		4.9	4.0	4.9		4.9				
Max Green Setting (Gmax), s	13.0	49.1		51.1	13.0	49.1		51.1				
Max Q Clear Time (g_c+I1), s	2.9	7.6		6.7	4.3	7.8		9.1				
Green Ext Time (p_c), s	0.0	3.3		1.7	0.1	3.2		1.7				

Intersection Summary												
HCM 6th Ctrl Delay			13.4									
HCM 6th LOS			B									

Lane Group	EBT	EBR	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	220	75	277	97	581	39	567
v/c Ratio	0.59	0.15	0.59	0.34	0.46	0.17	0.57
Control Delay	25.9	5.6	22.5	29.2	16.5	29.9	19.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	25.9	5.6	22.5	29.2	16.5	29.9	19.9
Queue Length 50th (ft)	64	0	73	31	82	13	81
Queue Length 95th (ft)	156	27	173	88	163	46	166
Internal Link Dist (ft)	1279		1248		1576		1284
Turn Bay Length (ft)		200		190		125	
Base Capacity (vph)	1007	1248	1211	425	2753	425	2684
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.22	0.06	0.23	0.23	0.21	0.09	0.21

Intersection Summary

Intersection	
Intersection Delay, s/veh	10.5
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	24	150	10	34	169	93	24	39	44	76	31	34
Future Vol, veh/h	24	150	10	34	169	93	24	39	44	76	31	34
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	28	172	11	39	194	107	28	45	51	87	36	39
Number of Lanes	0	1	0	0	1	1	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	2	1
HCM Control Delay	10.7	10.7	9.7	10.4
HCM LOS	B	B	A	B

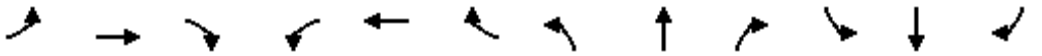
Lane	NBLn1	EBLn1	WBLn1	WBLn2	SBLn1
Vol Left, %	22%	13%	17%	0%	54%
Vol Thru, %	36%	82%	83%	0%	22%
Vol Right, %	41%	5%	0%	100%	24%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	107	184	203	93	141
LT Vol	24	24	34	0	76
Through Vol	39	150	169	0	31
RT Vol	44	10	0	93	34
Lane Flow Rate	123	211	233	107	162
Geometry Grp	2	5	7	7	2
Degree of Util (X)	0.185	0.312	0.369	0.145	0.248
Departure Headway (Hd)	5.425	5.312	5.686	4.894	5.511
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	662	677	635	733	652
Service Time	3.46	3.339	3.41	2.618	3.544
HCM Lane V/C Ratio	0.186	0.312	0.367	0.146	0.248
HCM Control Delay	9.7	10.7	11.7	8.5	10.4
HCM Lane LOS	A	B	B	A	B
HCM 95th-tile Q	0.7	1.3	1.7	0.5	1

Intersection	
Intersection Delay, s/veh	15.5
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	13	241	33	65	217	27	50	62	69	54	51	19
Future Vol, veh/h	13	241	33	65	217	27	50	62	69	54	51	19
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	16	290	40	78	261	33	60	75	83	65	61	23
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	2	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	2	1	1
HCM Control Delay	16.2	17.5	13.4	12.2
HCM LOS	C	C	B	B

Lane	NBLn1	EBLn1	WBLn1	SBLn1	SBLn2
Vol Left, %	28%	5%	21%	51%	0%
Vol Thru, %	34%	84%	70%	49%	0%
Vol Right, %	38%	11%	9%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	181	287	309	105	19
LT Vol	50	13	65	54	0
Through Vol	62	241	217	51	0
RT Vol	69	33	27	0	19
Lane Flow Rate	218	346	372	127	23
Geometry Grp	5	2	2	7	7
Degree of Util (X)	0.387	0.564	0.607	0.26	0.041
Departure Headway (Hd)	6.382	5.872	5.868	7.394	6.414
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	563	615	618	485	557
Service Time	4.435	3.887	3.883	5.15	4.169
HCM Lane V/C Ratio	0.387	0.563	0.602	0.262	0.041
HCM Control Delay	13.4	16.2	17.5	12.7	9.4
HCM Lane LOS	B	C	C	B	A
HCM 95th-tile Q	1.8	3.5	4.1	1	0.1



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	178	159	155	74	137	99	140	753	113	134	642	209
Future Volume (veh/h)	178	159	155	74	137	99	140	753	113	134	642	209
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.96	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1781	1781	1781	1781	1781	1781	1781	1781	1781	1781	1781	1781
Adj Flow Rate, veh/h	184	164	158	76	141	81	144	776	113	138	662	197
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	8	8	8	8	8	8	8	8	8	8	8	8
Cap, veh/h	225	164	700	40	64	24	172	901	131	166	768	228
Arrive On Green	0.47	0.47	0.47	0.47	0.47	0.47	0.10	0.31	0.31	0.10	0.30	0.30
Sat Flow, veh/h	371	345	1479	0	135	50	1697	2946	429	1697	2542	756
Grp Volume(v), veh/h	348	0	158	298	0	0	144	446	443	138	440	419
Grp Sat Flow(s),veh/h/ln	717	0	1479	186	0	0	1697	1692	1682	1697	1692	1606
Q Serve(g_s), s	0.0	0.0	7.1	0.0	0.0	0.0	9.3	27.8	27.8	9.0	27.5	27.6
Cycle Q Clear(g_c), s	53.1	0.0	7.1	53.1	0.0	0.0	9.3	27.8	27.8	9.0	27.5	27.6
Prop In Lane	0.53		1.00	0.26		0.27	1.00		0.25	1.00		0.47
Lane Grp Cap(c), veh/h	388	0	700	128	0	0	172	517	514	166	511	485
V/C Ratio(X)	0.90	0.00	0.23	2.32	0.00	0.00	0.84	0.86	0.86	0.83	0.86	0.86
Avail Cap(c_a), veh/h	388	0	700	128	0	0	242	666	662	242	666	632
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	29.8	0.0	17.4	33.7	0.0	0.0	49.5	36.7	36.7	49.7	36.9	36.9
Incr Delay (d2), s/veh	22.5	0.0	0.2	619.7	0.0	0.0	16.2	9.1	9.2	14.8	9.0	9.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	11.4	0.0	2.4	24.4	0.0	0.0	4.6	12.1	12.0	4.3	12.0	11.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	52.4	0.0	17.6	653.4	0.0	0.0	65.7	45.8	45.9	64.5	45.9	46.4
LnGrp LOS	D	A	B	F	A	A	E	D	D	E	D	D
Approach Vol, veh/h		506			298			1033			997	
Approach Delay, s/veh		41.5			653.4			48.6			48.7	
Approach LOS		D			F			D			D	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	14.9	39.2		58.0	15.3	38.8		58.0				
Change Period (Y+Rc), s	4.0	4.9		4.9	4.0	4.9		4.9				
Max Green Setting (Gmax), s	16.0	44.1		53.1	16.0	44.1		53.1				
Max Q Clear Time (g_c+I1), s	11.0	29.8		55.1	11.3	29.6		55.1				
Green Ext Time (p_c), s	0.1	4.4		0.0	0.1	4.3		0.0				

Intersection Summary			
HCM 6th Ctrl Delay		111.0	
HCM 6th LOS		F	

Lane Group	EBT	EBR	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	348	160	319	144	892	138	877
v/c Ratio	0.84	0.25	0.67	0.64	0.80	0.63	0.80
Control Delay	49.4	4.6	32.7	61.1	37.7	60.8	37.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	49.4	4.6	32.7	61.1	37.7	60.8	37.1
Queue Length 50th (ft)	208	0	161	92	280	89	270
Queue Length 95th (ft)	#401	42	294	#203	423	#191	406
Internal Link Dist (ft)	1279		1248		1576		1284
Turn Bay Length (ft)		200		190		125	
Base Capacity (vph)	607	883	694	283	1529	283	1506
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.57	0.18	0.46	0.51	0.58	0.49	0.58

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Intersection	
Intersection Delay, s/veh	14
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	27	302	38	53	234	45	24	21	56	58	25	20
Future Vol, veh/h	27	302	38	53	234	45	24	21	56	58	25	20
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	30	339	43	60	263	51	27	24	63	65	28	22
Number of Lanes	0	1	0	0	1	1	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	2	1
HCM Control Delay	16	13.9	10.4	10.8
HCM LOS	C	B	B	B

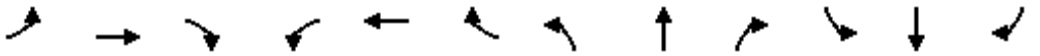
Lane	NBLn1	EBLn1	WBLn1	WBLn2	SBLn1
Vol Left, %	24%	7%	18%	0%	56%
Vol Thru, %	21%	82%	82%	0%	24%
Vol Right, %	55%	10%	0%	100%	19%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	101	367	287	45	103
LT Vol	24	27	53	0	58
Through Vol	21	302	234	0	25
RT Vol	56	38	0	45	20
Lane Flow Rate	113	412	322	51	116
Geometry Grp	2	5	7	7	2
Degree of Util (X)	0.187	0.602	0.522	0.071	0.2
Departure Headway (Hd)	5.944	5.258	5.824	5.022	6.209
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	601	685	619	712	576
Service Time	4.004	3.298	3.564	2.762	4.269
HCM Lane V/C Ratio	0.188	0.601	0.52	0.072	0.201
HCM Control Delay	10.4	16	14.8	8.1	10.8
HCM Lane LOS	B	C	B	A	B
HCM 95th-tile Q	0.7	4.1	3	0.2	0.7

Intersection	
Intersection Delay, s/veh	17.2
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	15	334	67	91	278	22	55	40	80	25	26	9
Future Vol, veh/h	15	334	67	91	278	22	55	40	80	25	26	9
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	16	363	73	99	302	24	60	43	87	27	28	10
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	2	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	2	1	1
HCM Control Delay	19	18.3	12.5	11.1
HCM LOS	C	C	B	B

Lane	NBLn1	EBLn1	WBLn1	SBLn1	SBLn2
Vol Left, %	31%	4%	23%	49%	0%
Vol Thru, %	23%	80%	71%	51%	0%
Vol Right, %	46%	16%	6%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	175	416	391	51	9
LT Vol	55	15	91	25	0
Through Vol	40	334	278	26	0
RT Vol	80	67	22	0	9
Lane Flow Rate	190	452	425	55	10
Geometry Grp	5	2	2	7	7
Degree of Util (X)	0.333	0.675	0.65	0.118	0.018
Departure Headway (Hd)	6.306	5.375	5.506	7.639	6.57
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	567	669	650	472	540
Service Time	4.391	3.443	3.574	5.339	4.369
HCM Lane V/C Ratio	0.335	0.676	0.654	0.117	0.019
HCM Control Delay	12.5	19	18.3	11.4	9.5
HCM Lane LOS	B	C	C	B	A
HCM 95th-tile Q	1.5	5.2	4.8	0.4	0.1



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	135	118	78	83	118	114	101	614	64	42	504	139
Future Volume (veh/h)	135	118	78	83	118	114	101	614	64	42	504	139
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	0.99		0.98	1.00		0.96	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1781	1781	1781	1781	1781	1781	1781	1781	1781	1781	1781	1781
Adj Flow Rate, veh/h	136	119	77	84	119	95	102	620	62	42	509	123
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	8	8	8	8	8	8	8	8	8	8	8	8
Cap, veh/h	304	230	502	165	204	128	131	1016	101	76	793	190
Arrive On Green	0.34	0.34	0.34	0.34	0.34	0.34	0.08	0.33	0.33	0.04	0.30	0.30
Sat Flow, veh/h	555	676	1474	203	599	375	1697	3094	309	1697	2681	644
Grp Volume(v), veh/h	255	0	77	298	0	0	102	339	343	42	320	312
Grp Sat Flow(s),veh/h/ln	1231	0	1474	1177	0	0	1697	1692	1710	1697	1692	1632
Q Serve(g_s), s	0.0	0.0	1.8	3.8	0.0	0.0	2.8	8.1	8.1	1.2	7.9	8.0
Cycle Q Clear(g_c), s	8.2	0.0	1.8	12.1	0.0	0.0	2.8	8.1	8.1	1.2	7.9	8.0
Prop In Lane	0.53		1.00	0.28		0.32	1.00		0.18	1.00		0.39
Lane Grp Cap(c), veh/h	534	0	502	496	0	0	131	556	562	76	500	482
V/C Ratio(X)	0.48	0.00	0.15	0.60	0.00	0.00	0.78	0.61	0.61	0.55	0.64	0.65
Avail Cap(c_a), veh/h	1559	0	1625	1599	0	0	634	1796	1815	317	1479	1426
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	12.9	0.0	11.1	14.1	0.0	0.0	21.8	13.6	13.6	22.5	14.7	14.8
Incr Delay (d2), s/veh	0.7	0.0	0.1	1.2	0.0	0.0	9.4	1.1	1.1	6.2	1.4	1.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.9	0.0	0.5	2.2	0.0	0.0	1.3	2.4	2.4	0.5	2.4	2.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	13.5	0.0	11.2	15.2	0.0	0.0	31.2	14.7	14.7	28.7	16.1	16.2
LnGrp LOS	B	A	B	B	A	A	C	B	B	C	B	B
Approach Vol, veh/h		332			298			784			674	
Approach Delay, s/veh		13.0			15.2			16.8			16.9	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	6.1	20.7		21.3	7.7	19.1		21.3				
Change Period (Y+Rc), s	4.0	4.9		4.9	4.0	4.9		4.9				
Max Green Setting (Gmax), s	9.0	51.1		53.1	18.0	42.1		53.1				
Max Q Clear Time (g_c+I1), s	3.2	10.1		10.2	4.8	10.0		14.1				
Green Ext Time (p_c), s	0.0	4.0		2.0	0.2	3.7		2.1				

Intersection Summary												
HCM 6th Ctrl Delay			16.0									
HCM 6th LOS			B									

Lane Group	EBT	EBR	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	255	79	318	102	685	42	649
v/c Ratio	0.66	0.14	0.63	0.38	0.53	0.22	0.63
Control Delay	30.5	4.9	25.2	36.7	19.5	39.4	24.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	30.5	4.9	25.2	36.7	19.5	39.4	24.5
Queue Length 50th (ft)	89	0	99	39	117	16	114
Queue Length 95th (ft)	221	27	241	114	236	63	246
Internal Link Dist (ft)	1279		1248		1576		1284
Turn Bay Length (ft)		200		190		125	
Base Capacity (vph)	863	1143	1090	503	2484	251	2115
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.30	0.07	0.29	0.20	0.28	0.17	0.31

Intersection Summary

Intersection	
Intersection Delay, s/veh	11.8
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	29	172	11	38	194	113	28	48	51	93	38	41
Future Vol, veh/h	29	172	11	38	194	113	28	48	51	93	38	41
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	33	198	13	44	223	130	32	55	59	107	44	47
Number of Lanes	0	1	0	0	1	1	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	2	1
HCM Control Delay	12.2	12	10.7	11.7
HCM LOS	B	B	B	B

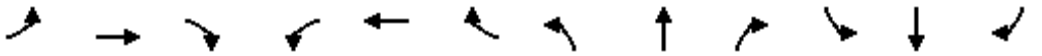
Lane	NBLn1	EBLn1	WBLn1	WBLn2	SBLn1
Vol Left, %	22%	14%	16%	0%	54%
Vol Thru, %	38%	81%	84%	0%	22%
Vol Right, %	40%	5%	0%	100%	24%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	127	212	232	113	172
LT Vol	28	29	38	0	93
Through Vol	48	172	194	0	38
RT Vol	51	11	0	113	41
Lane Flow Rate	146	244	267	130	198
Geometry Grp	2	5	7	7	2
Degree of Util (X)	0.235	0.383	0.443	0.187	0.321
Departure Headway (Hd)	5.805	5.652	5.984	5.192	5.849
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	616	636	600	690	613
Service Time	3.866	3.702	3.729	2.936	3.906
HCM Lane V/C Ratio	0.237	0.384	0.445	0.188	0.323
HCM Control Delay	10.7	12.2	13.4	9.1	11.7
HCM Lane LOS	B	B	B	A	B
HCM 95th-tile Q	0.9	1.8	2.3	0.7	1.4

Intersection	
Intersection Delay, s/veh	24.2
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	16	277	39	77	244	33	60	76	83	66	62	23
Future Vol, veh/h	16	277	39	77	244	33	60	76	83	66	62	23
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	19	334	47	93	294	40	72	92	100	80	75	28
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	2	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	2	1	1
HCM Control Delay	26.3	30	18.2	14.8
HCM LOS	D	D	C	B

Lane	NBLn1	EBLn1	WBLn1	SBLn1	SBLn2
Vol Left, %	27%	5%	22%	52%	0%
Vol Thru, %	35%	83%	69%	48%	0%
Vol Right, %	38%	12%	9%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	219	332	354	128	23
LT Vol	60	16	77	66	0
Through Vol	76	277	244	62	0
RT Vol	83	39	33	0	23
Lane Flow Rate	264	400	427	154	28
Geometry Grp	5	2	2	7	7
Degree of Util (X)	0.53	0.74	0.787	0.355	0.056
Departure Headway (Hd)	7.225	6.657	6.64	8.287	7.298
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	499	544	546	433	489
Service Time	5.292	4.678	4.66	6.056	5.066
HCM Lane V/C Ratio	0.529	0.735	0.782	0.356	0.057
HCM Control Delay	18.2	26.3	30	15.6	10.5
HCM Lane LOS	C	D	D	C	B
HCM 95th-tile Q	3.1	6.3	7.3	1.6	0.2



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	194	185	160	82	160	113	146	866	128	153	747	234
Future Volume (veh/h)	194	185	160	82	160	113	146	866	128	153	747	234
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.96	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1781	1781	1781	1781	1781	1781	1781	1781	1781	1781	1781	1781
Adj Flow Rate, veh/h	200	191	163	85	165	95	151	893	129	158	770	223
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	8	8	8	8	8	8	8	8	8	8	8	8
Cap, veh/h	205	153	658	37	62	23	176	982	142	183	864	250
Arrive On Green	0.45	0.45	0.45	0.45	0.45	0.45	0.10	0.33	0.33	0.11	0.34	0.34
Sat Flow, veh/h	359	343	1478	0	138	52	1697	2950	426	1697	2562	742
Grp Volume(v), veh/h	391	0	163	345	0	0	151	512	510	158	509	484
Grp Sat Flow(s),veh/h/ln	703	0	1478	191	0	0	1697	1692	1684	1697	1692	1611
Q Serve(g_s), s	0.0	0.0	8.4	0.0	0.0	0.0	10.6	35.2	35.2	11.1	34.6	34.6
Cycle Q Clear(g_c), s	54.1	0.0	8.4	54.1	0.0	0.0	10.6	35.2	35.2	11.1	34.6	34.6
Prop In Lane	0.51		1.00	0.25		0.28	1.00		0.25	1.00		0.46
Lane Grp Cap(c), veh/h	358	0	658	122	0	0	176	563	561	183	571	544
V/C Ratio(X)	1.09	0.00	0.25	2.83	0.00	0.00	0.86	0.91	0.91	0.86	0.89	0.89
Avail Cap(c_a), veh/h	358	0	658	122	0	0	196	614	611	209	628	598
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	37.1	0.0	21.0	36.3	0.0	0.0	53.6	38.8	38.8	53.3	38.1	38.1
Incr Delay (d2), s/veh	74.9	0.0	0.2	846.8	0.0	0.0	27.7	16.8	16.8	26.4	14.1	14.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	18.4	0.0	2.9	31.1	0.0	0.0	5.7	16.4	16.3	5.9	15.7	15.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	111.9	0.0	21.2	883.1	0.0	0.0	81.2	55.5	55.6	79.7	52.2	52.8
LnGrp LOS	F	A	C	F	A	A	F	E	E	E	D	D
Approach Vol, veh/h		554			345			1173			1151	
Approach Delay, s/veh		85.2			883.1			58.9			56.2	
Approach LOS		F			F			E			E	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	17.1	45.3		59.0	16.6	45.9		59.0				
Change Period (Y+Rc), s	4.0	4.9		4.9	4.0	4.9		4.9				
Max Green Setting (Gmax), s	15.0	44.1		54.1	14.0	45.1		54.1				
Max Q Clear Time (g_c+I1), s	13.1	37.2		56.1	12.6	36.6		56.1				
Green Ext Time (p_c), s	0.1	3.3		0.0	0.0	3.7		0.0				

Intersection Summary												
HCM 6th Ctrl Delay			150.7									
HCM 6th LOS			F									

Lane Group	EBT	EBR	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	391	165	366	151	1025	158	1011
v/c Ratio	0.92	0.24	0.79	0.78	0.90	0.77	0.88
Control Delay	61.6	4.2	42.6	80.0	48.1	77.4	45.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	61.6	4.2	42.6	80.0	48.1	77.4	45.0
Queue Length 50th (ft)	291	0	238	123	414	128	395
Queue Length 95th (ft)	#489	42	#378	#241	#541	#243	#496
Internal Link Dist (ft)	1279		1248		1576		1284
Turn Bay Length (ft)		200		190		125	
Base Capacity (vph)	498	776	537	207	1278	221	1288
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.79	0.21	0.68	0.73	0.80	0.71	0.78

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Intersection	
Intersection Delay, s/veh	18.5
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	33	348	44	59	271	55	26	26	63	71	31	24
Future Vol, veh/h	33	348	44	59	271	55	26	26	63	71	31	24
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	37	391	49	66	304	62	29	29	71	80	35	27
Number of Lanes	0	1	0	0	1	1	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	2	1
HCM Control Delay	23.1	17.6	11.6	12.3
HCM LOS	C	C	B	B

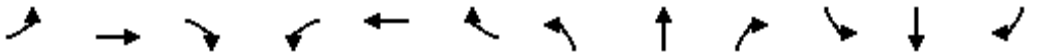
Lane	NBLn1	EBLn1	WBLn1	WBLn2	SBLn1
Vol Left, %	23%	8%	18%	0%	56%
Vol Thru, %	23%	82%	82%	0%	25%
Vol Right, %	55%	10%	0%	100%	19%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	115	425	330	55	126
LT Vol	26	33	59	0	71
Through Vol	26	348	271	0	31
RT Vol	63	44	0	55	24
Lane Flow Rate	129	478	371	62	142
Geometry Grp	2	5	7	7	2
Degree of Util (X)	0.235	0.74	0.634	0.092	0.267
Departure Headway (Hd)	6.559	5.582	6.156	5.354	6.787
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	550	640	582	662	532
Service Time	4.567	3.674	3.951	3.148	4.795
HCM Lane V/C Ratio	0.235	0.747	0.637	0.094	0.267
HCM Control Delay	11.6	23.1	19.1	8.7	12.3
HCM Lane LOS	B	C	C	A	B
HCM 95th-tile Q	0.9	6.5	4.4	0.3	1.1

Intersection	
Intersection Delay, s/veh	28.6
Intersection LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	18	377	79	108	316	27	65	49	95	31	32	11
Future Vol, veh/h	18	377	79	108	316	27	65	49	95	31	32	11
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	20	410	86	117	343	29	71	53	103	34	35	12
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	2	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	2	1	1
HCM Control Delay	33.9	31.8	15.5	12.4
HCM LOS	D	D	C	B

Lane	NBLn1	EBLn1	WBLn1	SBLn1	SBLn2
Vol Left, %	31%	4%	24%	49%	0%
Vol Thru, %	23%	80%	70%	51%	0%
Vol Right, %	45%	17%	6%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	209	474	451	63	11
LT Vol	65	18	108	31	0
Through Vol	49	377	316	32	0
RT Vol	95	79	27	0	11
Lane Flow Rate	227	515	490	68	12
Geometry Grp	5	2	2	7	7
Degree of Util (X)	0.441	0.851	0.827	0.159	0.025
Departure Headway (Hd)	6.995	5.944	6.076	8.378	7.4
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	513	608	593	427	481
Service Time	5.062	3.994	4.129	6.159	5.18
HCM Lane V/C Ratio	0.442	0.847	0.826	0.159	0.025
HCM Control Delay	15.5	33.9	31.8	12.8	10.4
HCM Lane LOS	C	D	D	B	B
HCM 95th-tile Q	2.2	9.3	8.6	0.6	0.1



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	135	118	78	83	118	116	101	614	64	44	504	139
Future Volume (veh/h)	135	118	78	83	118	116	101	614	64	44	504	139
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	0.99		0.98	1.00		0.96	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1781	1781	1781	1781	1781	1781	1781	1781	1781	1781	1781	1781
Adj Flow Rate, veh/h	136	119	77	84	119	97	102	620	62	44	509	123
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	8	8	8	8	8	8	8	8	8	8	8	8
Cap, veh/h	303	230	504	164	203	130	131	1010	101	78	791	190
Arrive On Green	0.34	0.34	0.34	0.34	0.34	0.34	0.08	0.33	0.33	0.05	0.30	0.30
Sat Flow, veh/h	553	672	1474	201	595	380	1697	3094	309	1697	2681	644
Grp Volume(v), veh/h	255	0	77	300	0	0	102	339	343	44	320	312
Grp Sat Flow(s),veh/h/ln	1225	0	1474	1176	0	0	1697	1692	1710	1697	1692	1632
Q Serve(g_s), s	0.0	0.0	1.8	3.9	0.0	0.0	2.9	8.1	8.2	1.2	7.9	8.0
Cycle Q Clear(g_c), s	8.3	0.0	1.8	12.2	0.0	0.0	2.9	8.1	8.2	1.2	7.9	8.0
Prop In Lane	0.53		1.00	0.28		0.32	1.00		0.18	1.00		0.39
Lane Grp Cap(c), veh/h	533	0	504	497	0	0	131	553	559	78	500	482
V/C Ratio(X)	0.48	0.00	0.15	0.60	0.00	0.00	0.78	0.61	0.61	0.56	0.64	0.65
Avail Cap(c_a), veh/h	1550	0	1619	1593	0	0	632	1789	1809	316	1474	1421
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	12.9	0.0	11.0	14.1	0.0	0.0	21.9	13.7	13.7	22.6	14.8	14.8
Incr Delay (d2), s/veh	0.7	0.0	0.1	1.2	0.0	0.0	9.4	1.1	1.1	6.2	1.4	1.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.9	0.0	0.5	2.7	0.0	0.0	1.3	2.4	2.4	0.5	2.4	2.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	13.6	0.0	11.2	15.3	0.0	0.0	31.3	14.8	14.8	28.7	16.2	16.3
LnGrp LOS	B	A	B	B	A	A	C	B	B	C	B	B
Approach Vol, veh/h		332			300			784			676	
Approach Delay, s/veh		13.0			15.3			17.0			17.1	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	6.2	20.7		21.4	7.7	19.2		21.4				
Change Period (Y+Rc), s	4.0	4.9		4.9	4.0	4.9		4.9				
Max Green Setting (Gmax), s	9.0	51.1		53.1	18.0	42.1		53.1				
Max Q Clear Time (g_c+I1), s	3.2	10.2		10.3	4.9	10.0		14.2				
Green Ext Time (p_c), s	0.0	4.0		2.0	0.2	3.7		2.1				

Intersection Summary												
HCM 6th Ctrl Delay			16.1									
HCM 6th LOS			B									

Lane Group	EBT	EBR	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	255	79	320	102	685	44	649
v/c Ratio	0.66	0.14	0.63	0.38	0.53	0.23	0.63
Control Delay	30.6	4.9	25.3	36.7	19.6	39.4	24.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	30.6	4.9	25.3	36.7	19.6	39.4	24.5
Queue Length 50th (ft)	89	0	100	39	118	17	114
Queue Length 95th (ft)	221	27	243	114	236	64	246
Internal Link Dist (ft)	1279		1248		1576		1284
Turn Bay Length (ft)		200		190		125	
Base Capacity (vph)	862	1143	1091	503	2484	251	2115
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.30	0.07	0.29	0.20	0.28	0.18	0.31

Intersection Summary

Intersection	
Intersection Delay, s/veh	11.9
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	29	174	11	38	196	113	28	48	51	93	38	41
Future Vol, veh/h	29	174	11	38	196	113	28	48	51	93	38	41
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	33	200	13	44	225	130	32	55	59	107	44	47
Number of Lanes	0	1	0	0	1	1	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	2	1
HCM Control Delay	12.3	12.1	10.7	11.7
HCM LOS	B	B	B	B

Lane	NBLn1	EBLn1	WBLn1	WBLn2	SBLn1
Vol Left, %	22%	14%	16%	0%	54%
Vol Thru, %	38%	81%	84%	0%	22%
Vol Right, %	40%	5%	0%	100%	24%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	127	214	234	113	172
LT Vol	28	29	38	0	93
Through Vol	48	174	196	0	38
RT Vol	51	11	0	113	41
Lane Flow Rate	146	246	269	130	198
Geometry Grp	2	5	7	7	2
Degree of Util (X)	0.236	0.387	0.447	0.187	0.322
Departure Headway (Hd)	5.82	5.657	5.987	5.195	5.864
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	615	635	600	688	611
Service Time	3.881	3.71	3.736	2.944	3.921
HCM Lane V/C Ratio	0.237	0.387	0.448	0.189	0.324
HCM Control Delay	10.7	12.3	13.5	9.1	11.7
HCM Lane LOS	B	B	B	A	B
HCM 95th-tile Q	0.9	1.8	2.3	0.7	1.4

Intersection	
Intersection Delay, s/veh	25.4
Intersection LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	16	282	39	77	251	33	60	76	83	66	62	23
Future Vol, veh/h	16	282	39	77	251	33	60	76	83	66	62	23
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	19	340	47	93	302	40	72	92	100	80	75	28
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	2	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	2	1	1
HCM Control Delay	27.6	32	18.5	15
HCM LOS	D	D	C	B

Lane	NBLn1	EBLn1	WBLn1	SBLn1	SBLn2
Vol Left, %	27%	5%	21%	52%	0%
Vol Thru, %	35%	84%	70%	48%	0%
Vol Right, %	38%	12%	9%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	219	337	361	128	23
LT Vol	60	16	77	66	0
Through Vol	76	282	251	62	0
RT Vol	83	39	33	0	23
Lane Flow Rate	264	406	435	154	28
Geometry Grp	5	2	2	7	7
Degree of Util (X)	0.535	0.756	0.807	0.358	0.057
Departure Headway (Hd)	7.301	6.706	6.682	8.364	7.374
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	493	540	544	429	484
Service Time	5.367	4.728	4.703	6.133	5.143
HCM Lane V/C Ratio	0.535	0.752	0.8	0.359	0.058
HCM Control Delay	18.5	27.6	32	15.8	10.6
HCM Lane LOS	C	D	D	C	B
HCM 95th-tile Q	3.1	6.6	7.8	1.6	0.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	194	185	160	82	160	116	146	866	128	154	747	234
Future Volume (veh/h)	194	185	160	82	160	116	146	866	128	154	747	234
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.96	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1781	1781	1781	1781	1781	1781	1781	1781	1781	1781	1781	1781
Adj Flow Rate, veh/h	200	191	163	85	165	99	151	893	129	159	770	223
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	8	8	8	8	8	8	8	8	8	8	8	8
Cap, veh/h	203	151	658	37	62	24	176	982	142	184	865	251
Arrive On Green	0.44	0.44	0.44	0.44	0.44	0.44	0.10	0.33	0.33	0.11	0.34	0.34
Sat Flow, veh/h	356	340	1478	0	138	55	1697	2950	426	1697	2562	742
Grp Volume(v), veh/h	391	0	163	349	0	0	151	512	510	159	509	484
Grp Sat Flow(s),veh/h/ln	697	0	1478	193	0	0	1697	1692	1684	1697	1692	1611
Q Serve(g_s), s	0.0	0.0	8.4	0.0	0.0	0.0	10.6	35.2	35.2	11.2	34.6	34.6
Cycle Q Clear(g_c), s	54.1	0.0	8.4	54.1	0.0	0.0	10.6	35.2	35.2	11.2	34.6	34.6
Prop In Lane	0.51		1.00	0.24		0.28	1.00		0.25	1.00		0.46
Lane Grp Cap(c), veh/h	355	0	658	123	0	0	176	563	560	184	572	544
V/C Ratio(X)	1.10	0.00	0.25	2.84	0.00	0.00	0.86	0.91	0.91	0.86	0.89	0.89
Avail Cap(c_a), veh/h	355	0	658	123	0	0	195	614	611	209	628	598
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	37.2	0.0	21.0	36.5	0.0	0.0	53.6	38.8	38.8	53.3	38.1	38.1
Incr Delay (d2), s/veh	78.2	0.0	0.2	851.1	0.0	0.0	27.7	16.8	16.9	26.7	13.9	14.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	18.6	0.0	2.9	31.5	0.0	0.0	5.7	16.4	16.3	6.0	15.7	15.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	115.3	0.0	21.2	887.6	0.0	0.0	81.3	55.6	55.7	80.0	52.1	52.6
LnGrp LOS	F	A	C	F	A	A	F	E	E	E	D	D
Approach Vol, veh/h		554			349			1173			1152	
Approach Delay, s/veh		87.6			887.6			59.0			56.2	
Approach LOS		F			F			E			E	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	17.2	45.4		59.0	16.6	46.0		59.0				
Change Period (Y+Rc), s	4.0	4.9		4.9	4.0	4.9		4.9				
Max Green Setting (Gmax), s	15.0	44.1		54.1	14.0	45.1		54.1				
Max Q Clear Time (g_c+I1), s	13.2	37.2		56.1	12.6	36.6		56.1				
Green Ext Time (p_c), s	0.1	3.3		0.0	0.0	3.7		0.0				

Intersection Summary												
HCM 6th Ctrl Delay			152.5									
HCM 6th LOS			F									

Lane Group	EBT	EBR	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	391	165	370	151	1025	159	1011
v/c Ratio	0.92	0.24	0.80	0.78	0.90	0.78	0.88
Control Delay	62.4	4.2	43.1	80.1	48.2	77.9	45.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	62.4	4.2	43.1	80.1	48.2	77.9	45.0
Queue Length 50th (ft)	292	0	241	123	414	129	395
Queue Length 95th (ft)	#491	42	#386	#241	#541	#245	#496
Internal Link Dist (ft)	1279		1248		1576		1284
Turn Bay Length (ft)		200		190		125	
Base Capacity (vph)	495	776	537	206	1277	221	1288
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.79	0.21	0.69	0.73	0.80	0.72	0.78

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Intersection	
Intersection Delay, s/veh	18.7
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	33	349	44	59	274	55	26	26	63	71	31	24
Future Vol, veh/h	33	349	44	59	274	55	26	26	63	71	31	24
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	37	392	49	66	308	62	29	29	71	80	35	27
Number of Lanes	0	1	0	0	1	1	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	2	1
HCM Control Delay	23.3	17.9	11.6	12.3
HCM LOS	C	C	B	B

Lane	NBLn1	EBLn1	WBLn1	WBLn2	SBLn1
Vol Left, %	23%	8%	18%	0%	56%
Vol Thru, %	23%	82%	82%	0%	25%
Vol Right, %	55%	10%	0%	100%	19%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	115	426	333	55	126
LT Vol	26	33	59	0	71
Through Vol	26	349	274	0	31
RT Vol	63	44	0	55	24
Lane Flow Rate	129	479	374	62	142
Geometry Grp	2	5	7	7	2
Degree of Util (X)	0.236	0.743	0.64	0.092	0.268
Departure Headway (Hd)	6.574	5.59	6.16	5.359	6.803
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	549	641	580	661	531
Service Time	4.584	3.685	3.958	3.156	4.811
HCM Lane V/C Ratio	0.235	0.747	0.645	0.094	0.267
HCM Control Delay	11.6	23.3	19.4	8.7	12.3
HCM Lane LOS	B	C	C	A	B
HCM 95th-tile Q	0.9	6.6	4.5	0.3	1.1

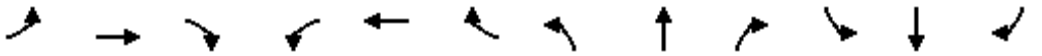
Intersection	
Intersection Delay, s/veh	30.2
Intersection LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	18	384	79	108	322	27	65	49	95	31	32	11
Future Vol, veh/h	18	384	79	108	322	27	65	49	95	31	32	11
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	20	417	86	117	350	29	71	53	103	34	35	12
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	2	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	2	1	1
HCM Control Delay	36.1	33.6	15.7	12.4
HCM LOS	E	D	C	B

Lane	NBLn1	EBLn1	WBLn1	SBLn1	SBLn2
Vol Left, %	31%	4%	24%	49%	0%
Vol Thru, %	23%	80%	70%	51%	0%
Vol Right, %	45%	16%	6%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	209	481	457	63	11
LT Vol	65	18	108	31	0
Through Vol	49	384	322	32	0
RT Vol	95	79	27	0	11
Lane Flow Rate	227	523	497	68	12
Geometry Grp	5	2	2	7	7
Degree of Util (X)	0.445	0.867	0.842	0.16	0.025
Departure Headway (Hd)	7.046	5.971	6.104	8.437	7.458
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	509	606	591	423	478
Service Time	5.114	4.024	4.159	6.221	5.242
HCM Lane V/C Ratio	0.446	0.863	0.841	0.161	0.025
HCM Control Delay	15.7	36.1	33.6	12.8	10.4
HCM Lane LOS	C	E	D	B	B
HCM 95th-tile Q	2.3	9.8	9	0.6	0.1

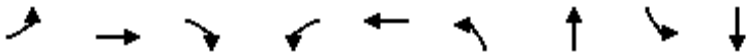
APPENDIX E
INTERSECTION ANALYSIS SHEETS
IMPROVED CONDITIONS



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	118	100	74	73	101	100	96	520	55	39	439	123
Future Volume (veh/h)	118	100	74	73	101	100	96	520	55	39	439	123
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.96	1.00		0.95
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1781	1781	1781	1781	1781	1781	1781	1781	1781	1781	1781	1781
Adj Flow Rate, veh/h	119	101	60	74	102	81	97	525	45	39	443	99
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	8	8	8	8	8	8	8	8	8	8	8	8
Cap, veh/h	155	385	317	112	173	137	129	940	80	72	724	160
Arrive On Green	0.09	0.22	0.22	0.07	0.19	0.19	0.08	0.30	0.30	0.04	0.27	0.27
Sat Flow, veh/h	1697	1781	1463	1697	905	718	1697	3143	269	1697	2728	604
Grp Volume(v), veh/h	119	101	60	74	0	183	97	282	288	39	273	269
Grp Sat Flow(s),veh/h/ln	1697	1781	1463	1697	0	1623	1697	1692	1719	1697	1692	1639
Q Serve(g_s), s	3.2	2.2	1.6	2.0	0.0	4.9	2.6	6.6	6.7	1.1	6.7	6.8
Cycle Q Clear(g_c), s	3.2	2.2	1.6	2.0	0.0	4.9	2.6	6.6	6.7	1.1	6.7	6.8
Prop In Lane	1.00		1.00	1.00		0.44	1.00		0.16	1.00		0.37
Lane Grp Cap(c), veh/h	155	385	317	112	0	310	129	506	514	72	449	435
V/C Ratio(X)	0.77	0.26	0.19	0.66	0.00	0.59	0.75	0.56	0.56	0.54	0.61	0.62
Avail Cap(c_a), veh/h	646	1172	963	431	0	862	538	1471	1494	287	1220	1182
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	21.0	15.4	15.1	21.6	0.0	17.4	21.4	13.9	14.0	22.2	15.2	15.3
Incr Delay (d2), s/veh	7.8	0.4	0.3	6.6	0.0	1.8	8.4	1.0	1.0	6.2	1.3	1.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.5	0.8	0.5	0.9	0.0	1.7	1.2	2.0	2.0	0.5	2.1	2.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	28.8	15.7	15.4	28.2	0.0	19.2	29.8	14.9	14.9	28.4	16.6	16.7
LnGrp LOS	C	B	B	C	A	B	C	B	B	C	B	B
Approach Vol, veh/h		280			257			667			581	
Approach Delay, s/veh		21.2			21.8			17.1			17.4	
Approach LOS		C			C			B			B	

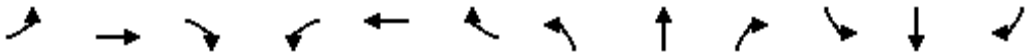
Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.0	19.0	7.1	15.1	7.6	17.4	8.3	13.9
Change Period (Y+Rc), s	4.0	4.9	4.0	4.9	4.0	4.9	4.0	4.9
Max Green Setting (Gmax), s	8.0	41.1	12.0	31.1	15.0	34.1	18.0	25.1
Max Q Clear Time (g_c+I1), s	3.1	8.7	4.0	4.2	4.6	8.8	5.2	6.9
Green Ext Time (p_c), s	0.0	3.2	0.1	0.7	0.1	2.9	0.2	0.9

Intersection Summary	
HCM 6th Ctrl Delay	18.5
HCM 6th LOS	B



Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	119	101	75	74	203	97	581	39	567
v/c Ratio	0.41	0.24	0.17	0.31	0.55	0.36	0.49	0.20	0.60
Control Delay	36.5	27.3	1.0	38.2	30.0	37.2	21.1	39.7	26.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	36.5	27.3	1.0	38.2	30.0	37.2	21.1	39.7	26.0
Queue Length 50th (ft)	48	36	0	30	64	39	108	16	106
Queue Length 95th (ft)	125	94	3	90	165	109	202	58	214
Internal Link Dist (ft)		1279			1248		1576		1284
Turn Bay Length (ft)			200			190		125	
Base Capacity (vph)	545	933	831	363	750	454	2092	242	1811
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.22	0.11	0.09	0.20	0.27	0.21	0.28	0.16	0.31

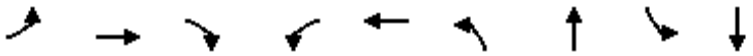
Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	178	159	155	74	137	99	140	753	113	134	642	209
Future Volume (veh/h)	178	159	155	74	137	99	140	753	113	134	642	209
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.96	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1781	1781	1781	1781	1781	1781	1781	1781	1781	1781	1781	1781
Adj Flow Rate, veh/h	184	164	128	76	141	81	144	776	92	138	662	172
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	8	8	8	8	8	8	8	8	8	8	8	8
Cap, veh/h	228	464	382	97	192	110	181	996	118	174	854	222
Arrive On Green	0.13	0.26	0.26	0.06	0.18	0.18	0.11	0.33	0.33	0.10	0.32	0.32
Sat Flow, veh/h	1697	1781	1468	1697	1047	601	1697	3032	359	1697	2633	683
Grp Volume(v), veh/h	184	164	128	76	0	222	144	433	435	138	425	409
Grp Sat Flow(s),veh/h/ln	1697	1781	1468	1697	0	1648	1697	1692	1699	1697	1692	1624
Q Serve(g_s), s	7.4	5.3	5.0	3.1	0.0	9.0	5.9	16.3	16.3	5.6	16.0	16.1
Cycle Q Clear(g_c), s	7.4	5.3	5.0	3.1	0.0	9.0	5.9	16.3	16.3	5.6	16.0	16.1
Prop In Lane	1.00		1.00	1.00		0.36	1.00		0.21	1.00		0.42
Lane Grp Cap(c), veh/h	228	464	382	97	0	302	181	556	558	174	549	527
V/C Ratio(X)	0.81	0.35	0.33	0.79	0.00	0.74	0.80	0.78	0.78	0.79	0.77	0.78
Avail Cap(c_a), veh/h	432	710	585	261	0	492	336	936	939	336	936	898
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	29.7	21.3	21.2	32.9	0.0	27.3	30.8	21.4	21.4	31.0	21.6	21.6
Incr Delay (d2), s/veh	6.7	0.5	0.5	13.1	0.0	3.5	7.7	2.4	2.4	7.9	2.4	2.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.3	2.1	1.7	1.6	0.0	3.6	2.6	5.8	5.9	2.5	5.7	5.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	36.4	21.8	21.7	46.0	0.0	30.8	38.5	23.8	23.8	38.9	23.9	24.1
LnGrp LOS	D	C	C	D	A	C	D	C	C	D	C	C
Approach Vol, veh/h		476			298			1012			972	
Approach Delay, s/veh		27.4			34.7			25.9			26.1	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.3	28.1	8.0	23.3	11.5	27.8	13.5	17.8
Change Period (Y+Rc), s	4.0	4.9	4.0	4.9	4.0	4.9	4.0	4.9
Max Green Setting (Gmax), s	14.0	39.1	10.9	28.2	14.0	39.1	18.0	21.1
Max Q Clear Time (g_c+I1), s	7.6	18.3	5.1	7.3	7.9	18.1	9.4	11.0
Green Ext Time (p_c), s	0.2	4.9	0.1	1.3	0.2	4.7	0.3	0.8

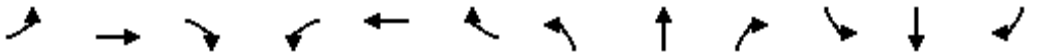
Intersection Summary	
HCM 6th Ctrl Delay	27.2
HCM 6th LOS	C



Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	184	164	160	76	243	144	892	138	877
v/c Ratio	0.70	0.34	0.31	0.47	0.76	0.66	0.81	0.64	0.81
Control Delay	55.6	33.7	7.1	55.1	50.9	58.3	35.5	57.4	34.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	55.6	33.7	7.1	55.1	50.9	58.3	35.5	57.4	34.4
Queue Length 50th (ft)	114	88	0	47	132	89	272	86	258
Queue Length 95th (ft)	#213	158	51	100	#253	#184	364	#173	350
Internal Link Dist (ft)		1279			1248		1576		1284
Turn Bay Length (ft)			200			190		125	
Base Capacity (vph)	332	548	560	201	400	258	1415	258	1397
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.55	0.30	0.29	0.38	0.61	0.56	0.63	0.53	0.63

Intersection Summary

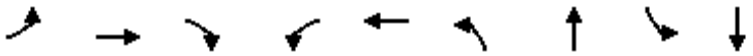
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	135	118	78	83	118	116	101	614	64	44	504	139
Future Volume (veh/h)	135	118	78	83	118	116	101	614	64	44	504	139
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.96	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1781	1781	1781	1781	1781	1781	1781	1781	1781	1781	1781	1781
Adj Flow Rate, veh/h	136	119	63	84	119	94	102	620	52	44	509	112
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	8	8	8	8	8	8	8	8	8	8	8	8
Cap, veh/h	177	424	349	114	183	144	131	980	82	76	764	167
Arrive On Green	0.10	0.24	0.24	0.07	0.20	0.20	0.08	0.31	0.31	0.05	0.28	0.28
Sat Flow, veh/h	1697	1781	1466	1697	908	717	1697	3149	264	1697	2736	598
Grp Volume(v), veh/h	136	119	63	84	0	213	102	333	339	44	314	307
Grp Sat Flow(s),veh/h/ln	1697	1781	1466	1697	0	1624	1697	1692	1720	1697	1692	1641
Q Serve(g_s), s	4.1	2.9	1.8	2.6	0.0	6.3	3.1	8.9	8.9	1.3	8.6	8.7
Cycle Q Clear(g_c), s	4.1	2.9	1.8	2.6	0.0	6.3	3.1	8.9	8.9	1.3	8.6	8.7
Prop In Lane	1.00		1.00	1.00		0.44	1.00		0.15	1.00		0.36
Lane Grp Cap(c), veh/h	177	424	349	114	0	327	131	527	536	76	473	458
V/C Ratio(X)	0.77	0.28	0.18	0.74	0.00	0.65	0.78	0.63	0.63	0.58	0.66	0.67
Avail Cap(c_a), veh/h	580	1019	838	419	0	775	451	1341	1363	239	1129	1095
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	23.0	16.4	16.0	24.1	0.0	19.3	23.8	15.5	15.5	24.6	16.8	16.8
Incr Delay (d2), s/veh	6.9	0.4	0.2	8.9	0.0	2.2	9.6	1.3	1.2	6.7	1.6	1.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.8	1.1	0.5	1.2	0.0	2.3	1.4	2.8	2.8	0.6	2.8	2.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	29.8	16.7	16.2	33.0	0.0	21.5	33.5	16.8	16.8	31.3	18.4	18.5
LnGrp LOS	C	B	B	C	A	C	C	B	B	C	B	B
Approach Vol, veh/h		318			297			774			665	
Approach Delay, s/veh		22.2			24.8			19.0			19.3	
Approach LOS		C			C			B			B	

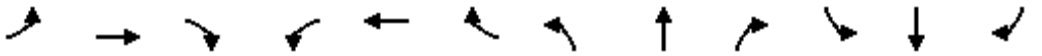
Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.4	21.3	7.5	17.4	8.1	19.6	9.5	15.5
Change Period (Y+Rc), s	4.0	4.9	4.0	4.9	4.0	4.9	4.0	4.9
Max Green Setting (Gmax), s	7.4	41.7	13.0	30.1	14.0	35.1	18.0	25.1
Max Q Clear Time (g_c+I1), s	3.3	10.9	4.6	4.9	5.1	10.7	6.1	8.3
Green Ext Time (p_c), s	0.0	3.8	0.1	0.8	0.1	3.4	0.2	1.1

Intersection Summary	
HCM 6th Ctrl Delay	20.4
HCM 6th LOS	C



Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	136	119	79	84	236	102	685	44	649
v/c Ratio	0.51	0.24	0.15	0.40	0.65	0.45	0.58	0.28	0.68
Control Delay	42.6	29.0	1.2	43.8	35.4	43.9	23.5	46.2	29.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	42.6	29.0	1.2	43.8	35.4	43.9	23.5	46.2	29.1
Queue Length 50th (ft)	62	48	0	38	87	46	145	20	140
Queue Length 95th (ft)	150	114	5	106	204	123	253	67	257
Internal Link Dist (ft)		1279			1248		1576		1284
Turn Bay Length (ft)			200			190		125	
Base Capacity (vph)	431	759	702	311	603	335	1966	177	1626
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.32	0.16	0.11	0.27	0.39	0.30	0.35	0.25	0.40

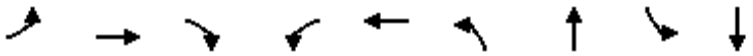
Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	194	185	160	82	160	116	146	866	128	154	747	234
Future Volume (veh/h)	194	185	160	82	160	116	146	866	128	154	747	234
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.96	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1781	1781	1781	1781	1781	1781	1781	1781	1781	1781	1781	1781
Adj Flow Rate, veh/h	200	191	132	85	165	96	151	893	105	159	770	193
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	8	8	8	8	8	8	8	8	8	8	8	8
Cap, veh/h	238	474	391	108	198	115	185	1074	126	193	954	239
Arrive On Green	0.14	0.27	0.27	0.06	0.19	0.19	0.11	0.35	0.35	0.11	0.36	0.36
Sat Flow, veh/h	1697	1781	1469	1697	1042	606	1697	3036	357	1697	2656	666
Grp Volume(v), veh/h	200	191	132	85	0	261	151	498	500	159	491	472
Grp Sat Flow(s),veh/h/ln	1697	1781	1469	1697	0	1648	1697	1692	1700	1697	1692	1630
Q Serve(g_s), s	10.1	7.8	6.4	4.3	0.0	13.4	7.7	23.7	23.7	8.1	23.0	23.0
Cycle Q Clear(g_c), s	10.1	7.8	6.4	4.3	0.0	13.4	7.7	23.7	23.7	8.1	23.0	23.0
Prop In Lane	1.00		1.00	1.00		0.37	1.00		0.21	1.00		0.41
Lane Grp Cap(c), veh/h	238	474	391	108	0	313	185	599	602	193	607	585
V/C Ratio(X)	0.84	0.40	0.34	0.78	0.00	0.83	0.82	0.83	0.83	0.82	0.81	0.81
Avail Cap(c_a), veh/h	370	617	509	251	0	455	293	829	832	301	836	805
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	36.9	26.6	26.0	40.6	0.0	34.3	38.4	26.0	26.0	38.1	25.5	25.5
Incr Delay (d2), s/veh	9.9	0.6	0.5	11.6	0.0	8.6	9.4	5.2	5.2	10.0	4.2	4.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.7	3.3	2.2	2.1	0.0	5.9	3.5	9.3	9.4	3.7	8.9	8.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	46.8	27.1	26.6	52.2	0.0	42.9	47.8	31.2	31.2	48.2	29.6	29.8
LnGrp LOS	D	C	C	D	A	D	D	C	C	D	C	C
Approach Vol, veh/h		523			346			1149			1122	
Approach Delay, s/veh		34.5			45.2			33.4			32.3	
Approach LOS		C			D			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.0	36.1	9.6	28.3	13.6	36.5	16.3	21.6
Change Period (Y+Rc), s	4.0	4.9	4.0	4.9	4.0	4.9	4.0	4.9
Max Green Setting (Gmax), s	15.6	43.1	13.0	30.5	15.2	43.5	19.2	24.3
Max Q Clear Time (g_c+I1), s	10.1	25.7	6.3	9.8	9.7	25.0	12.1	15.4
Green Ext Time (p_c), s	0.2	5.4	0.1	1.4	0.2	5.4	0.3	0.9

Intersection Summary	
HCM 6th Ctrl Delay	34.5
HCM 6th LOS	C



Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	200	191	165	85	285	151	1025	159	1011
v/c Ratio	0.78	0.39	0.32	0.53	0.84	0.73	0.88	0.74	0.87
Control Delay	67.1	37.9	7.2	62.7	62.3	69.3	43.3	69.7	41.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	67.1	37.9	7.2	62.7	62.3	69.3	43.3	69.7	41.3
Queue Length 50th (ft)	150	122	0	64	194	114	382	120	366
Queue Length 95th (ft)	#258	197	54	117	#334	#210	#476	#221	457
Internal Link Dist (ft)		1279			1248		1576		1284
Turn Bay Length (ft)			200			190		125	
Base Capacity (vph)	301	509	534	204	391	238	1327	245	1321
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.66	0.38	0.31	0.42	0.73	0.63	0.77	0.65	0.77

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

MITIGATION MONITORING AND REPORTING PROGRAM

This Mitigation Monitoring and Reporting Program (MMRP) has been formulated based upon the findings of the Initial Study/Mitigated Negative Declaration (IS/MND) prepared for the proposed Casa De Villa Apartment Complex Project (project), for which the City of Selma (City) is the California Environmental Quality Act (CEQA) Lead Agency for environmental review. The MMRP, which is provided in Table A, lists mitigation measures recommended in the IS/MND for the proposed project and identifies mitigation monitoring requirements. The Final MMRP must be adopted when the City makes a final decision on the project.

This MMRP has been prepared to comply with the requirements of State law (Public Resources Code Section 21081.6). State law requires the adoption of an MMRP when mitigation measures are required to avoid significant impacts. The MMRP is intended to ensure compliance during implementation of the project.

The MMRP is organized in a matrix format:

- The first column identifies the mitigation measure that would be implemented for each project impact.
- The second column refers to the party or agency responsible for implementing the mitigation measure.
- The third column refers to the action that prompts implementation and/or implementation timing.
- The fourth column refers to the agency responsible for oversight or ensuring that the mitigation measure is implemented.
- The fifth column refers to the action that prompts the commencement of monitoring.
- The sixth column refers to when the monitoring will occur to ensure that the mitigation action is completed.
- The seventh and final column is where the lead agency contact initials and dates are provided as verification of mitigation measure implementation.

Table A: Mitigation Monitoring and Reporting Program

Mitigation Measures	Party Responsible for Implementation	Implementation Trigger/Timing	Agency Responsible for Monitoring	Monitoring Action	Monitoring Frequency	Verified Implementation
3.1: AESTHETICS						
Mitigation Measure AES-1: Exterior lighting for the project shall be shielded to prevent line of sight visibility of the light source from adjacent properties. In addition, the project shall result in no more than 0.25 foot-candle or equal measurement of errant light impacts to adjacent properties. The City's Planning Official shall require a photometric analysis of the project where necessary to demonstrate compliance with this requirement.	Project Applicant and project architect	Lighting systems to be confirmed during plan check, prior to issuance of building permits	City of Selma Planning Department	Plan review and approval	Prior to approval	Initials:_____ Date:_____
3.2: AGRICULTURE AND FORESTRY RESOURCES						
There are no significant impacts to agriculture and forestry resources.						
3.3: AIR QUALITY						
Mitigation Measure AIR-1: Consistent with San Joaquin Valley Air Pollution Control District (SJVAPCD) Regulation VIII (Fugitive PM10 Prohibitions), the following controls are required to be included as specifications for the proposed project and implemented at the construction site: ● All disturbed areas, including storage piles, which are not being actively utilized for construction purposes, shall be effectively stabilized of dust emissions using water, chemical stabilizer/suppressant, covered with a tarp or other suitable cover or vegetative ground cover. ● All on-site unpaved roads and off-site unpaved access roads shall be effectively stabilized of dust emissions using water or chemical stabilizer/suppressant. ● All land clearing, grubbing, scraping, excavation, land leveling, grading, cut and fill, and demolition activities shall be effectively controlled of fugitive dust emissions utilizing application of water or by presoaking. ● When materials are transported off-site, all material shall be covered, or effectively wetted to limit visible dust emissions, and at least 6 inches of freeboard space from the top of the container shall be maintained. ● All operations shall limit or expeditiously remove the accumulation of mud or dirt from adjacent public streets at the end of each workday. (The use of dry rotary brushes is expressly prohibited except where	Project Applicant and Construction Contractor	Prior to issuance of a building permit and throughout the construction period	City of Selma Planning Department	Plan review and approval	Prior to approval and during scheduled site visits	Initials:_____ Date:_____

Table A: Mitigation Monitoring and Reporting Program

Mitigation Measures	Party Responsible for Implementation	Implementation Trigger/Timing	Agency Responsible for Monitoring	Monitoring Action	Monitoring Frequency	Verified Implementation
preceded or accompanied by sufficient wetting to limit the visible dust emissions. Use of blower devices is expressly forbidden.) ● Following the addition of materials to, or the removal of materials from, the surface of out-door storage piles, said piles shall be effectively stabilized of fugitive dust emission utilizing sufficient water or chemical stabilizer/suppressant.						
3.4: BIOLOGICAL RESOURCES						
Mitigation Measure BIO-1: A preconstruction clearance survey shall be prepared for burrowing owl no more than 30 calendar days prior to initiation of project activities by a qualified biologist. All survey results must be delivered to the City of Selma. If an active burrowing owl burrow is found within the project site, the applicant must coordinate with the California Department of Fish and Wildlife (CDFW) to obtain applicable agency approval/direction prior to any ground disturbance activities on the site. Specific avoidance, den excavation, passive relocation, and compensatory mitigation activities shall be performed as required by the CDFW. If no active burrowing owl burrows are identified, project activities may proceed as planned following the preconstruction survey.	Project Applicant and Construction Contractor	30 calendar days prior to initiation of project construction activities.	City of Selma Planning Department	Plan review and approval	30 calendar days prior to initiation of project construction activities.	Initials:_____ Date:_____
Mitigation Measure BIO-2: If vegetation removal, construction, or grading activities are planned within the active nesting bird season (February 15 through September 15), a qualified biologist shall conduct a preconstruction nesting bird survey no more than 5 days prior to the start of such activities. The nesting bird survey shall include the project site and areas immediately adjacent to the site that could potentially be affected by project-related activities such as noise, vibration, increased human activity, and dust, etc. For any active nest(s) identified, the qualified biologist shall establish an appropriate buffer zone around the active nest(s). The appropriate buffer shall be determined by the qualified biologist based on species, location, and the nature of the proposed activities. Project activities shall be avoided within the buffer zone until the nest is deemed no longer active by the qualified biologist. Documentation of all survey results shall be provided to the City of Selma.	Project Applicant and Construction Contractor	Prior to project construction if during the nesting season (February 15 through September 15)	City of Selma Planning Department	Plan review and approval	During project construction if during the nesting season (February 15 to September 15)	Initials:_____ Date:_____

Table A: Mitigation Monitoring and Reporting Program

Mitigation Measures	Party Responsible for Implementation	Implementation Trigger/Timing	Agency Responsible for Monitoring	Monitoring Action	Monitoring Frequency	Verified Implementation
3.5: CULTURAL AND TRIBAL RESOURCES						
Mitigation Measure CUL-1: The Project Applicant shall hire a qualified professional archaeologist to monitor all project-related ground-disturbing activities. In the event that buried archaeological resources (historic or prehistoric) are discovered, the monitoring archaeologist shall stop construction in the immediate vicinity of the find and contact a professional qualified archaeologist for consultation to determine whether the resource requires further study. The qualified archaeologist shall make recommendations to the City on the measures that shall be implemented to protect the discovered resources, including but not limited to excavation of the finds and evaluation of the finds in accordance with *State CEQA Guidelines* Section 15064.5. If the resources are determined to be unique prehistoric archaeological resources as defined under Section 15064.5 of the *State CEQA Guidelines*, mitigation measures shall be identified by the monitor and recommended to the lead agency. Appropriate measures for significant resources could include avoidance or capping, incorporation of the site in green space, parks, or open space, or data recovery excavations of the finds. No further construction activities shall occur in the area of the discovery until the lead agency approves the measures to protect these resources. Any archaeological artifacts recovered as a result of mitigation shall be provided to a City-approved institution or person who is capable of providing long-term preservation to allow future scientific study. Monitoring should take place on a full-time basis during all ground-disturbing activities until the qualified archaeologist, based on the archaeological monitor's observations, is satisfied there is little likelihood of encountering archaeological deposits. Upon completion of monitoring activities, the qualified archaeologist should prepare a report to document the methods and results of monitoring activities. The final version of this report should be submitted to the Southern San Joaquin Valley Information Center (SSJVIC).	Project Applicant and Construction Contractor	Prior to commencement of, and during, construction activities	Qualified archaeologist approved by the City of Selma Planning Department	Initiated in the event that a find is made during construction	During regularly scheduled site inspections that would be initiated in the event that a find is made during construction	Initials:_____ Date:_____

Table A: Mitigation Monitoring and Reporting Program

Mitigation Measures	Party Responsible for Implementation	Implementation Trigger/Timing	Agency Responsible for Monitoring	Monitoring Action	Monitoring Frequency	Verified Implementation
Mitigation Measure CUL-2: In the event that human remains are unearthed during excavation and grading activities of any future development project, all activity shall cease immediately. Pursuant to Health and Safety Code (HSC) Section 7050.5, no further disturbance shall occur until the County Coroner has made the necessary findings as to origin and disposition pursuant to Public Resources Code (PRC) Section 5097.98(a). If the remains are determined to be of Native American descent, the coroner shall within 24 hours notify the Native American Heritage Commission (NAHC). The NAHC shall then contact the Most Likely Descendant (MLD) of the deceased Native American, who shall then serve as the consultant on how to proceed with the remains. Pursuant to PRC Section 5097.98(b), upon the discovery of Native American remains, the landowner shall ensure that the immediate vicinity, according to generally accepted cultural or archaeological standards or practices, where the Native American human remains are located is not damaged or disturbed by further development activity until the landowner has discussed and conferred with the MLDs regarding their recommendations, if applicable, taking into account the possibility of multiple human remains. The landowner shall discuss and confer with the MLDs all reasonable options regarding the MLDs' preferences for treatment.	Project Applicant and Construction Contractor	During construction	The Fresno County Coroner	Initiated in the event that a find is made during construction	During regularly scheduled site inspections initiated after a find is made during construction	Initials:_____ Date:_____
3.6: ENERGY						
There are no significant impacts to energy.						
3.7: GEOLOGY AND SOILS						
Mitigation Measure GEO-1: If any potentially significant paleontological resources are discovered during grading activities, all construction activities shall stop within 50 feet of the find and a certified professional paleontologist shall provide recommendations and mitigation measures to protect the resource. If a potentially significant resource is encountered, then the qualified professional paleontologist, the City of Selma, and the Project Applicant shall arrange for either (1) total avoidance of the resource or (2) test excavations to evaluate eligibility and, if eligible, total data recovery. The determination shall be formally documented in writing and submitted to the City of Selma as verification that the provisions for managing unanticipated discoveries have been met.	Project Applicant and Construction Contractor	During construction	Qualified paleontologist approved by the City of Selma Planning Department	Initiated in the event that a find is made during construction	During regularly scheduled site inspections that would be initiated in the event that a find is made during construction	Initials:_____ Date:_____

Table A: Mitigation Monitoring and Reporting Program

Mitigation Measures	Party Responsible for Implementation	Implementation Trigger/Timing	Agency Responsible for Monitoring	Monitoring Action	Monitoring Frequency	Verified Implementation
3.8: GREENHOUSE GAS EMISSIONS						
There are no significant impacts to greenhouse gas emissions.						
3.9: HAZARDS AND HAZARDOUS MATERIALS						
There are no significant impacts to hazards and hazardous materials.						
3.10: HYDROLOGY AND WATER QUALITY						
There are no significant impacts to hydrology and water quality.						
3.11: LAND USE AND PLANNING						
There are no significant impacts to land use and planning.						
3.12: MINERAL RESOURCES						
There are no significant impacts to mineral resources.						
3.13: NOISE						
Mitigation Measure NOI-1: The project contractor shall implement the following measures during construction of the project: ● Equip all construction equipment, fixed or mobile, with properly operating and maintained mufflers consistent with manufacturers' standards. ● Place all stationary construction equipment so that emitted noise is directed away from sensitive receptors nearest the active project site. ● Locate equipment staging in areas that would create the greatest possible distance between construction-related noise sources and noise-sensitive receptors nearest the active project site during all construction activities. ● Ensure that all general construction-related activities are restricted to between the hours of 7:00 a.m. and 10:00 p.m. ● Designate a "disturbance coordinator" at the City of Selma who would be responsible for responding to any local complaints about construction noise. The disturbance coordinator would determine the cause of the noise complaint (e.g., starting too early, bad muffler) and would determine and implement reasonable measures warranted to correct the problem.	Project Applicant and Construction Contractor	Prior to issuance of construction permits	City of Selma Planning Department	Plan review and approval	During construction	Initials:_____ Date:_____
3.14: POPULATION AND HOUSING						
There are no significant impacts to population and housing.						
3.15: PUBLIC SERVICES						
There are no significant impacts to public services.						

Table A: Mitigation Monitoring and Reporting Program

Mitigation Measures	Party Responsible for Implementation	Implementation Trigger/Timing	Agency Responsible for Monitoring	Monitoring Action	Monitoring Frequency	Verified Implementation
3.16: RECREATION						
There are no significant impacts to recreation.						
3.17: TRANSPORTATION						
Mitigation Measure TRA-1: The Project Applicant shall pay the project's equitable share for improvements to widen the Highland Avenue/Nebraska Avenue intersection to ensure that it operates at adequate level of service (LOS).	Project Applicant	Prior to issuance of building permits	City of Selma Planning Department	Plan review and approval	Prior to approval	Initials:_____ Date:_____
3.18: TRIBAL AND CULTURAL RESOURCES						
There are no significant impacts to tribal and cultural resources.						
3.19: UTILITIES AND SERVICE SYSTEMS						
There are no significant impacts to utilities and service systems.						
3.20: WILDFIRE						
There are no significant impacts to wildfire.						

Source: Compiled by LSA (January 2024).

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