INITIAL STUDY WITH PROPOSED MITIGATED NEGATIVE DECLARATION

NORTH 5TH STREET COMPLETE STREETS AND CONNECTIVITY PROJECT

CITY OF WEST SACRAMENTO

Prepared by

WOOD RODGERS

BUILDING RELATIONSHIPS ONE PROJECT AT A TIME

Prepared for the City of West Sacramento

November 2025

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GENERAL INFORMATION ABOUT THIS DOCUMENT

What's in this document:

The City of West Sacramento Capital Projects Department has prepared this Initial Study, which examines the potential environmental impacts of the North 5th Street Complete Streets and Connectivity Project (Project). The document explains the proposed Project details; the existing environment that could be affected by the Project; potential impacts; and proposed avoidance, minimization, and/or mitigation measures.

Project Description

5th Street is a four-lane, divided minor arterial route with existing Class II bicycle facilities and pedestrian infrastructure north of A street and south of C Street. C Street is primarily a two-lane road within the project area, which transitions from a minor arterial in the west to a major arterial route east of the 5th Street intersection. The design for the project would include a road diet along 5th Street from four lanes down to two, installation of 2,000 linear feet of Class IV buffered bicycle lanes, six intersection enhancements via restriping, sidewalk gap closures on C Street, pavement rehabilitation, and installation of an ADA ramp connection from 5th Street/A Street to the Riverwalk Trail. Tree removal is anticipated to create sufficient space for the design of the ADA ramp connecting to the Riverwalk Trail, ensuring compliance with ADA requirements. The City is also exploring options to include lighting infrastructure for the new ADA ramp.

Existing above or below ground utilities may conflict with the proposed project. The project would be designed to avoid any potential conflicts with utilities to the greatest extent feasible. If conflicts are unavoidable, existing utilities would be relocated in coordination with associated utility providers.

Construction staging and access is anticipated to occur within public right of way. Permanent right-of-way acquisition is anticipated to include three parcels, located on the northeast corner of the 5th Street and A Street intersection, to facilitate installation of the ADA ramp connecting to the Riverwalk Trail.

What you should do:

Please read the document. Hard copies of the document are available for review at:

City of West Sacramento
1110 West Capitol Avenue, 1st Floor
Sacramento, CA 95354

An electronic copy of the document is also available for review at: https://wsac.city/North5thStreet

Please submit your comments in writing no later than December 12, 2025 to:

City of West Sacramento, Capital Projects Department
ATTN: Mr. Christian Asuncion
1110 West Capitol Avenue, 1st Floor
West Sacramento, CA 95691

You may also submit your comments via e-mail to christianas@cityofwestsacramento.org. For emailed comments, please include the Project title in the subject line and include the commentor's name and mailing address.

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LIST OF ABBREVIATIONS

ACE	Area of Conservation Emphasis
ACHP	Advisory Council on Historic Preservation
ADU	Accessory Dwelling Unit
AIRFA	American Indian Religious Freedom Act
APE	Area of Potential Effects
ARPA	American Rescue Plan Act
BIOS	Biogeographic Information and Observation System
BMPs	Best Management Practices
BSA	Biological Study Area
CAA	Clean Air Act
CalNAGPRA	California Native American Graves Protection and Repatriation Act
Caltrans	California Department of Transportation
CCAP	Climate Change Action Plan
CARB	California Air Resources Board
CDC	California Department of Conservation
CDFW	California Department of Fish and Wildlife
CESA	California Endangered Species Act
CEQA	California Environmental Quality Act
CGP	Construction General Permit
CIHC	California Indian Heritage Center
CNDDB	California Natural Diversity Database
CNPS	California Native Plant Society
CRHR	California Register of Historical Resources
CWA	Clean Water Act
DCP	Dust Control Plan
District	San Joaquin Valley Unified Air Pollution Control District
DWR	California Department of Water Resources
EFH	Essential Fish Habitat
EOP	Emergency Operations Plan
FEMA	Federal Emergency Management Agency
FESA	Federal Endangered Species Act
FIP	Federal Implementation Plan
FIRM	Flood Insurance Rates Maps
FMMP	Farmland Mapping and Monitoring Program
GHG	Greenhouse Gases
IPaC	Information for Planning and Consultation
IPCC	Intergovernmental Panel on Climate Change
ITA	Indian Trust Assets
LAFCO	Local Agency Formation Commission
LOS	Level of Service
MBTA	Migratory Bird Treaty Act
MND	Mitigated Negative Declaration

MLD	Most Likely Descendent
NAAQS	National Ambient Air Quality Standards
NAHC	Native American Heritage Commission
NHPA	National Historic Preservation Act
NOAA	National Oceanic and Atmospheric Administration
NPDES	National Pollutant Discharge Elimination System
NRCS	Natural Resource Conservation Service
NRHP	National Register of Historic Places
OHP	Office of Historic Preservation
Porter-Cologne Act	Porter-Cologne Water Quality Act (Porter-Cologne Act)
RWQCB	Regional Water Quality Control Board
SIP	State Implementation Plan
SLF	Sacred Lands File
SOI	Sphere of Influence
SWPPP	Storm Water Pollution Prevention Plan
SWRCB	State Water Resources Control Board
TCL	Traditional Cultural Landscapes
TCP	Traditional Cultural Properties
TCR	Tribal Cultural Resource
TOA	Traffic Operations Analysis
UCMP	University of California Museum of Paleontology
USACE	United States Army Corps of Engineers
USEPA	United States Environmental Protection Agency
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey
WoS	Waters of the State
WOTUS	Waters of the United States
WWTP	Wastewater Treatment Plant

1.0 Introduction

1.1 Project Description

5th Street is a four-lane, divided minor arterial route with existing Class II bicycle facilities and pedestrian infrastructure north of A street and south of C Street. C Street is primarily a two-lane road within the project area, which transitions from a minor arterial in the west to a major arterial route east of the 5th Street intersection. The design for the project would include a road diet along 5th Street from four lanes down to two, installation of 2,000 linear feet of Class IV buffered bicycle lanes, six intersection enhancements via restriping, sidewalk gap closures on C Street, pavement rehabilitation, and installation of an ADA ramp connection from 5th Street/A Street to the Riverwalk Trail. Tree removal is anticipated to create sufficient space for the design of the ADA ramp connecting to the Riverwalk Trail, ensuring compliance with ADA requirements. The City is also exploring options to include lighting infrastructure for the new ADA ramp.

Existing above or below ground utilities may conflict with the proposed project. The project would be designed to avoid any potential conflicts with utilities to the greatest extent feasible. If conflicts are unavoidable, existing utilities would be relocated in coordination with associated utility providers.

Construction staging and access is anticipated to occur within public right of way. Permanent right-of-way acquisition is anticipated to include three parcels, located on the northeast corner of the 5th Street and A Street intersection, to facilitate installation of the ADA ramp connecting to the Riverwalk Trail.

1.2 Permits and Approvals Needed

The following permits, licenses, agreements, and certifications are required for Project construction:

Table 1. Permits and Approvals Needed

Agency	Permit/Approval	Status
Central Valley Flood Control Board	CVFPB Encroachment Permit	To be obtained prior to construction
U.S. Army Corps of Engineers	USACE 408 Levee Permit	To be obtained prior to construction
State Water Resources Control Board	NPDES Permit	To be obtained prior to construction

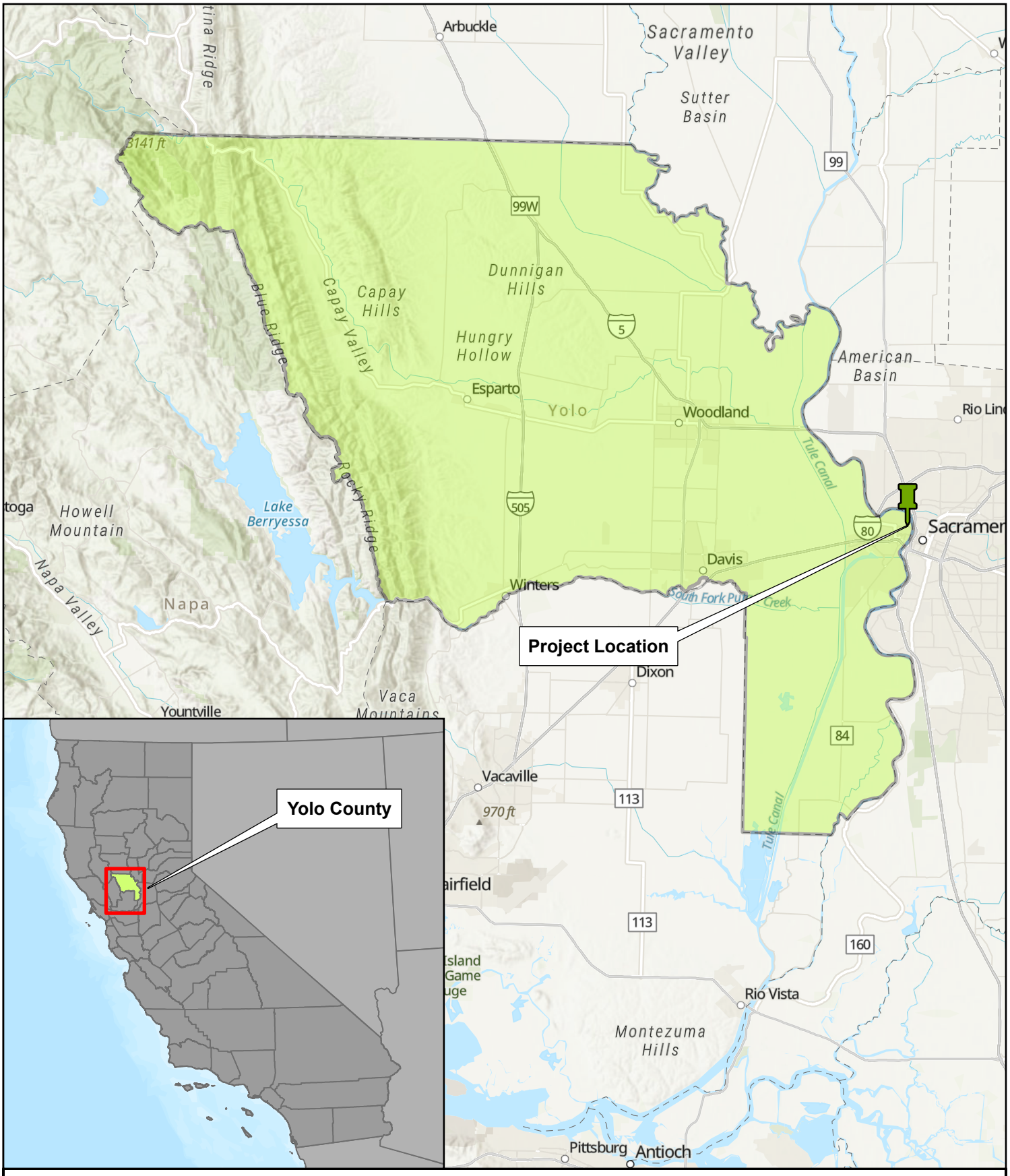


FIGURE 1

PROJECT VICINITY

NORTH 5TH STREET COMPLETE STREETS AND CONNECTIVITY PROJECT

WEST SACRAMENTO, CALIFORNIA

JULY 2025

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Miles

NORTH

WOOD RODGERS

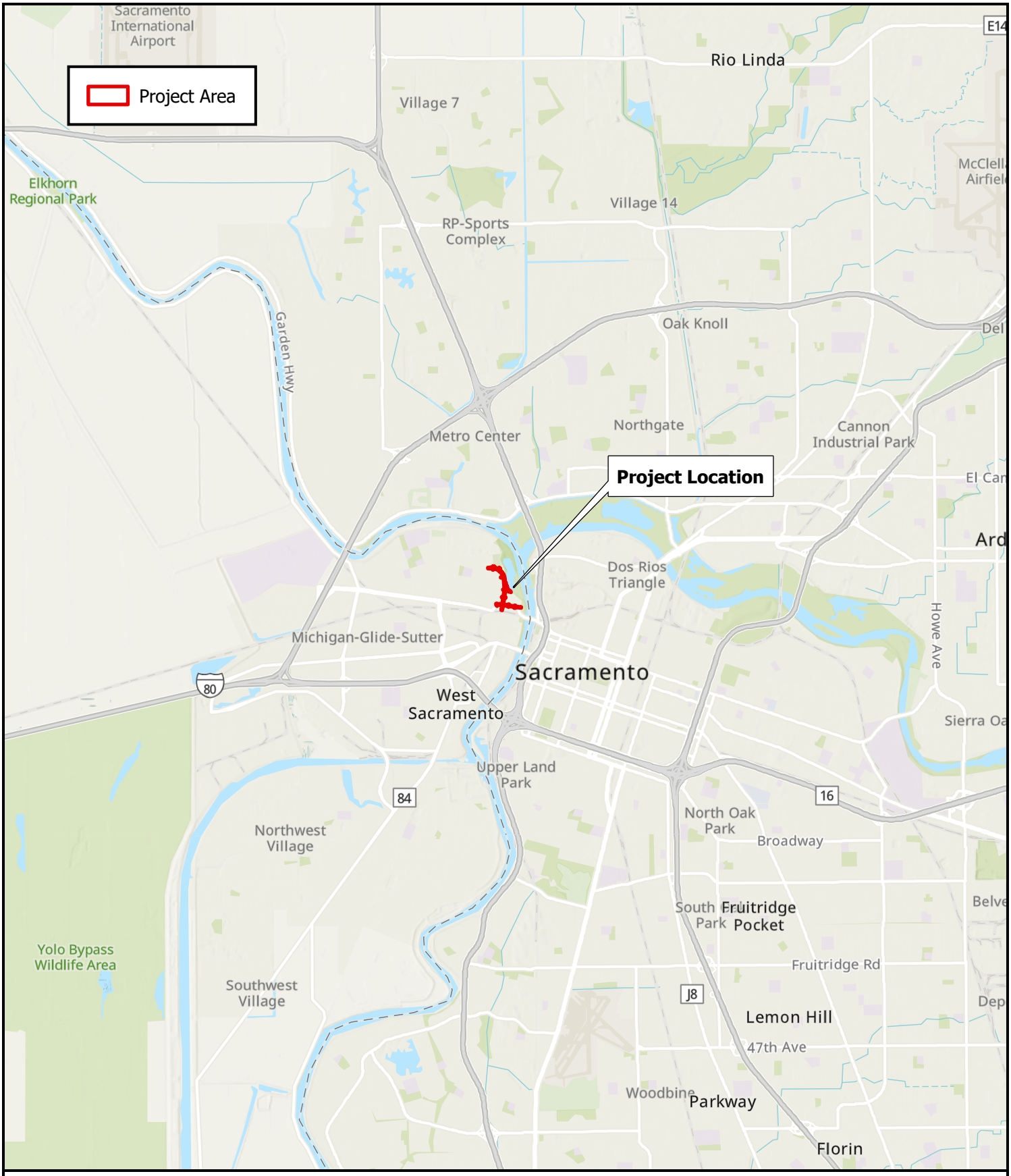


FIGURE 2

PROJECT LOCATION

NORTH 5TH STREET COMPLETE STREETS AND CONNECTIVITY PROJECT

WEST SACRAMENTO, CALIFORNIA

JULY 2025

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Miles

NORTH

WOOD RODGERS

FIGURE 3

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PROJECT FEATURES

NORTH 5TH STREET COMPLETE STREETS AND CONNECTIVITY PROJECT

WEST SACRAMENTO, CALIFORNIA

JULY 2025

Page 2

Page 3

Page 4

Page 5

Project Area

Tree Removal

Project Features

Striping - Roadway

Striping - Roadway Symbols

Striping - Biciclye Lane Symbols

Striping - Bicycle Lane

Striping - Crosswalk

Striping - Parking

Access Ramp

Sidewalk

Structure Wall

Curb and Gutter Flow

Curb Lip

Signal

Grading Limits



0 350 700 1,400

Feet

NORTH

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Feet

1 inch equals 500 feet

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FIGURE 3

PROJECT FEATURES

NORTH 5TH STREET COMPLETE STREETS AND CONNECTIVITY PROJECT

WEST SACRAMENTO, CALIFORNIA

JULY 2025

Project Area
Tree Removal

Project Features

- Striping - Roadway
- Striping - Roadway Symbols
- Striping - Biciclye Lane Symbols
- Striping - Bicycle Lane
- Striping - Crosswalk
- Striping - Parking
- Access Ramp
- Sidewalk
- Structure Wall
- Curb and Gutter Flow
- Curb Lip
- Signal
- Grading Limits



0 350 700 1,400
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0 25 50 100
Feet
1 inch equals 100 feet

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FIGURE 3

Page 3 of 5

PROJECT FEATURES

NORTH 5TH STREET COMPLETE STREETS AND CONNECTIVITY PROJECT

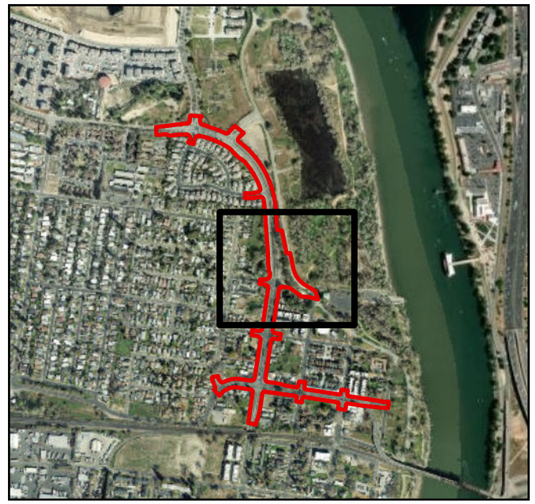
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- Project Area
- Tree Removal

Project Features

- Striping - Roadway
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- Striping - Biciclye Lane Symbols
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FIGURE 3

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PROJECT FEATURES

NORTH 5TH STREET COMPLETE STREETS AND CONNECTIVITY PROJECT

WEST SACRAMENTO, CALIFORNIA

JULY 2025

- Project Area
- Tree Removal

Project Features

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- Striping - Crosswalk
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FIGURE 3

Page 5 of 5

PROJECT FEATURES

NORTH 5TH STREET COMPLETE STREETS AND CONNECTIVITY PROJECT

WEST SACRAMENTO, CALIFORNIA

JULY 2025

Project Area
Tree Removal

Project Features

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2.0 CEQA Initial Study Environmental Checklist Form

1. **PROJECT NAME:** North 5th Street Complete Streets and Connectivity Project – City of West Sacramento

2. **LEAD AGENCY / PROJECT APPLICANT**

   City of West Sacramento
   Capital Projects Department
   1110 West Capital Avenue, 1st Floor
   West Sacramento, CA 95691

3. **LEAD AGENCY CONTACT PERSON:**

   Christian Asuncion, Associate Engineer, christianas@cityofwestsacramento.org

4. **PROJECT LOCATION:** The Project site is an existing mixed-use neighborhood within the City of West Sacramento. The Project Area is located just west of the Sacramento River, approximately 0.4 miles west of I-5, 1.2 miles north of U.S Route 50, and 2.2 miles east of I-80.

5. **GENERAL PLAN LAND USE DESIGNATION:** Neighborhood Mixed-Use (MU-NC), High-Density Residential (HR), Medium-Density Residential (MR), and Recreation and Parks (RP).

6. **ZONING:** Recreation and Parks (RP), and Mixed-use Neighborhood Commercial (MU-NC).

7. **PROJECT DESCRIPTION:** The project would include a road diet along 5th Street from four lanes down to two, installation of 2,000 linear feet of Class IV buffered bicycle lanes, six intersection enhancements via restriping, sidewalk gap closures on C Street, along with installation of an ADA ramp connection from 5th Street/A Street to the Riverwalk Trail. Tree removal is anticipated, and lighting infrastructure may be installed for the ADA ramp. See Section 1.1 for a comprehensive project description.

8. **ENVIRONMENTAL SETTING/SURROUNDING LAND USES:** The Project would occur in areas designated as "Neighborhood Mixed-Use" and "Recreation and Parks" in the Land Use Map of the City of West Sacramento General Plan (City of West Sacramento, 2016c). The Project site is surrounded by residential, mixed-use, and commercial development and recreation areas within the City of West Sacramento. The City's zoning designates the area west of the Project area as primarily residential, including Residential - Medium Density (R-2) and Residential – Multifamily (R-3); the eastern portion of the Project falls within Recreation and Parks (RP) and Mixed-Use Neighborhood Commercial (MU-NC).

   The project is located in the northeast corner of the City of West Sacramento and is largely an urban and disturbed environment. Roadways in the area are well-developed, with four travel lanes on 5th Street / Lighthouse Drive with a paved shoulder and existing sidewalk on each side. The terrain is generally flat throughout the Project site; however, terrain becomes steeper on the eastern edge of the

Project area, sloping upwards toward the top of levee. The levee present is immediately to the east followed by the Sacramento River. East of the Sacramento River is land within the City of Sacramento.

9. **OTHER REQUIRED AGENCY APPROVALS (e.g., permits, financing approval, or participation agreement.):** Central Valley Flood Control Board, U.S. Army Corps of Engineers, West Sacramento Area Flood Control Agency, and the State Water Resources Control Board

10. **CALIFORNIA NATIVE AMERICAN TRIBES CONSULTATION:**

a. Have California Native American Tribes traditionally and culturally affiliated with the Project area requested consultation pursuant to Public Resources Code Section 21080.3.1?

☒Yes **☐ No**

b. If so, is there a plan for consultation that includes, for example, the determination of significance of impacts to tribal cultural resources, procedures regarding confidentiality, etc.?

☐Yes **☒ No**

11. **PREVIOUS ENVIRONMENTAL DOCUMENTATION:** None

12. SUMMARY OF ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

The summary of environmental factors checked below would be potentially affected by this Project, involving at least one impact that is a "Potentially Significant Impact" or a "Less-Than-Significant Impact with Mitigation Incorporated" as indicated by the checklist on the following pages.

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

13. PREPARATION: This Initial Study for the subject Project was prepared by:

_____ 10/29/2025

Emma Deal, Environmental Planner — Date
Wood Rodgers, Inc.

14. DETERMINATION: (TO BE COMPLETED BY THE LEAD AGENCY)

Based on the 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 EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR of NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

A copy of the Initial Study documenting reasons to support the Mitigated Negative Declaration is on file at City of West Sacramento Capital Projects Department, 1110 West Capitol Avenue, 1st Floor, Sacramento, CA 95354.

Christian Asuncion
Associate Engineer
City of West Sacramento

Date

Evaluation of Environmental Impacts

This checklist identifies physical, biological, social, and economic factors that might be affected by the proposed project. Potential impact determinations include Potentially Significant Impact, Less Than Significant with Mitigation, Less Than Significant Impact, and No Impact. In many cases, background investigation performed in connection with a project will indicate that there are no impacts to a particular resource. A No Impact answer reflects this determination. The questions in this checklist are intended to encourage the thoughtful assessment of impacts and do not represent thresholds of significance.

1. A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).

2. All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.

3. Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.

4. "Less than Significant with Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact." The lead agency must describe the mitigation measures and briefly explain how they reduce the effect to a less than significant level (mitigation measures from "Earlier Analyses," as described in (5) below, may be cross-referenced).

5. Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. Section 15063(c)(3)(D). In this case, a brief discussion should identify the following:

    a. Earlier Analysis Used. Identify and state where they are available for review.

    b. Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.

    c. Mitigation Measures. For effects that are "Less than Significant with Mitigation Measures Incorporated," describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.

6. Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.

7. Supporting Information Sources: A source list should be attached, and other sources used, or individuals contacted should be cited in the discussion.

8. The explanation of each issue should identify:

   a. The significance criteria or threshold, if any, used to evaluate each question; and
   b. The mitigation measure identified, if any, to reduce the impact to less than significant.

9. Tribal consultation, if requested as provided in Public Resources Code Section 21080.3.1, must begin prior to release of a negative declaration, mitigated negative declaration, or environmental impact report for a project. Information provided through tribal consultation may inform the lead agency's assessment as to whether tribal cultural resources are present, and the significance of any potential impacts to such resources. Prior to beginning consultation, lead agencies may request information from the Native American Heritage Commission regarding its Sacred Lands File, per Public Resources Code sections 5097.9 and 5097.94, as well as the California Historical Resources Information System administered by the California Office of Historic Preservation.

2.1 AESTHETICS

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
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 nonurbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	☐	☐	☒	☐
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☐	☒	☐

DISCUSSION

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

Less Than Significant Impact. No designated scenic vistas or state scenic highways are located within or near to the Project site. The Sacramento River is located approximately 800 feet east of the project; however, this section of the Sacramento River is not designated as a wild and scenic river. The nearest river within the National Wild and Scenic Rivers System is the Lower American River from its source at the Sacramento River to the mainstem of the American River (Wild and Scenic Rivers 2025). All Project construction and operations would occur within existing roadways and adjacent mixed-use neighborhood commercial development zoned parcels. Two street trees planned for removal will be replaced with 15 gallon trees at a minimum, thus will not significantly change the view of the Project area. The ADA ramp will also be installed on these parcels but the visual impact will be minimal due to the surrounding commercial and residential development. The Project would not impact the river or other regional scenic resources. Therefore, the Project would have a less than significant impact on scenic vistas.

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. The Project site is not located within a State Scenic Highway designated by Caltrans' State Scenic Highway Program, nor is the site visible from a State Scenic Highway (Caltrans 2018). The nearest officially designated State Scenic Highway is Route 160 within Sacramento County, approximately 44 miles south of the Project area. Therefore, no impact to scenic resources within a State Scenic Highway would result from the development of the Project.

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

Less Than Significant Impact. The Project location and setting provide the context for determining the type of changes to the existing visual environment. The Project is located in a mixed-use area and would consist of infrastructure, safety improvements, bike lanes in the city right-of-way, and an ADA ramp within 3 undeveloped parcels. The Project would require roadwork, ramp installation, minor tree removal; and

construction would temporarily change public views for drivers, pedestrians, local residents, and other people in the vicinity of the site. Two London plane (*Platanus x acerifolia*) street trees are planned for removal and replacement with at least two 15 gallon trees which will not cause a significant visual change to the Project area. More mature trees planted on the side of the levee are expected to be removed prior to this project advancing to construction by an Army Corps levee improvement project that is expected to be implemented in the near future. Installation of the ADA ramp will have a minor visual impact due to the surrounding commercial and residential properties. Work within existing roadways would be returned to previous conditions or better post-construction conditions. Therefore, impacts to the visual character or quality of the site and its surroundings would be considered 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 Impact. The City is exploring options to include lighting infrastructure for the new ADA ramp. Any impacts to daytime or nighttime views in the area are anticipated to be less than significant.

MITIGATION MEASURES

Trees to be removed are ornamental street trees and are not considered a potentially significant impact. All street trees removed by Project activities will be replaced with, at minimum, a 15-gallon tree. The species and location of which will be set in accordance with the West Sacramento Landscape Development Guidelines, as outlined in the City's Tree Preservation Ordinance.

FINDINGS

The Project would not adversely affect any designated scenic resource or vista, nor substantially change the current visual environment. The Project may introduce new lighting into the ADA ramp, which would not impair views in the area and each street tree removed will be replaced with a 15-gallon tree at a minimum. Therefore, the Project is anticipated to have a **Less Than Significant Impact** on aesthetics in the area.

2.2 AGRICULTURE AND FOREST RESOURCES

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment project and the Forest Legacy Assessment project; and the forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board.				
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?	☐	☐	☐	☒

AFFECTED ENVIRONMENT

The land use within the Project area is designated by the California Department of Conservation (CDC), Division of Land Resource Protection, Farmland Mapping and Monitoring Program (FMMP) as "Other Land" and "Urban and Build-up Land". Other land is "land not included in any other mapping category. Common examples include low density rural developments; brush, timber, wetland, and riparian areas not suitable for livestock grazing; confined livestock, poultry or aquaculture facilities; strip mines, borrow pits; and water bodies smaller than forty acres. Vacant and nonagricultural land surrounded on all sides by urban development and greater than 40 acres is mapped as Other Land" (CDC, 2022). Urban and Build-up Land "is occupied by structures with a building density of at least 1 unit to 1.5 acres, or approximately 6 structures to a 10-acre parcel. Common examples include residential, industrial, commercial, institutional facilities, cemeteries, airports, golf courses, sanitary landfills, sewage treatment, and water control structures" (CDC, 2022). The City of West Sacramento designates the land use as "Parks and Recreation" and "Mixed-use Neighborhood Commercial." Two London plane (*Platanus x acerifolia*) street trees, located within 12.5 feet of the curb/street, will be removed and replaced with, at minimum, a 15-gallon tree per tree removed.

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 does not contain any farmland. The CDC designates the land in the Project area as "Other Land" and "Urban and Build-up Land."

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

No Impact. The Project area is zoned as "Other Land" and "Urban and Build-up Land" under the CDC. Land within the Project area is not zoned for agriculture. No Williamson Act contracted land is located within the vicinity of the Project site and the Project is not expected to conflict with existing zoning for agricultural use or Williamson Act contracts.

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. There is no forest land (as defined in Public Resources Code section 12220(g)) or timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g)) within the Project area.

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

No Impact. There is no forest land (as defined in Public Resources Code section 12220(g)) within the Project area. Therefore, no loss or conversion of forest land will occur.

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

No Impact. The Project area does not contain any land zoned for farming or forest land. Therefore, there will be no conversion of farmland to non-agricultural use or forest land to non-forest use.

MITIGATION MEASURES

No mitigation is required.

FINDINGS

According to the CDC FMMP Farmland Map (2022), the Project would occur entirely on "Other Land" and "Urban and Built-Up Land", and would not include any protected farmland resources, forest land, or timberland. Therefore, there will be **No Impact** to farmland, forest land, or timberland.

2.3 AIR QUALITY

Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
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?	☐	☐	☒	☐

REGULATORY SETTING

Federal Regulations

The Clean Air Act (CAA) as amended in 1990 is the federal law that governs air quality. Its counterpart in California is the California Clean Air Act of 1988. These laws set standards for the quantity of pollutants that can be found in the air. At the federal level, these standards are called National Ambient Air Quality Standards (NAAQS). Standards have been established for six criteria pollutants that have been linked to potential health concerns. These criteria pollutants are carbon monoxide (CO), nitrogen dioxide (NO_2), ozone (O_3), particulate matter (PM), lead (Pb), and sulfur dioxide (SO_2).

State Regulations

Responsibility for achieving California's air quality standards, which are more stringent than federal standards, is placed on the California Air Resources Board (CARB) and local air districts, and these standards are to be achieved through district-level air quality management plans that will be incorporated into the State Implementation Plan (SIP). In California, the United States Environmental Protection Agency (USEPA) has delegated authority to prepare SIPs to the CARB, which, in turn, has delegated that authority to individual air districts.

The CARB has traditionally established state air quality standards while maintaining oversight authority in air quality planning, developing programs for reducing emissions from motor vehicles, developing air emission inventories, collecting air quality and meteorological data, and approving state implementation plans.

The responsibilities of air districts include overseeing stationary source emissions, approving permits, maintaining emissions inventories, maintaining air quality stations, overseeing agricultural burning permits, and reviewing air quality-related sections of the environmental documents required by CEQA.

AFFECTED ENVIRONMENT

The Project, located within the City of West Sacramento, is situated in the Sacramento Federal Ozone Nonattainment Area (SFNA) within the Sacramento Valley Air Basin and is subject to the Yolo-Solano Air Quality Management District (District) requirements and regulations.

DISCUSSION

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

No Impact. The Project is consistent with the site land use and zoning; construction of the Project would not conflict with or obstruct implementation of any regional air quality plan, SIP, or Federal Implementation Plan (FIP). Additionally, any potential air quality impacts would be temporary and intermittent during construction and would cease upon completion of the Project. Therefore, no impact would occur.

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

Less Than Significant Impact. The CARB is required to designate areas of the state as attainment, non-attainment, or unclassified for any state standard. An "attainment" designation for an area signifies that pollutant concentrations do not violate the standard for that pollutant in that area. A "non-attainment" designation indicates that a pollutant concentration violated the standard at least once within a calendar year. The air quality attainment status of Yolo County is shown below in **Table 2**.

Table 2. NAAQS and CAAQS Attainment Status for Yolo County

Pollutant	Designation/Classification	
	Federal Standards	**State Standards**
Ozone – 8-Hour	Nonattainment	Nonattainment - Transitional
PM_{10}	Unclassified	Nonattainment
$PM_{2.5}$	Nonattainment	Unclassified
Carbon Monoxide	Unclassified/Attainment	Attainment
Nitrogen Dioxide	Unclassified/Attainment	Attainment
Sulfur Dioxide	Unclassified/Attainment	Attainment
Sulfates	No Federal Standard	Attainment
Lead	Unclassified/Attainment	Attainment
Hydrogen Sulfide	No Federal Standard	Unclassified
Visibility Reducing Particles	No Federal Standard	Unclassified
Sources: CARB		

Operational Emissions

The completed Project would have no operational emissions. Therefore, no impact relating to air quality would occur due to operation of the completed Project. The Project is exempt from the requirement that a conformity decision be made based on 40 CFR 93.126, as the Project consists of "pavement surfacing and/or rehabilitation", "lighting improvements", and "bicycle and pedestrian facilities".

Construction Emissions

Construction activities associated with the Project would result in temporary incremental increases in air pollutants (such as ozone precursors and particulate matter) due to the operation of gas-powered equipment and earth-moving activities. However, as the Project does not have the potential for operational emissions and construction emissions would be short-term, emissions resulting from construction are not anticipated to exceed the Air Quality Thresholds of Significance for criteria pollutants outlined by the District, which are evaluated on a rolling 12-month period.

According to the District's Guidance for Assessing and Mitigating Air Quality Impacts (2007), Measure 5.2.4, the following are the district rules:

- Visible emissions from stationary diesel-powered equipment are not allowed to exceed 40 percent opacity for more than three minutes in any one-hour, as regulated under District Rule 2.3, Ringelmann Chart.
- Dust emissions must be prevented from creating a nuisance to surrounding properties as regulated under District Rule 2.5, Nuisance.
- District Rule 2.9, Open Burning, Certain Materials prohibits outside fires for the purpose of disposing petroleum waste, demolition debris, construction debris, tires or other rubber 17 materials, materials containing tar, or for metal salvage or burning of vehicle bodies. Any open burning requires approval and issuance of a burn permit from the District and shall be performed in accordance with District Rule 2.8, Open Burning, General.
- Portable equipment greater than 50 horsepower, other than vehicles, must be registered with either the ARB Portable Equipment Registration Program (PERP) (http://www.arb.ca.gov/perp/perp.htm) or with the District.
- Architectural coatings and solvents used at the Project shall be compliant with District Rule 2.14, Architectural Coatings.
- Cutback and emulsified asphalt application shall be conducted in accordance with District Rule 2.28, Cutback and Emulsified Asphalt Paving Materials.
- In the event that demolition, renovation or removal of asbestos-containing materials is involved, District Rule 9.9 requires District consultation and permit prior to commencing demolition or renovation work.
- All stationary equipment, other than internal combustion engines less than 50 horsepower, emitting air pollutants controlled under District rules and regulations require an Authority to Construct (ATC) and Permit to Operate (PTO) from the District.
- District Rule 2.40 Wood Burning Appliances prohibits installation of any new traditional "open hearth" type fireplaces.

With incorporation of District air quality BMPs (including construction phase BMPs), and implementation of an approved DCP, Project impacts related to air quality would be considered less than significant in accordance with District Air Quality Guidelines and performance standards.

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

Less Than Significant Impact. Sensitive receptors are defined by the District as people who have an increased sensitivity to air pollution or environmental contaminants. Sensitive receptor locations include schools, parks, playgrounds, day care centers, nursing homes, hospitals, and residential dwelling units. The Project would occur in area surrounded by residential dwellings and within 0.25 miles from Elkhorn Village School. The nearest sensitive receptors are located directly adjacent to the existing roadways; however, the proposed Project would not generate any substantial pollutant concentrations and with the implementation of BMPs, temporary incremental increases of air pollutants would be minimized and reduced in accordance with District rules and regulations. Therefore, the Project would not expose sensitive receptors to substantial pollutant concentrations, and the Project would have a less than significant impact.

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. While offensive odors rarely cause physical harm, they can be unpleasant, leading to considerable annoyance and distress among the public, and can generate citizen complaints to

local governments and air districts. Project-related odor emissions would be limited to the times construction-related activities would require machine equipment. Emissions from equipment may be evident in the immediate surrounding area during these times; however, construction activities would be short-term and would quickly disperse after equipment utilization. Therefore, due to the short-term nature of the construction activities, impacts associated with development of the Project are considered less than significant.

BEST MANAGEMENT PRACTICES

Prior to construction, the Project proponent or Project contractor shall obtain a District approved Authority to Construct and a Permit to Operate, as well as an approved DCP, and shall implement all District construction phase BMPs where applicable.

MITIGATION MEASURES

No mitigation is required.

FINDINGS

The Project would not cause operational long-term air quality impacts; however, the Project would cause temporary incremental emissions from construction. With the implementation of District approved construction BMPs, the Project would comply with all federal, state, and District regulations, and would result in a **Less Than Significant Impact** relating to air quality.

2.4 BIOLOGICAL RESOURCES

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
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, U.S. Fish and Wildlife Service, or NOAA Fisheries?	☐	☒	☐	☐
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 US 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?	☐	☐	☒	☐

REGULATORY SETTING

This section describes the federal, state, and local plans, policies, and laws that are relevant to biological resources within the Biological Study Area (BSA). Applicable permits and approvals that would be required before construction of the Project are provided in Section 1.5.

Federal Regulations

Federal Endangered Species Act
The Federal Endangered Species Act (FESA) of 1973 (16 U.S.C. section 1531 et seq.) provides for the conservation of endangered and threatened species listed pursuant to Section 4 of the Act (16 U.S.C. section 1533) and the ecosystems upon which they depend. These species and resources have been identified by the United States Fish and Wildlife Services (USFWS) or the National Marine Fisheries Service.

Clean Water Act
The Clean Water Act (CWA) was enacted as an amendment to the Federal Water Pollutant Control Act of 1972, which outlined the basic structure for regulating discharges of pollutants to waters of the United States (WOTUS). The CWA serves as the primary federal law protecting the quality of the nation's surface waters, including lakes, rivers, and coastal wetlands. The CWA empowers the USEPA to set national water quality standards and effluent limitations, and it includes programs addressing both point-source and non-point-source pollution. Point-source pollution originates or enters surface waters at a single, discrete location, such as an outfall structure or an excavation or construction site. Non-point-source pollution originates over a broader area and includes urban contaminants in stormwater runoff and sediment loading from upstream areas. The CWA operates on the principle that all discharges into the nation's waters are unlawful unless they are specifically authorized by a permit. Permit review is CWA's primary regulatory tool.

The USACE regulates discharges of dredged or fill material into WOTUS. These waters include wetlands and non-wetland bodies of water that meet specific criteria, including a "relatively permanent" waters and "continuous surface connection" to other defined WOTUS. Under the current definition of WOTUS, Section 404 of the CWA is founded on a connection between the water body in question and other WOTUS. This connection must be direct (through a tributary system linking a stream channel with traditional navigable waters used in interstate or foreign commerce), or in the context of wetlands, the wetland in question must have a direct surface connection to the existing WOTUS, where there is no clear demarcation between the existing WOTUS and the wetland.

The Regional Water Quality Control Board (RWQCB) has jurisdiction under Section 401 of the CWA and regulates any activity that may result in a discharge to surface waters. Typically, the areas subject to jurisdiction of the RWQCB coincide with those of the USACE (i.e., WOTUS, including any wetlands). The RWQCB also asserts authority over "waters of the State" (WoS) under waste discharge requirements pursuant to the Porter-Cologne Water Quality Control Act.

State Regulations

California Environmental Quality Act
California State law created the CEQA to inform governmental decision-makers and the public about the potential, significant environmental effects of proposed activities and to work to reduce these negative environmental impacts.

California Endangered Species Act
The California Endangered Species Act (CESA) (California Fish and Game (CFG) Code Section 2050 et seq.) requires the California Department of Fish and Wildlife (CDFW) to establish a list of endangered and threatened species (Section 2070) and to prohibit the incidental taking of any such listed species except as allowed by the Act (Sections 2080-2089). In addition, CESA prohibits "take" of candidate species (those species under consideration for listing).

The CESA also requires the CDFW to comply with CEQA (Pub. Resources Code Section 21000 et seq.) when evaluating incidental take permit applications (CFG Code Section 2081(b) and California Code Regulations, Title 14, section 783.0 et seq.), and the potential impacts that the project or activity for which the application was submitted may have on the environment. The CDFW's CEQA obligations include consultation with other public agencies that have jurisdiction over the project or activity [California Code Regulations, Title 14, Section 783.5(d)(3)]. The CDFW cannot issue an incidental take permit if issuance would jeopardize the continued existence of the species [CFG Code Section 2081(c); California Code Regulations, Title 14, Section 783.4(b)].

Natural Community Conservation Planning Act
The Natural Community Conservation Planning Act (NCCP) of 1991 was intended to provide an alternative and/or a collaborative approach to FESA and CESA. It was designed to represent a new approach to conservation. Instead of focusing on individual species (e.g., FESA/CESA), the NCCA focuses on protecting intact ecosystems across an entire region or landscape. NCCP programs have become increasingly common in the development of regional plans that combine the habitat conservation plan (HCP) and NCCP processes.

Section 3503 and 3503.5: Bird and Raptors
CFG Code Section 3503 prohibits the destruction of bird nests and Section 3503.5 prohibits the killing of raptor species and destruction of raptor nests. Trees and shrubs are present in and adjacent to the BSA and could contain nesting sites.

Section 3513: Migratory Birds
CFG Code Section 3513 prohibits the take or possession of any migratory non-game bird as designated in the Migratory Bird Treaty Act (MBTA) or any part of such migratory non-game bird except as provided by the rules and regulations adopted by the Secretary of the Interior under provisions of the MBTA.

Local Regulations

City of West Sacramento General Plan
The City's 2035 General plan (City of West Sacramento 2016c) was first adopted in 2016 and has been amended as necessary to comply with the Governor's Office of Planning and Research (OPR) Guidelines. The Project has been designed to be consistent with the City's General Plan. The following Natural and Cultural Resources Element goals provide a baseline of protection of natural resources throughout the City: protect sensitive native vegetation and wildlife communities and habitat in West Sacramento, protect existing mature trees and encourage the development of a healthy urban forest, and preserve and protect water quality in the City's natural water bodies and drainage systems and the area's groundwater basin.

Yolo County General Plan
The Yolo County 2030 Countywide General Plan (County 2009) contains numerous policies that support habitat conservation and open space preservation. They are found in all elements of the general plan and work together as a framework for extraordinary landscape protections.

Specifically, the Conservation and Open Space Element focuses on balanced management of Yolo County's multiple natural and cultural resources. The goals and policies speak to a connected and accessible open space system, with communities separated by agriculture and natural spaces linked by a network of trails, and where open spaces complement other land areas in a way that benefits both natural resources and the community.

Yolo Habitat Conservation Plan/Natural Communities Conservation Plan
The Yolo Habitat Conservation Plan/Natural Communities Conservation Plan (Yolo HCP/NCCP) is a comprehensive, county-wide plan to provide FESA/CESA permits and associated mitigation for planned covered activities including infrastructure (e.g., roads and bridges), development (e.g., agricultural processing facilities, housing, and commercial buildings), and operation and maintenance activities. The Yolo HCP/NCCP provides for the conservation of 12 sensitive species and the natural communities and agricultural land on which they depend. The Yolo HCP/NCCP strikes a sensible balance between natural resource conservation and economic growth by improving habitat conservation efforts in Yolo County; encouraging sustainable economic activity; and maintaining and enhancing agricultural production.

The Yolo Habitat Conservancy (Conservancy) is a joint powers agency that includes Yolo County and the incorporated cities of Davis, West Sacramento, Winters, and Woodland. The Conservancy, as well as individual member agencies (defined as Yolo County and the four participating cities listed above), developed the Yolo HCP/NCCP. The Yolo HCP/NCCP provides the basis for issuance of long-term permits under the FESA and California Natural Community Conservation Planning Act (NCCPA) that cover an array of public and private activities, including activities that are essential to the ongoing viability of Yolo County's agricultural and urban economies (Conservancy 2021).

AFFECTED ENVIRONMENT

This section describes the natural resources present within and immediately surrounding the Project area designated as the Project BSA. The Project BSA was defined as the area necessary for all Project activities, plus an additional 100-foot buffer. The Project BSA encompasses approximately 40.81 acres.

This section provides the following: 1) discussion on the special-status species and sensitive habitats that have been identified or are potentially occurring in the Project BSA; 2) an analysis of the impacts that could occur to biological resources due to implementation of the Project; and 3) appropriate avoidance and minimization and/or mitigation measures to reduce or avoid significant impacts. The analysis of biological resources presented in this section is based on a review of the current Project description, literature research, biological field survey, and aquatic resources delineation conducted by a Wood Rodgers qualified biologist.

The Project would occur in the City of West Sacramento in the California Dry Steppe Province ecological subregion, Great Valley Section, and ecological subsection 262Ai (Yolo-American Basins) of California (Cleland et al. 2007). The Project area is located within the USGS *Sacramento West* 7.5-Minute Quadrangle.

Physical Conditions

Soils
The United States Department of Agriculture (USDA) Natural Resource Conservation Service (NRCS 2024) identifies soils within the BSA as:

- Lang sandy loam
- Lang sandy loam, deep

Hydrological Resources
The Project area contains no hydrological features; however, the Sacramento River is adjacent to the eastern boundary of the BSA. The Sacramento River is the largest river in Northern California, flowing southward from its origin in the Klamath Mountains for approximately 400 miles to the Sacramento-San Joaquin River Delta and the San Francisco Bay. The Sacramento River watershed is the largest in California, encompassing 19 counties, primarily within the Sacramento Valley agricultural region. The Sacramento River is a regulated stream under the jurisdiction of the Central Valley Flood Protection Board. However, the Project would not impact or encroach upon the river; therefore, no encroachment permit would be required.

Vegetation Communities
The BSA is dominated by developed and barren land cover with the vegetated portions of the BSA including valley foothill riparian habitats. Land use within the Project vicinity is designated by the City of West Sacramento General Plan (2016c) Land Use Element as "Neighborhood Mixed-Use" (MU-NC), "High-Density Residential" (HR), "Medium-Density Residential" (MR), and "Recreation and Parks" (RP). Mapped vegetation communities within the BSA are shown in **Figure 4**.

Developed
Developed lands are defined by the Yolo HCP/NCCP as being dominated by pavement and building structures. Vegetation in developed areas typically consists of ornamental plantings, such as tree groves, street strips, shade trees, lawns, and shrubs supported by irrigation. Wildlife habitat quality is dependent on specific site conditions, although it is generally considered to be limited. However, urban environments can provide suitable habitat for common birds and mammals. Additionally, large trees used in urban settings can provide nesting habitat for raptors, including white-tailed kite and Swainson's hawk. The BSA consists predominantly of urban lands including the paved roadway of North 5th Street and surrounding sidewalks and residences.

Barren
Barren habitats are man-made infrastructures and are defined by the absence of any vegetation. Any habitat with <2% total vegetation cover by herbaceous, desert, or non-wildland species and <10% cover by tree or

shrub species would be considered barren habitat (CDFW 1988). Barren habitats within the BSA consists of the vacant lots and the top of the levee east of the roadway.

Valley Foothill Riparian

The valley foothill riparian natural community is defined by the Yolo HCP/NCCP as a multi-layered woodland plant community with a tree overstory and a dense, diverse shrub layer comprised of blue elderberry, California rose, poison oak, and California blackberry. The main constituent tree species include cottonwood, ash, valley oak, willow, and alder, and invasive species, such as giant reed and salt cedar, may be present. The valley foothill riparian natural community is typically associated with streams and creeks with low-velocity flows, floodplains, and low topography. Within the BSA, valley foothill riparian habitats are present adjacent to the Sacramento River, with large stands of valley oak and Fremont cottonwood present on the water side of the levee. The Yolo Conservancy indicates that this natural community is extensive along the Sacramento River, and that the Fremont cottonwood-valley oak-willow riparian association occurs most frequently along major watercourses.

FIGURE 4

Page 1 of 3

VEGETATON COMMUNITIES

NORTH 5TH STREET COMPLETE STREETS AND CONNECTIVITY PROJECT
WEST SACRAMENTO, CALIFORNIA
JULY 2025

Project Area
BSA

Vegetation Communities

Barren
Developed
Valley Foothill Riparian



0 350 700 1,400
Feet

NORTH

0 125 250 500
Feet
1 inch equals 500 feet

NORTH

WOOD RODGERS

Fountain Drive
Lighthouse Drive
Page 2
Watercolor Lane
Cummins Way
6th Street
Douglas Street
Andrew Street
A Street
Riverwalk Trail
B Street
Page 3
Sacramento Avenue
C Street
5th Street
4th Street
I Street Bridge

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FIGURE 4

Page 2 of 3

VEGETATON COMMUNITIES

NORTH 5TH STREET COMPLETE STREETS
AND CONNECTIVITY PROJECT
WEST SACRAMENTO, CALIFORNIA
JULY 2025

Project Area
BSA

Vegetation Communities

Barren
Developed
Valley Foothill Riparian



0 350 700 1,400
Feet

NORTH

0 50 100 200
Feet
1 inch equals 200 feet

NORTH

WOOD RODGERS

Fountain Drive
Lighthouse Drive
Watercolor Lane
Cummins Way
6th Street
Matchline-See Page 3

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Matchline-See Page 2

A Street

Andrew Street

B Street

4th Street

Riverwalk Trail

C Street

5th Street

FIGURE 4

Page 3 of 3

VEGETATON COMMUNITIES

NORTH 5TH STREET COMPLETE STREETS
AND CONNECTIVITY PROJECT
WEST SACRAMENTO, CALIFORNIA
JULY 2025

Project Area

BSA

Vegetation Communities

Barren

Developed

Valley Foothill Riparian



0 350 700 1,400
Feet

NORTH

0 50 100 200
Feet
1 inch equals 200 feet

NORTH

WOOD RODGERS

DISCUSSION

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 Wildlife, U.S. Fish and Wildlife Service, or NOAA Fisheries?

Less Than Significant with Mitigation. Prior to field work, literature research was conducted through the USFWS Information for Planning and Consultation (IPaC) official species list generator, National Oceanic and Atmospheric Administration (NOAA) National Marine Fisheries Service (NMFS) Protected Resources Application, the CDFW California Natural Diversity Database (CNDDB), and the California Native Plant Society (CNPS) Electronic Inventory of Rare and Endangered Plants. Literature and database searches (see Appendix A) were completed to identify habitats and special-status species that have the potential to occur in the Project vicinity.

Field surveys, habitat assessments, and analyses of special status species occurrences were conducted to determine the potential for species to occur within the BSA. Field surveys were conducted on March 13, 2025, by Wood Rodgers biologists Andrew Dellas and Eralise Spokely. Field surveys included walking meandering transects through the entire BSA, observing vegetation communities, compiling notes on observed flora and fauna, and assessing the potential for existing habitat to support sensitive plants and wildlife.

The potential for each species to occur within the BSA was determined by analyzing the habitat requirements for each species, comparing them to available habitat within the BSA, and analyzing the regional occurrences of the species. No special-status species were observed during the field surveys; however, based on the analyses, it was determined that special status wildlife species - Cooper's hawk (*Accipiter cooperii*), purple martin *(Progne subis*), Swainson's hawk (*Buteo swainsoni*), and white-tailed kite (*Elanus leucurus*) - have the potential to occur within the BSA. No special status plant species were determined to have the potential to occur within the BSA. **Table 3** contains a comprehensive list of all regional special status species as listed by USFWS, NMFS, CDFW, and CNPS, as well as rationale for the potential for occurrence.

The following is a discussion of Cooper's hawk, purple martin, Swainson's hawk, and white-tailed kite, potential Project effects, and any avoidance, minimization and/or mitigation measures required to reduce Project impacts to a less than significant level.

Discussion of Cooper's Hawk

<u>Cooper's Hawk</u>
Cooper's hawk (*Accipiter cooperii*) is not a state or federally listed species but is a CDFW Watch List Species (WL). Cooper's hawks are a relatively common, year-round resident throughout California and much of the conterminous United States (Audubon 2025). The species inhabits forest and woodland habitats and prefers open, interrupted, or marginal woodlands as well as those with edge habitat nearby (Polite 1988-1990a; Audubon 2025). Cooper's hawks' nest in either coniferous or deciduous trees, in tree crotches up to 80 feet above the ground. Their diet mainly consists of other birds, as they are bird hunting specialists, but they are also known to feed on small mammals, and may consume reptiles, amphibians, or insects (Laws, 2007; Polite 1988-1990a; Audubon 2025). The species has recovered greatly from widespread use of DDT and other organophosphate pesticides in the mid-20th century; primary threats include habitat loss and degradation, and urban development (Audubon 2025; Cornell 2025, The Peregrine Fund 2021). Most Cooper hawk deaths in urban areas are due to collisions with human-made objects, such as windows and cars (Cornell 2025).

Survey Results for Cooper's Hawk
No Cooper's hawk individuals or nest sites were observed during the March 2025 biological surveys. The BSA does contain potentially suitable large-diameter nesting trees in proximity to the Sacramento River, and portions of the BSA may provide suitable foraging habitat. The nearest recent (2008) CNDDB occurrence is located approximately 2 miles from the BSA. In addition, there are multiple (2019, 2020) ebird.org occurrences adjacent to the BSA.

Project Effects to Cooper's Hawk
No current or historic nesting locations are known to occur within the Project impact area. Therefore, the Project does not anticipate direct impacts to Cooper's hawk nesting sites or known Cooper's hawk nesting trees. To ensure no Cooper's hawk nesting sites are directly impacted by vegetation removal necessary for construction of the Project, measure **BIO-1** would be incorporated into the Project design.

Discussion of Purple Martin

Purple Martin

Purple martin (*Progne subis*) is not a state or federally listed species but is a CDFW Species of Special Concern (SSC). Purple martin is relatively rare in California but is more common in the eastern and southeastern United States. The species inhabits open areas in valley foothill and montane hardwood, hardwood-conifer, and riparian communities, as well as coniferous habitats such as closed-cone pine-cypress, ponderosa pine, Douglas-fir, and redwood. Purple martin nests are typically found in tall, old trees near a body of water, or in isolated snags in open forest or woodland habitats. They also nest in woodpecker cavities or in human-made structures, including in nesting boxes, under bridges, or in culverts. Purple martins are active year-round, arriving in California in late March and departing in late September. The primary threats to the species include riparian habitat loss, removal of snags, and nest cavity competition from European starlings and house sparrows (Airola & Williams 2008; PMCA 2025).

Survey Results for Purple Martin
No purple martin individuals or nest cavities were observed during the March 2025 biological surveys. The BSA does contain potentially suitable tall nesting trees in proximity to the Sacramento River, as well as suitable foraging habitat in riparian zones. The nearest recent (2007) CNDDB occurrence is located approximately 6.4 miles northeast. However, there are numerous presumed extant historical (2003) occurrences in Sacramento, the closest of which is located approximately 0.3 miles from the BSA, just across the Sacramento River. In addition, there are numerous recent (2021, 2018) ebird.org occurrences of the species adjacent to the BSA, on both sides of the Sacramento River.

Project Effects to Purple Martin
No current or historic nesting locations are known to occur within the Project impact area. Therefore, the Project does not anticipate direct impacts to purple martin nesting sites or nesting trees. To ensure no purple martin nesting sites are directly impacted by vegetation removal necessary for construction of the Project, measure **BIO-1** would be incorporated into the Project design.

Discussion of Swainson's Hawk

Swainson's Hawk
Swainson's hawk (*Buteo swainsoni*) is listed as threatened under the California Endangered Species Act. Swainson's hawks migrate annually from wintering areas in South America to breeding locations in northwestern Canada, the western U.S., and Mexico. In California, Swainson's hawks nest throughout the Sacramento and San Joaquin Valleys in large trees in riparian habitats and in isolated trees in or adjacent to agricultural fields. The breeding season extends from late March through late August, with peak activity

from late May through July. Swainson's hawks forage in large, open agricultural habitats, including alfalfa and hay fields (CDFW 1994). The breeding population in California has declined by an estimated 91% since 1900; this decline is attributed to the loss of riparian nesting habitats and the conversion of native grassland and woodland habitats to agriculture and urban development (CDFW 1994).

Survey Results for Swainson's Hawk

No Swainson's hawk individuals or nest sites were observed during the March 2025 biological surveys. The BSA does contain potentially suitable large-diameter nesting trees in proximity to the Sacramento River, and portions of the BSA may provide suitable foraging habitat. The nearest recent (2007) CNDDB occurrence is located approximately 600 feet from the BSA. In addition, there are numerous (2016, 2020, 2022, 2023) ebird.org occurrences adjacent to the BSA.

Project Effects to Swainson's Hawk

No current or historic nesting locations are known to occur within the Project impact area. Therefore, the Project does not anticipate direct impacts to Swainson's hawk nesting sites or known Swainson's hawk nesting trees. To ensure no Swainson's hawk nesting sites are directly impacted by vegetation removal necessary for construction of the Project, measure **BIO-2** would be incorporated into the Project design.

Project construction would require large equipment and the presence of the human form, which may have the potential to disturb any nesting Swainson's hawk within the vicinity of the Project. To prevent disturbance of any nesting Swainson's hawk, measure **BIO-2** would provide species specific pre-construction nesting surveys consistent with survey methods recommended by the Swainson's Hawk Technical Advisory Committee within ¼ mile of the Project. Therefore, no disturbance to nesting Swainson's hawk are anticipated. With the implementation of Project avoidance and minimization measures, and use of Standard BMPs, the Project would not result in take of Swainson's hawk. With the avoidance of take, the Project does not anticipate that a CDFW Section 2081 Incidental Take Permit (ITP) for Swainson's hawk would be necessary.

Discussion of White-Tailed Kite

White-Tailed Kite

White-tailed kite (Elanus leucurus) is not a state or federally listed species but is a CDFW Fully Protected Species (FP) and a Yolo HCP/NCCP Covered Species. White-tailed kites inhabit valley lowlands with undisturbed open grasslands, meadows, farmlands, and emergent wetlands. Groves of dense, broad-leaved deciduous trees, such as oak or willow, are typical for nesting (Polite 1988-1990c). The species breeds from February to October, peaking May through August (Polite 1988-1990c). White-tailed kites are nonmigratory and can be found roosting during the non-breeding season in groups, sometimes exceeding 100 individuals (Cornell 2025). The species feeds predominantly on small mammals, as well as small birds, reptiles, and insects, and may travel up to 1.9 square miles from a central perch to forage. The total breeding population declined by 36 percent between 1970 and 2014, primarily due to habitat loss due to agriculture and residential development, shooting, egg collection. Conservation efforts by CDFW have allowed selected agricultural lands and pastures to return to grasslands, which now support 10 times the quantity of raptors, including white-tailed kite, from when the program began (Cornell 2025).

White-Tailed Kite Survey Results

No white-tailed kite individuals or nest sites were observed during the March 2025 biological surveys. The BSA contains suitable nesting habitat in tall, dense oak stands adjacent to the Sacramento River. Additionally, suitable foraging habitats are present in rice fields, parks, and other open areas within 1.9 square miles of the BSA. The nearest recent (2017) CNDDB occurrence is located approximately 2 miles south of the BSA. However, there are numerous recent (2021) ebird.org occurrences of the species across the Sacramento River in Discovery Park, approximately 0.46 miles northeast of North 5th Street. Although

no existing nests were observed, the species has the potential to nest within the BSA, given the proximity of recent occurrences and the presence of suitable nesting conditions.

Project Effects to White-Tailed Kite

No current or historic nesting locations are known to occur within the project impact area. Therefore, the project does not anticipate direct impacts or take of white-tailed kite or white-tailed kite nesting sites. To ensure no white-tailed kite are directly impacted by vegetation removal necessary for construction of the project, measure **BIO-2** would be incorporated into the project design.

Migratory Birds and Raptors

Project Effects to Migratory Birds

Native birds, protected under the MBTA and similar provisions under CFG Code, have the potential to nest within the project area. To avoid and minimize potential impacts to migratory birds, measure **BIO-1** shall be implemented as part of the project. Therefore, no take of migratory birds or raptors protected under the MBTA and CFG Code is anticipated.

With the incorporation of avoidance, minimization, and/or mitigation measures, 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. Project impacts would be considered less than significant with mitigation.

Table 3. Species Potential Determinations

Common Name	Species Name	Status	General Habitat Description	Habitat Present	Effects Determination	Potential for Occurrence/Rationale
Amphibian Species						
California Tiger Salamander – central California DPS	*Ambystoma californiense pop. 1*	FT, ST	Inhabits annual grasslands, oak savanna, mixed woodland edges, and lower elevation coniferous forest. Requires underground refuges, especially ground squirrel burrows, vernal pools, or other seasonal water sources for breeding. Breeding occurs December through February in fish-free ephemeral ponds.	A	No Effect, No Take	**Presumed Absent:** The BSA is primarily urban and disturbed and does not provide seasonal water sources required by the species for reproduction. There are no recent (<20 years) or historical CNDDB occurrences in the region. The species is presumed absent based on a lack of suitable habitat and lack of regional occurrences.
Western spadefoot	*Spea hammondii*	FC	Inhabits open areas with sandy or gravelly soils within mixed woodlands, grasslands, coastal sage scrub, chaparral, sandy washes, lowlands, river floodplains, alluvial fans, playas, alkali flats, foothills, and mountains. Burrows underground for most of the year and is active above ground during rainfall. Requires vernal, shallow, temporary pools formed by heavy winter rains for reproduction. These pools must be free of bullfrogs, fish, and crayfish. Breeds from late winter to March.	A	No Effect	**Presumed Absent:** The BSA is primarily urban and disturbed and does not provide seasonal water sources required by the species for reproduction. There are no recent (<20 years) or historical CNDDB occurrences in the region. The species is presumed absent based on a lack of suitable habitat and lack of regional occurrences.
Bird Species						
Bank swallow	*Riparia riparia*	ST	A migratory colonial nester inhabiting lowland and riparian habitats west of the desert during spring - fall. Majority of current	A	No Take	**Presumed Absent:** The BSA does not contain cliffs or vertical banks this species needs for nesting. There are no recent (<20

Common Name	Species Name	Status	General Habitat Description	Habitat Present	Effects Determination	Potential for Occurrence/Rationale
			breeding populations occur along the Sacramento and Feather rivers in the north Central Valley. Requires vertical banks or cliffs with fine textured/sandy soils for nesting (tunnel and burrow excavations). Nests exclusively near streams, rivers, lakes or the ocean, often in large colonies. These colonies are located near large bodies of water so that there is ample room for vertical flying. Breeds May-July.			years) CNDDB occurrences in the region. There is presumed extant historical (1986) occurrence located approximately 3.50 miles east, along the American River. The species is presumed absent based on the lack of suitable habitat, lack of recent regional occurrences, and distance to historical occurrences.
Burrowing owl	*Athene cunicularia*	SSC	Species inhabits arid, open areas with sparse vegetation cover such as deserts, abandoned agricultural areas, grasslands, and disturbed open habitats. Requires friable soils for burrow construction (Below 5,300 feet).	A	No Take	**Presumed Absent:** The BSA does not contain potentially suitable open habitat for the species. No suitable ground squirrel burrows or other suitable nesting habitats were observed during the biological surveys. Additionally, no white wash or pellets were identified in any culverts within the project area. The nearest recent (2007) CNDDB occurrence is located approximately 2.7 miles north of the BSA. The species is presumed absent due to the lack of suitable habitat and the distance to recent regional occurrences.
California black rail	*Laterallus jamaicensis coturniculus*	ST, FP	A rare, yearlong California resident of brackish and freshwater emergent wetlands in delta and coastal locations, including the	A	No Take	**Presumed Absent**: The BSA does not contain suitable brackish or freshwater wetlands habitat for the species. The nearest recent

Common Name	Species Name	Status	General Habitat Description	Habitat Present	Effects Determination	Potential for Occurrence/Rationale
			San Francisco Bay area, Sacramento-San Joaquin Delta, Morro Bay, the Salton Sea, and lower Colorado River. Occurs in tidal emergent wetlands dominated by pickleweed, in brackish marshes dominated by bulrushes with pickleweed, and in freshwater wetlands dominated by bulrushes, cattails, and saltgrass. Species prefers high wetland areas, away from areas experiencing fluctuating water levels. Requires vegetation providing adequate overhead cover for nesting. Eggs are laid from March through June.			(2017) CNDDB occurrence is located approximately 4.90 miles southwest of the BSA. The species is presumed absent due to the lack of suitable habitat and distance to recent regional occurrences.
Cooper's hawk	*Accipiter cooperii*	WL	Species most often occurs in open, interrupted or marginal woodlands throughout California. Nests in forest habitats, usually near open water in conifer or deciduous riparian areas. Most frequently uses dense stands of live oak, riparian deciduous, and other forest habitats. Breeds from March through August. Occurs from elevations near sea level to 9,000 feet.	HP	No Take with implementation of mitigation measures	**Low Potential:** The BSA does contain potentially suitable trees for roosting or nesting, adjacent to open water. The nearest recent (2008) CNDDB occurrence is located approximately 2 miles east of the BSA. In addition, there are numerous ebird.org occurrences of the species adjacent to the BSA, located just east of the levee. The species is considered to have low potential to occur in the BSA due to the presence of potentially suitable habitat and the distance to recent regional occurrences.
Least Bell's vireo	*Vire bellii pusillus*	FE	Summer resident of southern California inhabiting low elevation	A	No Effect	Presumed Absent: The BSA does not contain suitable riparian

Common Name	Species Name	Status	General Habitat Description	Habitat Present	Effects Determination	Potential for Occurrence/Rationale
			riparian habitats in the vicinity of water and dry river bottoms. Prefers willows, baccharis, mesquite and other low, dense vegetation as nesting site. Forages in dense brush and occasionally tree tops. The species is known to occur in all four southern California national forests, with the largest population in the Los Padres National Forest (below 2,000 feet).			habitat for the species. The nearest recent (2015) CNDDB occurrence is located approximately 7.90 miles southwest of the BSA, at the Yolo Bypass Wildlife Area. There is a presumed extant historical (1877) occurrence of a non-specific area that encompasses the project area; however, much of this area is now urban/disturbed. The species is presumed absent due to the lack of suitable habitat and distance to recent regional occurrences.
Purple martin	*Progne subis*	SSC	Present in California as a summer migrant, arriving in March and departing by late September. Inhabits valley foothill and montane hardwood/hardwood-conifer, coniferous habitats, and riparian habitats. Associated with closed-cone pine-cypress, ponderosa pine, Douglas-fir, and redwood. Nests in tall, old, isolated trees or snags in open forest or woodland and in proximity to a body of water. Frequently nests within former woodpecker cavities may nest in human-made structures such as nesting boxes, under bridges and in culverts. Needs abundant aerial insect prey. Breeds April through August.	HP	No Take with implementation of mitigation measures	**Low Potential:** The BSA does contain some potentially suitable nesting trees adjacent to the Sacramento River. The nearest recent (2007) CNDDB occurrence is located approximately 6.4 miles northeast. However, there are numerous presumed extant historical (2003) occurrences in Sacramento, the closest of which is located approximately 0.3 miles from the BSA, just across the Sacramento River. In addition, there are numerous recent (2021, 2018) ebird.org occurrences of the species adjacent to the BSA, on both sides of the Sacramento River. The species is considered to have a low potential to occur within the BSA due to presence of

Common Name	Species Name	Status	General Habitat Description	Habitat Present	Effects Determination	Potential for Occurrence/Rationale
						potentially suitable habitat and distance to recent regional occurrences.
Song sparrow ("Modesto" population)	*Melospiza melodia pop. 1*	SSC	An endemic bird found exclusively in the north-central portion of the Central Valley, with highest densities in the Butte Sink and Sacramento-San Joaquin River Delta. The species is usually found in open brushy habitats, along the borders of ponds or streams, abandoned pastures, desert washes, thickets, or woodland edges. In addition, there is a strong affinity for emergent freshwater marshes dominated by tules and cattails, riparian willow thickets, and valley oak forests with a blackberry understory. Nests found in base of shrubs or clumps of grass, requiring low, dense vegetation for cover, usually near water. Breeds from March through August.	A	No Take	**Presumed Absent:** The BSA does not contain potentially suitable brushy or thicket habitat adjacent to wetlands or other aquatic features. The nearest recent (2011) CNDDB occurrence is located approximately 7.45 miles southwest of the BSA, at the Yolo Bypass Wildlife Area. There is also a recent (2024) ebird.org occurrence located approximately 0.55 miles northeast of the BSA, across the Sacramento River. The species is presumed absent due to the lack of potentially suitable habitat and the distance to recent regional occurrences.
Swainson's hawk	*Buteo swainsoni*	ST	Inhabits grasslands with scattered trees, juniper-sage flats, riparian areas, savannahs, and agricultural or ranch lands with groves or lines of trees. Requires adjacent suitable foraging areas such as grasslands, alfalfa or grain fields that support a stable rodent prey base. Breeds march to late August.	HP	No Take with implementation of mitigation measures	**Moderate to High Potential:** The BSA does contain potentially suitable foraging and habitat. The nearest recent (2007) CNDDB occurrence is located approximately 600 feet from the BSA. In addition, there are numerous (2016, 2020, 2022, 2023) ebird.org occurrences adjacent to the BSA. The species

Common Name	Species Name	Status	General Habitat Description	Habitat Present	Effects Determination	Potential for Occurrence/Rationale
						is considered to have moderate to high potential for foraging and/or nesting within the BSA due to the presence of potentially suitable habitat and the high number of recent local occurrences.
Tricolored blackbird	*Agelaius tricolor*	SE, SSC	Prefers freshwater marsh, swamp and wetland communities, but utilize agricultural or upland habitats that can support large colonies often in the Central Valley area. Requires protected dense nesting habitat protected from predators, be within 3-5 miles to a suitable foraging area with insect prey and within 0.3 miles of open water. Suitable foraging includes wetland, pastureland, rangeland, at dairy farms, and in some irrigated croplands (silage, alfalfa, etc.). Nests mid-March - early August but may extend until October/November in the Sacramento Valley region.	A	No Take	**Presumed Absent:** The BSA does not contain suitable habitat for a nesting colony. The nearest recent (2014) CNDDB occurrence is located approximately 6.45 miles northeast of the BSA; the nearest recent (2020) ebird.org occurrence is located approximately 3.20 miles southwest of the BSA. The species is presumed absent due to the lack of suitable habitat and distance to recent regional occurrences.
Western yellow-billed cuckoo	*Coccyzus americanus occidentalis*	FT, SE	Species inhabits riparian forests, along broad, lower flood bottoms of larger river systems. Nests in large blocks of riparian jungles often mixed with cottonwoods. Nesting appears to be preferred in riparian forest habitats with a dense understory; requires water near nesting site. Breeds June-August.	A	No Take	**Presumed Absent:** The BSA does not contain suitable riparian forest habitat for the species. There are no recent (<20 years) CNDDB occurrences in the region. The nearest historical (1877) CNDDB occurrence is listed "Extirpated". The species is presumed absent due to the lack of

Common Name	Species Name	Status	General Habitat Description	Habitat Present	Effects Determination	Potential for Occurrence/Rationale
						suitable habitat and lack of regional occurrences.
White-tailed kite	*Elanus leucurus*	FP	Inhabits rolling foothills and valley margins with scattered oaks and river bottomlands or marshes next to deciduous woodland. Prefers open grasslands, meadows or marshes for foraging close to isolated, dense-topped trees for nesting and perching. In southern California, will roost in saltgrass and Bermuda grass. Often found near agricultural lands. Nests are placed near the tops of dense oak, willow, or other tree stands. Breeds February through October.	HP	No Take	**Low Potential:** The BSA does contain potentially suitable oak trees for the species, near the Sacramento River. the nearest recent (2017) CNDDB occurrence is located approximately 2 miles south of the BSA. In addition, there is a recent (2022) e-bird.org occurrence adjacent to the BSA. The species is considered to have low potential to occur within the BSA due to the presence of potentially suitable nesting trees and distance to recent regional occurrences.
Fish Species						
Chinook salmon - Central Valley spring-run ESU	*Oncorhynchus tshawytscha pop. 11*	FT, ST	Spring-run Chinook enter the Sacramento-San Joaquin River system to spawn, requiring larger gravel particle size and more water flow through their redds than other salmonids. Remaining runs occur in Butte, Mill, Deer, Antelope, and Beegum Creeks, tributaries to the Sacramento River. Known to occur in Siskiyou and Trinity counties.	A	No Effect, No Take	**Presumed Absent:** The BSA does not contain a permanent water source and is outside of the Sacramento River. The species is presumed absent based on the lack of suitable habitat.
Chinook salmon – Sacramento	*Oncorhynchus tshawytscha pop. 7*	FE, SE	Winter-run Chinook are currently restricted within the Sacramento River below Keswick dam; species does not spawn in tributaries.	A	No Effect, No Take	**Presumed Absent:** The BSA does not contain a permanent water source and is outside of the Sacramento River. The species is

Common Name	Species Name	Status	General Habitat Description	Habitat Present	Effects Determination	Potential for Occurrence/Rationale
River winter-run ESA			Species requires cold water over gravel beds to spawn.			presumed absent based on the lack of suitable habitat.
Green sturgeon – southern DPS	*Acipenser medirostris pop. 1*	FT	Most marine of the sturgeon species. Predominately spawns in the upper Sacramento River, with some recorded in the Rogue River, Klamath and Trinity Rivers (Klamath River basin). In the Sacramento River, green sturgeon spawn above Hamilton City up to Keswick Dam. Known to occupy other river bodies including the lower Feather River; spawning not recorded; no green sturgeon has ever been documented in the San Joaquin River or its tributaries. Large cobbles are preferred for spawning, but may utilize a range of substrates from bedrock to sand. Spawning occurs March-July.	A	No Effect	**Presumed Absent:** The BSA does not contain a permanent water source and is outside of the Sacramento River. The species is presumed absent based on the lack of suitable habitat.
Longfin smelt – San Francisco Bay-Delta DPS	*Spirinchus thaleichthys pop. 2*	FE, ST	Resides in California and are primarily an anadromous estuarine species that can tolerate salinities ranging from freshwater to nearly pure seawater. Occurs slightly upstream from Rio Vista through Suisun Bay and Suisun Marsh, the San Pablo Bay, the main San Francisco Bay, South San Francisco Bay, the Gulf of the Farallones, Humboldt Bay, and the Eel river estuary & local coastal areas.	A	No Effect No Take	**Presumed Absent:** The BSA does not contain a permanent water source and is outside of the Sacramento-San Joaquin Delta. The species is presumed absent based on the lack of suitable habitat.

Common Name	Species Name	Status	General Habitat Description	Habitat Present	Effects Determination	Potential for Occurrence/Rationale
Sacramento perch	*Archoplites interruptus*	SSC	Inhabits sloughs, lakes, and slow moving rivers of the Central Valley. Prefers turbid lakes, reservoirs and ponds warmed by summer heat and absent of plants; may occasionally occur in clear water among beds of aquatic vegetation. Species tolerates high temperatures, high salinities, high turbidity, and low water clarity. Young require aquatic and overhanging vegetation for cover. Spawns March-August in water temperatures between 64-84°F	A	No Take	**Presumed Absent:** The BSA does not contain a permanent water source and is outside of the Sacramento River. The species is presumed absent based on the lack of suitable habitat.
Sacramento splittail	*Pogonichthys macrolepidotus*	SSC	Historically inhabited low moving rivers, sloughs, and alkaline lakes of the Central Valley; now restricted to the Delta, Suisun Bay and associated marshes. Species is adapted to fluctuating environments with tolerance to water salinities from 10-18 ppt., low oxygen levels (< 1.0 mg/L) and temperatures of 41-75°F. Spawns late February- early July, with a peak in March-April; requires flooded vegetation for spawning activity and protective cover for young.	A	No Take	**Presumed Absent:** The BSA does not contain a permanent water source and is outside of the Sacramento-San Joaquin Delta. The species is presumed absent based on the lack of suitable habitat.
Steelhead - Central Valley DPS	*Oncorhynchus mykiss*	FT, SSC	Spawning occurs in small tributaries on coarse gravel beds in riffle areas. Central Valley steelhead are found in the Sacramento River system; the	A	No Effect	**Presumed Absent:** The BSA does not contain a permanent water source and is outside of the Sacramento River. The species is

Common Name	Species Name	Status	General Habitat Description	Habitat Present	Effects Determination	Potential for Occurrence/Rationale
			principal remaining wild populations spawn annually in Deer and Mill Creeks in Tehama County, in the lower Yuba River, a small population in the lower Stanislaus River.			presumed absent based on the lack of suitable habitat.
Invertebrate Species						
Monarch butterfly	*Danaus Plexippus*	FC	Winter roosts along the coast from northern Mendocino to Baja California. Utilizes wind protected tree groves in proximity to nectar and water sources. Host plants include milkweed species such as *Asclepias syriaca*, *A. incarnara*, and *A. speciosa*. Suitable habitat includes fields, meadows, weedy areas, marshes, and roadsides. Mass adult migrations occur from August to October.	A	No Effect	**Presumed Absent:** The BSA does not contain host milkweed plants required by the species. There are no recent (<20 years) or historical CNDDB occurrences in the region. The species is presumed absent due to the lack of potentially suitable habitat and the lack of regional occurrences.
Valley Elderberry Longhorn beetle	*Desmocerus californicus dimorphus*	FT	Species requires elderberry shrubs as host plants. Typically occurs in moist valley oak woodlands associated with riparian corridors in the lower Sacramento River and upper San Joaquin River drainages. (Sea level-3,000 feet).	A	No Effect	**Presumed Absent:** There are no elderberry shrubs located within the BSA. The nearest recent (2006) CNDDB occurrence is located approximately 1.3 miles northeast of the BSA, along the American River. The species is presumed absent from the BSA based on the absence of potentially suitable habitat and distance to recent regional occurrences.
Vernal Pool fairy shrimp	*Branchinecta lynchi*	FT	In California inhabits portions of Tehama county, south through the	A	No Effect	**Presumed Absent:** The BSA does not contain vernal pools. The

Common Name	Species Name	Status	General Habitat Description	Habitat Present	Effects Determination	Potential for Occurrence/Rationale
			Central Valley, and scattered locations in Riverside County and the Coast Ranges. Species associated with smaller and shallower cool-water vernal pools approximately 6 inches deep and short periods of inundation. In the southernmost extremes of the range, the species occurs in large, deep cool-water pools. Inhabited pools have low to moderate levels of alkalinity and total dissolved solids. The shrimp are temperature sensitive, requiring pools below 50 F to hatch and dying within pools reaching 75 F. Young emerge during cold-weather winter storms.			nearest recent (2007) CNDDB occurrence is located approximately 6.6 miles northeast of the BSA. The species is presumed absent from the BSA based on the absence of potentially suitable habitat and distance to recent regional occurrences.
Vernal Pool tadpole shrimp	*Lepidurus packardi*	FE	Inhabits vernal pools and swales containing clear to highly turbid waters such as pools located in grass bottomed swales of unplowed grasslands, old alluvial soils underlain by hardpan, and mud-bottomed pools with highly turbid water.	A	No Effect	**Presumed Absent:** The BSA does not contain vernal pools. There are no recent (<20 years) CNDDB occurrences in the region. The nearest presumed extant historical (1992) CNDDB occurrence is located approximately 6.9 miles southeast of the BSA. The species is presumed absent due to the lack of potentially suitable habitat, lack of recent regional occurrences, and distance to presumed extant historical occurrences.
Mammal Species						
American badger	*Taxidea taxus*	SSC	Prefers treeless, dry, open stages of most shrub and herbaceous	A	No Take	**Presumed Absent:** The BSA is primarily urban/disturbed and

Common Name	Species Name	Status	General Habitat Description	Habitat Present	Effects Determination	Potential for Occurrence/Rationale
			habitats with friable soils and a supply of rodent prey. Species also inhabits forest glades, meadows, marshes, brushy areas, hot deserts, and mountain meadows. Species maintains burrows within home ranges estimated between 338-1,700 acres, dependent on seasonal activity. Burrows are frequently re-used, but new burrows may be created nightly. Young are born in March and April within burrows dug in relatively dry, often sandy, soil, usually in areas with sparse overstory cover. Species is somewhat tolerant of human activity, but is sensitive to automobile mortality, trapping, and persistent poisons (up to 12,000 feet).			does not contain potentially suitable shrub or herbaceous habitat for the species. The nearest (no date) presumed extant CNDDB occurrence is located 6.70 miles southeast of the BSA. The species is presumed absent due to the lack of potentially suitable habitat, the lack of recent regional occurrences, and the distance to the nearest known occurrence.
Reptile Species						
Giant garter snake	*Thamnophis gigas*	FT, ST	Inhabits marsh, swamp, wetland (including agricultural wetlands), sloughs, ponds, rice fields, low gradient streams and irrigation/drainage canals adjacent to uplands. Ideal habitat contains both shallow and deep water with variations in topography. Species requires adequate water during the active season (April-November), emergent, herbaceous wetland vegetation, such as cattails and bulrushes, for escape cover and	A	No Effect No Take	**Presumed Absent:** The BSA does not contain potentially suitable wetland habitat for the species. The nearest recent (2009) CNDDB occurrence is located approximately 5.2 miles west of the BSA. The species is presumed absent from the BSA due to the lack of potentially suitable wetland habitat and distance to recent regional occurrences.

Common Name	Species Name	Status	General Habitat Description	Habitat Present	Effects Determination	Potential for Occurrence/Rationale
			foraging habitat and mammal burrows estivation. Requires grassy banks and openings in waterside vegetation for basking and higher elevation uplands for cover and refuge from flood waters during winter dormant season.			
Northwestern pond turtle	*Actinemys marmorata*	SSC	A fully aquatic turtle of ponds, marshes, rivers, streams and irrigation ditches with aquatic vegetation. Requires basking sites and suitable (sandy banks or grassy open field) upland habitat for reproduction (up to 4,690 feet).	A	No Take	**Presumed Absent:** The BSA does not include a permanent water source. The nearest recent (2012) CNDDB occurrence is located approximately 6.5 miles northwest of the BSA. The species is presumed absent due to the lack of suitable habitat and the distance to recent regional occurrences.
Plant Species						
Boggs Lake hedge-hyssop	*Gratiola heterosepala*	SE, CRPR 1B.2	An annual herb inhabiting clay soils and shallow waters of marshes, swamps, lake margins, and vernal pools. Flowers April-August (30-7,800 feet).	A	No Take	**Presumed Absent**: The BSA does not provide suitable wetland habitat for the species. Additionally, there are no recent (<20 years) or historical CNDDB occurrences within Yolo County. The species is presumed absent due to the lack of suitable habitat and lack of regional occurrences.
Dwarf downingia	*Downingia pusilla*	CRPR 2B.2	An annual herb inhabiting vernal pools and mesic soils in valley and foothill grassland communities. Flowers March-May (0-1,500 feet).	A	N/A	**Presumed Absent**: The BSA does not provide suitable vernal pool or grassland habitat for the species. Additionally, there are no recent (<20 years) or historical CNDDB occurrences within 10 miles of the project area. The

Common Name	Species Name	Status	General Habitat Description	Habitat Present	Effects Determination	Potential for Occurrence/Rationale
						species is presumed absent due to the lack of suitable habitat and the lack of regional occurrences.
Ferris' milk-vetch	*Astragalus tener var. ferrisiae*	CRPR 1B.1	An annual herb inhabiting vernally mesic meadows and seeps and subalkaline flats within valley and foothill grassland communities. Known only from six extant occurrences. Flowers April-May (0-250 feet).	A	N/A	**Presumed Absent**: The BSA does not provide suitable wetland habitat within grasslands for the species. There are no recent (<20 years) CNDDB occurrences in the region. There is one presumed extant historical (1954) CNDDB occurrence located approximately 3.85 miles west of the BSA, at the Yolo Bypass Wildlife Area. The species is presumed absent due to the lack of suitable habitat, lack of recent regional occurrences, and distance to presumed extant historical occurrences.
Legenere	*Legenere limosa*	CRPR 1B.1	An annual herb inhabiting wet areas, vernal pools, and ponds. Flowers April-June (0-2,900 feet).	A	N/A	**Presumed Absent**: The BSA does not provide suitable wetland habitat for the species. There are no recent (<20 years) CNDDB occurrences in the region. There is one presumed extant historical (1997) CNDDB occurrence located approximately 6.25 miles northeast of the BSA. The species is presumed absent due to the lack of suitable habitat, lack of recent regional occurrences, and distance to presumed extant historical occurrences.
Sanford's arrowhead	*Sagittaria sandfordii*	CRPR 1B.2	A perennial rhizomatous herb inhabiting freshwater marshes,	A	N/A	**Presumed Absent**: The BSA does not provide suitable wetland

Common Name	Species Name	Status	General Habitat Description	Habitat Present	Effects Determination	Potential for Occurrence/Rationale
			swamps, ponds, and ditches. Flowers May-October (0-2,130 feet).			habitat for the species. The nearest recent (2011) CNDDB occurrence is located approximately 3.10 miles northeast of the BSA, along Arcade Creek. The species is presumed absent due to the lack of suitable habitat and the distance to recent occurrences.
Suisun marsh aster	*Symphyotrichum lentum*	CRPR 1B.2	A perennial rhizomatous herb inhabiting wetlands, freshwater marsh, and brackish-marsh communities. Flowers May-November (0-300 feet).	A	N/A	**Presumed Absent:** The BSA does not contain suitable wetland or brackish-marsh habitat for the species. There nearest recent (2013) CNDDB occurrence is located approximately 5.35 miles southwest of the BSA, at the Yolo Bypass Wildlife Area. The species is presumed absent due to the lack of suitable habitat and the distance to recent occurrences.
Woolly rose-mallow	*Hibiscus lasiocarpos var. occidentalis*	CRPR 1B.2	A perennial rhizomatous herb inhabiting freshwater wetlands, wet banks, and marshes. Flowers June-September (0-394 feet).	A	N/A	**Presumed Absent**: The BSA does not provide suitable wetland habitat for the species. There are no recent (<20 years) CNDDB occurrences in the region. There is one presumed extant historical (1988) CNDDB occurrence located approximately 1.70 miles northwest of the BSA, adjacent to I-80. The species is presumed absent due to the lack of suitable habitat, lack of recent regional occurrences, and distance to presumed extant historical occurrences.

Federal Designations (FESA, USFWS): **FE:** Federally listed, endangered **FC:** Federal candidate **FT:** Federally listed, threatened **DL:** Federally listed, delisted	**State Designations (CESA, CDFW):** **SE:** State-listed, endangered **SCE:** Candidate Endangered **ST:** State-listed, threatened **SCT:** Candidate Threatened	**CDFW Designations** **SSC:** Species of Special Concern **FP:** Fully Protected
California Native Plant Society (CNPS) California Rare Plant Rank (CRPR) ***Note: according to CNPS (Skinner and Pavlik 1994), plants on Lists 1B and 2 meet definitions for listing as threatened or endangered under Section 1901, Chapter 10 of the California Fish and Game Code. This interpretation is inconsistent with other definitions.*** **1A:** Plants presumed extinct in California. **1B:** Plants rare and endangered in California and throughout their range. **2:** Plants rare, threatened, or endangered in California but more common elsewhere in their range. **3:** Plants about which need more information; a review list. **Plants 1B, 2, and 3 extension meanings:** **_.1** Seriously endangered in California (over 80% of occurrences threatened / high degree and immediacy of threat) **_.2** Fairly endangered in California (20-80% occurrences threatened) **_.3** Not very endangered in California (<20% of occurrences threatened or no current threats known)		
Habitat Potential Absent [A] - No habitat present and no further assessment required. Habitat Present [HP] - Habitat is, or may be present. Critical Habitat [CH] – Project is within designated Critical Habitat.	**Potential for Occurrence Criteria:** **Present**: Species was observed on site during a site visit or focused survey. **Moderate to High**: Habitat strongly associated with the species occurs on site and recent (<20 years extant occurrence(s) recorded within the project vicinity. **Low**: Low-quality habitat is present and recent (<20 years) extant occurrence(s) recorded within the project vicinity. **Presumed Absent**: No habitat is present within the project area, or low-quality habitat is present but no recent (<20 years) extant occurrence(s) recorded within the project vicinity.	
Sources: CDFW 2025; CNDDB 2025; CNPS 2025; Calflora 2021; Jepson, 2nd Ed. 2021; NMFS 2021; USFWS 2025		

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 Wildlife or U.S. Fish and Wildlife Service?

Less Than Significant Impact. The project would include roadway improvements, bicycle lanes, intersection restriping, sidewalk gap closures, and an ADA ramp connection to Riverwalk Trail. All project construction and operations would occur within previously developed and barren habitats and would not impact the valley foothill riparian habitat. Trees planned for removal are street trees and are not a part of the valley foothill riparian habitat. Although the project would not require the removal of riparian vegetation, the project footprint is located within the designated Yolo HCP/NCCP 100-foot resource protection buffer for valley foothill riparian natural communities. Therefore, avoidance and minimization measures (AMMs) in accordance with the Yolo HCP/NCCP would be incorporated into project design and construction to ensure no construction impacts would occur to riparian habitat or other sensitive natural communities within the BSA. Therefore, Project impacts would be less than significant.

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. There are no state or federally protected wetlands within the Project impact area. The Project would have no substantial adverse effect on state or federally protected wetlands through direct removal, filling, hydrological interruption, or other means. No impact would occur.

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

No Impact. According to CDFW's Biogeographic Information and Observation System (BIOS), the project area lies within a Terrestrial Connectivity, Area of Conservation Emphasis (ACE) level 4 hexagon supporting "Conservation Planning Linkages" (CDFW 2025). The Terrestrial Connectivity dataset summarizes information on terrestrial connectivity by ACE hexagon including the presence of mapped corridors or linkages and the juxtaposition to large, contiguous, natural areas. This dataset was developed to support conservation planning efforts by allowing user to spatially evaluate the relative contribution of an area to terrestrial connectivity based on the results of statewide, regional, and other connectivity analyses.

Though the project would occur within a Level 4 hexagon, the proposed project would occur in a fully developed area. The proposed project would not include any permanent impoundments or barriers to native wildlife migration and is not anticipated to impact riparian habitats outside of the project impact area. Therefore, no impact on habitat connectivity or wildlife movement is anticipated.

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 with Mitigation In order to access the project area and complete grading for the proposed ADA ramp connection, the project would require the removal of 2 London plane (*Platanus x acerifolia*) street trees, located within 12.5 feet of the curb/street. All street trees removed by project activities would be replaced with, at minimum, a 15-gallon tree. The species and location of which would be set in accordance with the West Sacramento Landscape Development Guidelines, as outlined in the City's Tree Preservation Ordinance with implementation of Mitigation Measure **BIO-3**, 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?

Less Than Significant Impact. The Project is located within Yolo County and has adopted the Yolo Habitat Conservation Plan/Natural Communities Conservation Plan. All Project activities would be in compliance with this plan through implementation of avoidance, minimization, and mitigation measures outlined in the HCP/NCCP. Therefore, Project impacts would be less than significant.

AVOIDANCE AND MINIMIZATION MEASURES

The following measures shall be incorporated into the Project bid documents and implemented prior to and during construction as appropriate:

- Implement Yolo HCP/NCCP General Construction and Operations Maintenance Avoidance and Minimization Measures (AMMs):

  AMM3, Confine and Delineate Work Area. *Where natural communities and covered species habitat are present, workers will confine land clearing to the minimum area necessary to facilitate construction activities. Workers will restrict movement of heavy equipment to and from the project site to established roadways to minimize natural community and covered species habitat disturbance. The project proponent will clearly identify boundaries of work areas using temporary fencing or equivalent and will identify areas designated as environmentally sensitive. All construction vehicles, other equipment, and personnel will avoid these designated areas.*

  AMM5, Control Fugitive Dust*. Workers will minimize the spread of dust from work sites to natural communities or covered species habitats on adjacent lands.*

  AMM6, Conduct Worker Training. *All construction personnel will participate in a worker environmental training program approved/authorized by the Conservancy and administered by a qualified biologist. The training will provide education regarding sensitive natural communities and covered species and their habitats, the need to avoid adverse effects, state and federal protection, and the legal implications of violating the FESA and NCCPA Permits. A pre-recorded video presentation by a qualified biologist shown to construction personnel may fulfill the training requirement.*

  AMM7, Control Nighttime Lighting of Project Construction Sites. *Workers will direct all lights for nighttime lighting of project construction sites into the project construction site area and minimize the lighting of natural habitat areas adjacent to the project construction area.*

  AMM8, Avoid and Minimize Effects of Construction Staging Areas and Temporary Work Areas. *Project proponents should locate construction staging and other temporary work areas for covered activities in areas that will ultimately be a part of the permanent project development footprint. If construction staging and other temporary work areas must be located outside of permanent project footprints, they will be located either in areas that do not support habitat for covered species or are easily restored to prior or improved ecological functions (e.g., grassland and agricultural land).*

  Construction staging and other temporary work areas located outside of project footprints will be sited in areas that avoid adverse effects to the following:

- *Serpentine, valley oak woodland, alkali prairie, vernal pool complex, valley foothill riparian, and fresh emergent wetland land cover types.*
- *Occupied western burrowing owl burrows.*
- *Nest sites for covered bird species and all raptors, including noncovered raptors, during the breeding season.*

Project proponents will follow specific AMMs for sensitive natural communities and covered species in temporary staging and work areas. For establishment of temporary work areas outside of the project footprint, project proponents will conduct surveys to determine if any of the biological resources listed above are present.

Within one year following removal of land cover, project proponents will restore temporary work and staging areas to a condition equal or greater than the covered species habitat function of the effected habitat. Restoration of vegetation in temporary work and staging areas will use clean, native seed mixed approved by the Conservancy that are free of noxious plant species seeds.

- Contract specifications shall include the following BMPs, where applicable, to reduce erosion during construction:
  - Implementation of the project shall require approval of a site-specific Storm Water Pollution Prevention Plan (SWPPP) or Water Pollution Control Program (WPCP) that would implement effective measures to protect water quality, which may include a hazardous spill prevention plan and additional erosion prevention techniques;
  - Existing vegetation shall be protected in place where feasible to provide an effective form of erosion and sediment control;
  - Stabilizing materials shall be applied to the soil surface to prevent the movement of dust from exposed soil surfaces on construction sites as a result of wind, traffic, and grading activities;
  - Roughening and/or terracing shall be implemented to create unevenness on bare soil through the construction of furrows running across a slope, creation of stair steps, or by utilization of construction equipment to track the soil surface. Surface roughening or terracing reduces erosion potential by decreasing runoff velocities, trapping sediment, and increasing infiltration of water into the soil, and aiding in the establishment of vegetative cover from seed.
  - Soil exposure shall be minimized through the use of temporary BMPs, groundcover, and stabilization measures;
  - The contractor shall conduct periodic maintenance of erosion- and sediment-control measures.

- Prior to arrival at the project site and prior to leaving the project site, construction equipment that may contain invasive plants and/or seeds must be cleaned to reduce the spreading of noxious weeds.

- The contractor must not use herbicides to control invasive, exotic plants or apply rodenticides during construction.

- The contractor must dispose of all food-related trash in closed containers and must remove it from the project area each day during construction.

MITIGATION MEASURES

BIO-1: If project commencement or ground disturbance is required during the nesting season (February 1 – August 31), a preconstruction nesting bird survey shall be conducted within 7 days prior to construction activities. If any active migratory bird nests are found, a minimum 100-foot no-disturbance buffer shall be established around any active migratory bird nest and a minimum 300-foot no-disturbance buffer shall be established around any active raptor nests. The contractor shall immediately stop work in the buffer area and is prohibited from conducting work that could disturb the birds (as determined by the project biologist and in consultation with wildlife agencies) in the buffer area until a qualified biologist determines the young have fledged. A reduced buffer can be established if determined appropriate by the project biologist and approved by CDFW.

BIO-2: Implement Yolo HCP/NCCP Swainson's Hawk and White-Tailed Kite Covered Species AMMs:

AMM16, Minimize Take and Adverse Effects on Habitat of Swainson's Hawk and White-Tailed Kite

The project proponent will retain a qualified biologist to conduct planning-level surveys and identify any nesting habitat present within 1,320 feet of the project footprint. Adjacent parcels under different land ownership will be surveyed only if access is granted or if the parcels are visible from authorized areas.

If a construction project cannot avoid potential nesting trees (as determined by the qualified biologist) by 1,320 feet, the project proponent will retain a qualified biologist to conduct preconstruction surveys for active nests consistent with guidelines provided by the Swainson's Hawk Technical Advisory Committee (2000), between March 15 and August 30, within 15 days prior to the beginning of construction activity. The results of the survey will be submitted to the Conservancy and CDFW. If active nests are found during preconstruction surveys, a 1,320-foot initial temporary nest disturbance buffer shall be established. If project related activities within the temporary nest disturbance buffer are determined to be necessary during the nesting season, then the qualified biologist will monitor the nest and will, along with the project proponent, consult with CDFW to determine the best course of action necessary to avoid nest abandonment or take of individuals. Work may be allowed only to proceed within the temporary nest disturbance buffer if Swainson's hawk or white-tailed kite are not exhibiting agitated behavior, such as defensive flights at intruders, getting up from a brooding position, or flying off the nest, and only with the agreement of CDFW and USFWS. The designated on-site biologist/monitor shall be onsite daily while construction-related activities are taking place within the 1,320-foot buffer and shall have the authority to stop work if raptors are exhibiting agitated behavior. Up to 20 Swainson's hawk nest trees (documented nesting within the last 5 years) may be removed during the permit term, but they must be removed when not occupied by Swainson's hawks.

For covered activities that involve pruning or removal of a potential Swainson's hawk or white-tailed kite nest tree, the project proponent will conduct preconstruction surveys that are consistent with the guidelines provided by the Swainson's Hawk Technical Advisory Committee (2000). If active nests are found during preconstruction surveys, no tree pruning or removal will occur during the period between March 1 and August 30 within 1,320 feet of an active nest, unless a qualified biologist determines that the young have fledged and the nest is no longer active.

BIO-3: If any tree protected by the City's Tree Preservation Ordinance is removed as a part of project implementation, the contractor shall adhere to replacement requirements set forth by the City's Tree Preservation Ordinance and Landscape Development Guidelines.

FINDINGS

Considering the information obtained for literature search, biological surveys, and analysis of potential impacts from Project design, and in conjunction with the implementation of Project-specific avoidance, minimization, and mitigation measures, Project effects relating to biological impacts would be considered **Less Than Significant with Mitigation.**

2.5 CULTURAL RESOURCES

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?	☐	☐	☒	☐
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	☐	☒	☐	☐
c) Disturb any human remains, including those interred outside of dedicated cemeteries?	☐	☐	☒	☐

REGULATORY SETTING

Federal Regulations

National Historic Preservation Act
Section 106 of the National Historic Preservation Act (NHPA) requires federal undertakings to consider the effects of the action on historic properties. Historic properties are defined by the Advisory Council on Historic Preservation (ACHP) regulations (36 Code of Federal Regulations [CFR] Part 800) and consist of any prehistoric or historical archaeological site, building, structure, historic district, or object included in, or eligible for inclusion in, the National Register of Historic Places (NRHP) maintained by the Secretary of the Interior. This term includes artifacts, records, and remains that are related to and located within such properties. The term includes properties of traditional religious and cultural importance to Native American tribes or Native Hawaiian organizations that meet the National Register criteria (36 CFR Part 800.16[l]).

To determine whether an undertaking could affect NRHP-eligible properties, cultural resources (including archaeological, historical, and architectural properties) must be inventoried and evaluated for listing in the NRHP. For a property to be considered for inclusion in the NRHP, it must be at least 50 years old and meet the criteria for evaluation set forth in 36 CFR Part 60.4.

The quality of significance in American history, architecture, archaeology, engineering, and culture must be present in districts, sites, buildings, structures, and objects that possess integrity of design, setting, materials, workmanship, feeling, and association. For inclusion on the NRHP, these properties must also meet one or more of the four criteria listed here:

1. Criterion A – They are associated with events that have made a significant contribution to the broad patterns of our history;
2. Criterion B – They are associated with the lives of persons significant in our past;
3. Criterion C – They embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or
4. Criterion D – They have yielded or may be likely to yield, information important in prehistory or history.

If a cultural resources professional meeting the Secretary of Interior's Qualification Standards determines that a particular resource meets one of these criteria, it is considered as an eligible historic property for listing in the NRHP. Among other criteria considerations, a property that has achieved significance within

the last 50 years is not considered eligible for inclusion in the NRHP unless certain exceptional conditions are met.

Resources listed on the NRHP, or that are eligible to be listed on the NRHP are automatically considered historical resources for the purposes of CEQA.

Native American Graves Protection and Repatriation Act of 1990 (PL 101-601; 25 U.S.C. 3001)
Under the Native American Graves Protection and Repatriation Act (NAGPRA) (25 U.S.C. 3001) and implementing regulations 43 CFR Part 10, federal agencies are responsible for the protection of Native American human remains, funerary objects, sacred objects, and objects of cultural patrimony that are discovered on lands under the agency's jurisdiction. All human remains and potential human remains must be treated with respect and dignity at all times.

State Regulations

California Register of Historical Resources: Public Resources Code (PRC) Section 5024
The term "historical resource" includes, but is not limited to, any object, building, structure, site, area, place, record, or manuscript which is historically or archaeologically significant, or is significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of PRC (PRC Section 5020.1[j]).

Historical resources may be designated as such through three different processes:

1. Official designation or recognition by a local government pursuant to local ordinance or resolution (PRC Section 5020.1[k]);
2. A local survey conducted pursuant to PRC Section 5024.1(g); or
3. The property is listed in or eligible for listing in the NRHP (PRC Section 5024.1[d][1]).

The process for identifying historical resources is typically accomplished by applying the criteria for listing in the California Register of Historical Resources (CRHR), which states that a historical resource must be significant at the local, state, or national level under one or more of the four criteria listed below. It is associated with events that have made a significant contribution to the broad patterns of:

1. It is associated with California's history and cultural heritage;
2. It is associated with the lives of persons important in our past;
3. It embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of a master, or possesses high artistic values; or
4. It has yielded, or may be likely to yield, information important in prehistory or history. (CCR 14 Section 4852).

To be considered a historical resource for the purpose of CEQA, the resource must also have integrity, which is the authenticity of a resource's physical identity evidenced by the survival of characteristics that existed during the resource's period of significance. Resources, therefore, must retain enough of their historic character or appearance to be recognizable as historical resources and to convey the reasons for their significance. Integrity is evaluated with regard to the retention of location, design, setting, materials, workmanship, feeling, and association. It must also be judged with reference to the particular criteria under which a resource is eligible for listing in the CRHR (CCR 14 Section 4852[c]).

Unique Archeological Resources
The PRC also requires the Lead Agency to determine whether or not a project would have a significant effect on unique archaeological resources (PRC Section 21083.2[a]).

The PRC defines a unique archaeological resource as follows.

- An archaeological artifact, object, or site about which it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that it meets any of the following criteria:
    - Contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information;
    - Has a special and particular quality such as being the oldest of its type or the best available example of its type; or
    - Is directly associated with a scientifically-recognized important prehistoric or historic event or person (PRC Section 21083.2).

In most situations, resources that meet the definition of a unique archaeological resource also meet the definition of a historical resource. As a result, it is current professional practice to evaluate cultural resources for significance based on their eligibility for listing in the CRHR.

Local Regulations

City of West Sacramento
The Natural and Cultural Resource Element of the City of West Sacramento 2035 General Plan (2016c) outlines goals and policies intended to protect water, plant and animal species and habitat, urban forest, agricultural land, mineral resources, air, energy, scenic amenities, and historic and cultural resources. Through the implementation of these measures, the City will ensure the preservation of significant historical, archeological, tribal cultural, and paleontological resources. Additionally, the Natural and Cultural Resources Element contains provisions for the inclusion and consultation of Native American tribes and historical organizations during the planning process for development projects, registration of new historic resources, and expansion of the Yolo County Historical Resources Survey.

Yolo County
The Conservation and Open Space Element of the Yolo County 2030 General Plan (2009) outlines the goals and policies intended to conserve the County's open spaces, biological, mineral, cultural, energy, and water resources, air quality, and to address climate change. The Conservation and Open Space Element includes policies for the identification and safeguarding of cultural resources, historic resource outreach and education, working with culturally affiliated tribes through the development review process, and avoiding or mitigating impacts on Native American archaeological and cultural resources.

DISCUSSION

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

Less Than Significant Impact. A Cultural Resources Inventory Report was prepared for the project in September 2025. This report included cultural resources identification efforts including a cultural record search, a pedestrian survey of the project area, and coordination with interested parties. The record search identified three known cultural resources in the project area; the Sacramento River West Levee, The Washington/Broderick Town Site, and the Sacramento River Tribal Cultural Landscape.

The Sacramento River West Levee is part of the Sacramento River Flood Control Project (SRFC) Unit 116. In 2021, the Sacramento River West Levee was covered in grass and had large trees on the land-side slope. In 2022, this levee, known at the time as Sacramento River North, unit 1 Levee (P-57-1562), was subsumed into the entire Sacramento River West Levee and was found eligible for the NRHP under Criterion A as a part of the SRFCP. During the ECORP visit of the site, it was observed that this portion of the Levee does not possess sufficient integrity to be individually eligible for the NRHP but does maintain overall integrity, despite the addition of a paved road and tree growth. However, in 2024, as part of the City of West Sacramento Recreation Improvements West Sacramento Project in Yolo County, the USACE evaluated the SRFCP Unit 116 and the Sacramento River West Levee, segment south of P-57-1521, as not eligible for the NRHP or the CRHR. Additionally, if the levee had been considered eligible, the addition of a paved ADA-accessible ramp on the land side would not alter the integrity of the features that would make the levee eligible because the levee would still retain sufficient integrity otherwise.

The Washington/Broderick Town Site includes the former Washington/Broderick limits from 1846 to 1890; however, this resource area has been heavily modified and no longer has the residential or landscape characteristics described in the site record. Because the town site is 4.4 miles, evaluation of this resource is outside the scope of the Project but the resource would be treated as eligible for NRHP and CRHR under Criterion A/1. There are no 19th-century structures within or adjacent to the Project area, thus, it lacks all integrity as a resource aside from location.

The Sacramento River Tribal Cultural Landscape (Resource P-587-1628) encompasses a 2-mile-wide swath on either side of the Sacramento River over a 55-miles stretch in Sacramento and Yolo Counties. The Sacramento River is located adjacent to the Project area and the Project is partially within the resource corridor; however, the landscape in the Project area has been heavily modified through residential use over an extended period of time and does not appear to have the landscape characteristic described in the site record. In 2018, Tremain and Associates evaluated this resource as eligible for the NRHP/CRHR under Criterion A/1; however, consultation with USACE and SHPO on other projects along the river have not reached any federal-agency or SHPO concurrence. For the purposes of this Project, the landscape would be treated as eligible for the NRHP and CRHR under Criterion A/1. Due to the development vicinity, this resource lacks all integrity in the Project area and adjacent areas except for location.

The Sacramento River West Levee, the Washington/Broderick Town Site, and the Sacramento River Tribal Cultural Landscape within the Project area lack integrity, and the Sacramento River West Levee was found not eligible for the NRHP or the CRHR. Therefore, there would be a less than significant impact to historic resources as defined in §15064.5 as a result of the Project.

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

Less Than Significant Impact with Mitigation. The Project area contains silt loam which forms from alluvium created during flood deposits. These flood deposits have the potential to bury pre-contact archeological deposits because many resources used by indigenous Americans were used near waterways. Pre-contact burial and individual pre-contact resources have been recorded within 0.25 miles; however, there have been no recorded observations within or adjacent to the Project area. With the minimal amount of ground disturbance from the Project, there is a moderate potential to uncover historic-era deposits, such as trash pits, left prior to the construction of modern streets. Only very deep deposits in these areas would remain, however, from the demolition during road construction. With the implementation of mitigation measure CR-1, there would be a less than significant impact with mitigation.

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

Less Than Significant Impact. Two responses were received from the West Sacramento Historical Society on June 26, 2025, from Thom Lewis and Mickey Fauset regarding human remains. Thom stated that he has heard stories of Native American burials in West Sacramento and Mickey shared a 1960's newspaper article about a residence on 5th Street and F Street, the location of East Yolo's first cemetery and a feature described as an Indian Mound. The residence Mickey shared an article about is located outside of the Project area. There is one record of a pre-contact human remains within 0.25 miles search of the Project site. There is no evidence of the presence of human remains in the Project area; however, this does not preclude the possibility of the existence of buried human remains. California law recognizes the need to protect historic-era and Native American human burials, skeletal remains, and items associated with Native American interments from vandalism and inadvertent destruction.

Damage to or destruction of human remains during Project construction or other Project-related activities would be considered a significant impact. However, in accordance with the California Health and Safety Code Sections 7050.5 and 7052, Public Resources Code Section 5097.98, and CEQA Section 15064.5, if human remains are uncovered during ground-disturbing activities, all such activities in the vicinity of the find would be halted immediately, and the City of West Sacramento's designated representative would be notified. The City's representative would immediately notify the Yolo County Coroner and a qualified professional archaeologist. The County Coroner is required to examine all discoveries of human remains within 48 hours of receiving notice of a discovery on private or State lands (Health and Safety Code Section 7050.5[b]). If the Coroner determines that the remains are those of a Native American, he or she must contact the NAHC by phone within 24 hours of making that determination (Health and Safety Code Section 7050[c]).

The County's responsibilities for acting upon notification of a discovery of Native American Human remains are identified in detail in the California Public Resources Code Section 5097.9. The County or its appointed representative and the professional archaeologist would contact the Most Likely Descendent (MLD), as determined by the NAHC, regarding the remains. The MLD, in cooperation with Yolo County, would determine the ultimate disposition of the remains. Since the proposed Project would be in compliance with the existing regulations of the California Health and Safety Code, the Public Resources Code, and CEQA, impacts to human remains would be less than significant and no mitigation is required.

MITIGATION MEASURES

CR-1: If subsurface deposits believed to be cultural or human in origin are discovered during construction, all work must halt within a 100-foot radius of the discovery. A qualified professional archaeologist, meeting the Secretary of the Interior's Professional Qualification Standards for prehistoric and historic archaeology, shall be retained to evaluate the significance of the find, and shall have the authority to modify the no-work radius as appropriate, using professional judgement.

If the professional archeologist determines that the find does not represent a cultural resource, work may resume immediately and no agency notifications are required.

If the professional archeologist determines that the find does represent a cultural resource from any time period or cultural affiliation, the archaeologist shall immediately notify the lead agencies. The agencies shall consult on a finding of eligibility and implement appropriate treatment measures, if the find is determined to be a Historical Resource under CEQA, as defined by CEQA or historic property under Section 106 NHPA, if applicable.

Work may not resume within the no-work radius until the lead agencies, through consultation as appropriate, determine that the site either: 1) is not a Historical Resource under CEQA or a Historic Property under Section 106; or 2 that the treatment measures have been completed to their satisfaction.

If the find represents a Native American or potentially Native American resource that does not include human remains, then the agencies shall consult with culturally affiliated tribes on a finding of eligibility and implement appropriate treatment measures, if the find is determined to be a Tribal Cultural Resource under CEQA, as defined in Section 21074 of the CEQA Guidelines, or a Traditional Cultural Property pursuant to Section 106. Preservation in place is the preferred treatment, if feasible. Work may not resume within the no-work radius until the lead agencies, through consultation as appropriate, determine that the site either: 1) is not a Tribal Cultural Resource under CEQA or a Tradition Cultural Property under Section 106 or 2) that the treatment measures have been completed to their satisfaction.

If the find includes human remains, or remains that are potentially human, they shall ensure reasonable protection measures are taken to protect the discovery from disturbance (AB 2641). The archaeologist shall notify the Yolo County Coroner (per § 7050.5 of the Health and Safety Code). The provisions of § 7050.5 of the California Health and Safety Code, § 5097.98 of the Native American and not the result of a crime scene, the coroner will notify the NAHC, which then will designate a Native American Most Likely Decent (MLD) for the Project (§ 5097.98 of the PRC). The designated MLD will have 48 hours from the time access to the property is granted to make recommendations concerning treatment of the remains. If the landowner does not agree with the recommendation of the MLD, the NAHC can mediate (§ 5097.94 of the PRC). If agreement is reached, the landowner must rebury the remains where they will not be further disturbed (§5097.98 of the PRC). This will also include either recording the site with the NAHC or the appropriate Information Center, using an open space or conservation zoning designation or easement; or recording a reinternment document with the county in which the property is located (AB 2641). Work may not resume within the no-work radius until the lead agencies, through consultation as appropriate, determine that the treatment measures have been completed to their satisfaction.

FINDINGS

Project impacts relating to cultural resources would be **Less than Significant with Mitigation** incorporated.

2.6 ENERGY

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

DISCUSSION

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

Less Than Significant Impact. The Project would comply with standard construction BMPs and the City of West Sacramento General Plan (2016c) relating to the efficient use of energy resources. The City is exploring options to include lighting infrastructure for the new ADA ramp. The installation of this lighting within the area would result in additional energy consumption; however, all additional lighting will be in compliance with City Standard Specifications and the General Plan. Therefore, the Project would not result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources during Project construction or operation, and impacts would be less than significant.

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

No Impact. The Project would not conflict with or obstruct any state or local plans for renewable energy or energy efficiency. Therefore, no impact would occur.

MITIGATION MEASURES

No mitigation is required.

FINDINGS

The Project would have a **Less Than Significant Impact** relating to energy or energy resources.

2.7 GEOLOGY AND SOILS

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
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 risks to life or property?	☐	☐	☐	☒
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	☐	☐	☐	☒
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☐	☒	☐

DISCUSSION

a) Would the project expose people or structures to 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?

No Impact. According to the CDC Fault Activity Map of California (CDC 2015), there are no known active faults within the Project area or directly adjacent to the Project area. The nearest faults are the Dunnigan Hills Fault (concealed), located approximately 20 miles northwest, and the Midland Fault (quaternary), located approximately 20 miles southwest of the Project area. The Project would consist of minor ground disturbance and would not substantially change the existing conditions in such a way that it would result in new risks for exposing people or structures to potential, substantial adverse effects (including risk of loss, injury, or death involving rupture of a known fault; strong, seismic ground shaking; seismic-related ground failure; or landslides). Yolo County has not yet been evaluated by the California Geographic Survey

Seismic Hazard Program to determine landslide potential. However, the Project area is situated on flat or very gently sloping topography where the potential for slope failure due to seismic activity, including liquefaction, is minimal to low. As a result of the flat topography and distance from fault zones, the Project would have no impact on seismic activity.

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

No Impact. The Project does not include the loss of topsoil, nor would it result in substantial soil erosion, as work would be conducted atop paved roadways and within previously disturbed areas in an existing mixed-use neighborhood. Therefore, no impact would occur.

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?

No Impact. The Project area is not located on a geologic unit or soil that is known for unstable conditions or would become unstable as a result of Project construction or operation. During construction, soils may become unstable during de-grading activities; however, the area of ground disturbance and construction activities necessary for the construction of the project would not occur on unstable soils and would not result or potentially result in on- or off-site landslides, lateral spreading, subsidence, liquefaction, or collapse. Therefore, no impact would occur.

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

No Impact. Natural soil within the Project area consists of lang sandy loams (NRCS 2024), which are not known as expansive soils as defined in Table 18-1-B of the Uniform Building Code. The Project would not create any risk to life or property due to expansive soils. Therefore, no impact would occur.

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

No Impact. The project would not utilize septic tanks or an alternative wastewater disposal system on site; thus, the project would have no impact due to soils incapable of adequately supporting septic systems. Therefore, no impact would occur.

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

Less Than Significant Impact. The Project area is located in a largely urban and disturbed area. According to Wagner et al., the Project is solely atop levee and channel deposits, made up of quaternary age sedimentary and metasedimentary rock (1981). The formation is further defined as Holocene age alluvial deposits, which are not typically considered sensitive for paleontological resources as this is the most recent geologic period in the region (Wagner et al. 1981). Paleontological resources are "considered to be older than recorded human history and/or older than middle Holocene (i.e., older than about 5,000 radiocarbon years)" (Society of Vertebrate Paleontology 2010). The City's General Plan Update Draft Environmental Impact Report (EIR) (City of West Sacramento 2016b) states fossils are not likely in the upper 3 feet, considering the degree of disturbance from cultivation and development in the area (2016). Furthermore, the discovery of fossils is equally unlikely within the existing levee prism due to the nature of disturbance previously required for levee implementation. Lastly, ground disturbance is minimal within an approximate

0.25-acre area to construct the ADA connection ramp. Therefore, a less than significant impact on unique paleontological or geological features would occur.

MITIGATION MEASURES

No mitigation is required.

FINDINGS

The Project would have a **Less Than Significant Impact** relating to geology and soils.

2.8 GREENHOUSE GAS EMISSIONS

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
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?	☐	☐	☒	☐

REGULATORY SETTING

While climate change has been a concern since at least 1988, as evidenced by the establishment of the United Nations and World Meteorological Organization's Intergovernmental Panel on Climate Change (IPCC), the efforts devoted to greenhouse gas (GHG) emissions reduction and climate change research and policy have increased dramatically in recent years. These efforts are primarily concerned with the emissions of GHG related to the human activities that include CO_2, CH_4, NO_X, nitrous oxide, tetrafluoromethane, hexafluoroethane, sulfur hexafluoride, HFC-23 (fluoroform), HFC-134a (s, s, s, 2 –tetrafluoroethane), and HFC-152a (difluoroethane).

On June 1, 2005, California Governor Arnold Schwarzenegger signed Executive Order S-3-05. The goal of this Executive Order is to reduce California's GHG emissions to: 1) 2000 levels by 2010; 2) 1990 levels by 2020; and 3) 80 percent below the 1990 levels by the year 2050. In 2006, this goal was further reinforced with the passage of Assembly Bill 32 (AB 32), the Global Warming Solutions Act of 2006. AB 32 sets the same overall GHG emissions reduction goals while further mandating that CARB create a plan which includes market mechanisms, and implement rules to achieve *"real, quantifiable, cost-effective reductions of greenhouse gases."* Executive Order S-20-06 further directs state agencies to begin implementing AB 32, including the recommendations made by the state's Climate Action Team.

With Executive Order S-01-07, Governor Schwarzenegger set forth the low carbon fuel standard for California. Under this executive order, the carbon intensity of California's transportation fuels was reduced by at least 10 percent by 2020.

Climate change and GHG reduction is also a concern at the federal level; however, at this time, no legislation or regulations have been enacted specifically addressing GHG emissions reductions and climate change. California, in conjunction with several environmental organizations and several other states, sued to force the U.S. EPA to regulate GHG as a pollutant under the Clean Air Act (Massachusetts vs. [EPA] et al., 549 U.S. 497 (2007). The court ruled that GHG does fit within the Clean Air Act's definition of a pollutant, and that the U.S. EPA does have the authority to regulate GHG. Despite the Supreme Court ruling, there are no promulgated federal regulations to date limiting GHG emissions. [1]

According to the Association of Environmental Professionals white paper, "Alternative Approaches to Analyzing Greenhouse Gas Emissions and Global Climate Change in CEQA Documents" (June 29, 2007), an individual project does not generate enough GHG emissions to significantly influence global climate change. Rather, global climate change creates a cumulative impact. This means that a project may participate in a potential impact through its incremental contribution combined with the contributions of all other sources of GHG. In assessing cumulative impacts, it must be determined if a project's incremental effect is "cumulatively considerable." (See CEQA Guidelines sections 15064(i)(1) and 15130.) To make this determination, the incremental impacts of the project must be compared with the effects of past, current,

[1] http://www.epa.gov/climatechange/endangerment.html

and probable future projects. To gather sufficient information on a global scale of all past, current, and future projects in order to make this determination is a difficult if not impossible task.

As the proposed Project would have no effects on traffic capacity, any additional GHG emissions would only occur during, and result from, necessary temporary construction activities.

DISCUSSION

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. The Project would not generate GHG emissions through operation of the completed Project. Short-term GHG emissions would occur during construction through the use of gas-powered construction vehicles. GHG emissions generated from temporary construction activities would not exceed the District's recommended thresholds of significance for criteria pollutants (Table 4). Therefore, the Project would have a less than significant impact on the generation of greenhouse gas emissions.

Table 4. Thresholds of Significance for Criteria Pollutants of Concern

Pollutant	Thresholds of Significance
ROG	10 tons/year
NOx	10 tons/year
PM10	80 lbs/day
CO	Violation of a state ambient air quality standard for CO

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. The Project would generate short-term GHG emissions during construction. As indicated under section (a) above, the short-term construction GHG emissions would not exceed the District's recommended thresholds of significance for criteria pollutants which were created per CEQA Guidelines §15382. Additionally, the City of West Sacramento's Climate Action and Adaption Plan (CAAP) includes recommended guidance; GHG emissions reduction measures for heavy machinery be reduced 2,700 MT CO2e/yr by 2030. According to the CAAP, this could be done by using the best commercially available and financially feasible, clean, off-road vehicle technologies for publicly funded projects. Project activities would not conflict with the City's GHG recommendations. The Project involves the creation of bike lanes which will also reduce long-term GHG emissions. Due to the short-term construction GHG emissions and the long-term GHG emissions reduction through bike lanes availability, there will be no conflicts with any plan, policy or regulation for the purpose of reducing GHG emissions. Impacts on GHG emissions will be less than significant.

MITIGATION MEASURES

No mitigation is required.

FINDINGS

The Project would have a **Less Than Significant Impact** relating to GHG emissions.

2.9 HAZARDS AND HAZARDOUS MATERIALS

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

REGULATORY SETTING

Hazardous materials and hazardous wastes are regulated by many state and federal laws. These include not only specific statutes governing hazardous waste, but also a variety of laws regulating air and water quality, human health, and land use.

Hazardous waste in California is regulated primarily under the authority of the federal Resource Conservation and Recovery Act of 1976 and the California Health and Safety Code. Other California laws that affect hazardous waste are specific to handling, storage, transportation, disposal, treatment, reduction, cleanup, and emergency planning.

Worker health and safety and public safety are key issues when dealing with hazardous materials that may affect human health and the environment. Proper disposal of hazardous material is vital if it is disturbed during project construction.

DISCUSSION

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. The Project will include roadway striping improvements and therefore would require the removal and disposal of roadway striping paint, which has the potential to contain lead. Testing and BMPs will be implemented per all applicable local, State, and Federal laws. The Project would also involve the use of heavy equipment. The use of this equipment may require the use of fuels or other common materials that have hazardous properties (e.g., fuels are flammable). These materials would be

used in accordance with all applicable laws and regulations and, if used properly, would not pose a hazard to people or the environment. The use of these hazardous materials would be temporary, and the Project would not include permanent use or source of hazardous materials. Therefore, the Project would not create a significant hazard to the public or environment.

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. Review of the information available through Geotracker and Envirostor indicate that there are no current or historical clean-up sites or hazardous waste facilities within the Project area. The nearest occurrence is approximately 50 feet south of the Project site. The Project will involve removal and disposal of roadway striping paint which has the potential to contain lead-based paint. Therefore, standard BMPs for lead-containing structures would be implemented prior to construction.

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

Less Than Significant Impact. The Project area is located within 0.25 miles from Elkhorn Village School. However, construction activities would not involve handling or transportation of acutely hazardous materials that would impact the nearby school. Furthermore, construction emissions would be temporary and intermittent and would remain below District thresholds of significance. Therefore, impacts would be considered 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. The proposed Project is not on a site included in the list of hazardous materials sites compiled pursuant to Government Code Section 65962.5, which is also known as the Cortese List. No sites on the Cortese List are located within the Project area; therefore, no impact would occur.

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

No Impact. The Project is not located within an airport land use plan or within two miles of a public airport or public use airport. Therefore, the Project would not result in a safety hazard or excessive noise for people residing near or working in the Project area, and no impact would occur.

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

Less Than Significant Impact. The Project would not impair or alter any existing emergency response plan or emergency evacuation plan. However, construction of the Project may cause short-term traffic impact, which may also affect emergency response vehicles. No road closures are anticipated to occur and access to each residence would be maintained. Traffic control would be implemented per the Project permits. Therefore, Project impacts would be considered less than significant.

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

No Impact. The Project would not occur within a designated wildland area, or where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands. Therefore, the Project would not expose people or structures to a significant risk of loss, injury, or death involving wildland fires, and no impact would occur.

AVOIDANCE AND MINIMIZATION MEASURES

The following construction BMPs shall be incorporated into the Project to minimize the potential impacts discussed in section (b) above:

- Where the Project would affect yellow thermoplastic pavement markings and other types or colors of street or municipal markings that may contain lead-based paints, markings would be collected, tested, and/or disposed of in accordance with applicable regulations. To avoid impacts from pavement striping during construction, it is recommended that testing and removal requirements for yellow striping and pavement markings be performed in accordance with applicable local, State, and Federal laws.

MITIGATION MEASURES

No mitigation is required.

FINDINGS

The Project would have a **Less Than Significant Impact** relating to hazards and hazardous materials.

2.10 HYDROLOGY AND WATER QUALITY

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	☐	☐	☒	☐
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such 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?	☐	☐	☐	☒

REGULATORY SETTING

Federal Regulations

Clean Water Act

The Clean Water Act (CWA) was enacted as an amendment to the Federal Water Pollutant Control Act of 1972, which outlined the basic structure for regulating discharges of pollutants to Waters of the United States (WOTUS). The CWA serves as the primary federal law protecting the quality of the nation's surface waters, including lakes, rivers, and coastal wetlands. The CWA empowers the USEPA to set national water quality standards and effluent limitations and includes programs addressing both point-source and non-point-source pollution. Point-source pollution originates or enters surface waters at a single, discrete location, such as an outfall structure or an excavation or construction site. Non-point-source pollution originates over a broader area and includes urban contaminants in stormwater runoff and sediment loading from upstream areas. The CWA operates on the principle that all discharges into the nation's waters are unlawful unless they are specifically authorized by a permit; permit review is the CWA's primary regulatory tool.

Section 401

The RWQCB has jurisdiction under Section 401 of the CWA and regulates any activity that may result in a discharge to surface waters. Typically, the areas subject to jurisdiction of the RWQCB coincide with those of USACE (i.e., WOTUS, including any wetlands). The RWQCB also asserts authority over WoS under waste discharge requirements pursuant to the Porter-Cologne Water Quality Control Act.

Section 402

The Central Valley RWQCB is a designated municipal permittee under the EPA's National Pollutant Discharge Elimination System (NPDES), which regulates stormwater flows into natural water bodies. The NPDES regulations require permitted areas to implement specific activities and actions to eliminate or control stormwater pollution (RWQCB, 2018).

The U.S. EPA defines a Municipal Separate Storm Sewer System (MS4) as any conveyance or system of conveyances (roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, human-made channels, and storm drains) owned or operated by a state, city, town, county, or other public body having jurisdiction over storm water, that are designed or used for collecting or conveying storm water. As part of the NPDES program, U.S. EPA initiated a program requiring that entities having MS4s apply to their local RWQCBs for storm water discharge permits. For all projects subject to the Construction General Permit (CGP), applicants are required to develop and implement an effective Storm Water Pollution Prevention Plan (SWPPP).

By law, all storm water discharges associated with construction activity, including, but not limited to, clearing, grading, grubbing or excavation, or any other activity that results in a land disturbance of equal to or greater than one acre must comply with the provisions of the CGP. Construction activity that results in soil disturbances of less than one acre is subject to this CGP if there is potential for significant water quality impairment resulting from the activity as determined by the RWQCB. Operators of regulated construction sites are required to develop a Storm Water Pollution Prevention Plan; to implement sediment, erosion, and pollution prevention control measures; and to obtain coverage under the CGP.

The CGP separates projects into Risk Levels 1, 2, or 3. Risk levels are determined during the planning and design phases and are based on potential erosion and transport to receiving waters. Requirements apply according to the Risk Level determined.

Section 404

The USACE regulates discharges of dredged or fill material into WOTUS. These waters include wetlands and non-wetland bodies of water that meet specific criteria, including a "relatively permanent" waters and "continuous surface connection" to other defined WOTUS. Under the current definition of WOTUS, Section 404 of the CWA is founded on a connection between the water body in question and other WOTUS. This connection must be direct (through a tributary system linking a stream channel with traditional navigable waters used in interstate or foreign commerce), or in the context of wetlands, the wetland in question must have a direct surface connection to the existing WOTUS, where there is no clear demarcation between the existing WOTUS and the wetland.

Sackett v. Environmental Protection Agency

On May 25, 2023, the Supreme Court of the United States (SCOTUS) issued a unanimous ruling limiting the federal government's jurisdiction over wetland and tributaries. In Sackett v. EPA, the Court expressly endorsed the test articulated in the Rapanos plurality opinion and outright rejected Justice Kennedy's "significant nexus" test. Therefore, the Sackett v. EPA decision limits the definition of WOTUS to relatively permanent bodies of navigable waters, and to assert jurisdiction over an adjacent wetland or tributary under the CWA, a party must establish "first, that the adjacent [body of water constitutes] . . . 'water[s] of the United States' (i.e., "only those relatively permanent, standing or continuously flowing bodies of water 'forming geographic[al] features' connected to traditional interstate navigable waters); and second, that the wetland or tributary has a continuous surface connection with that water, making it difficult to determine where the 'water' ends and the 'wetland' begins." (SCOTUS 2023).

State Regulations

Porter-Cologne Water Quality Act
Also known as the California Water Code, the Porter-Cologne Water Quality Act (Porter-Cologne Act), was created in 1969 to govern water quality regulation in California and protect water quality as well as beneficial uses of water. The Porter-Cologne Act applies to all WoS, including surface water, groundwater, and wetlands at both point and non-point sources of pollution. The act established the overarching California State Water Resources Control Board and nine semiautonomous Regional Water Boards. The Porter-Cologne Act requires the adoption of water quality control plans that give direction to managing water pollution in California. Usually, basin plans get adopted by the Regional Water Boards and are updated when needed. The plans incorporate the beneficial uses of the WoS and then provide objectives that should be met in order to maintain and protect these uses.

DISCUSSION

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

Less Than Significant Impact. The Project would disturb less than 1 acre of land as a result of construction. As such, the Project falls under Small Construction Projects, as defined by the City, and would be required to comply with all stormwater requirements for construction and development projects per City guidelines. This includes preparation of an Erosion and Sediment Control Plan (ESCP), which would outline construction BMPs for erosion and sediment control, in order to prevent construction pollutants from entering stormwater runoff. Therefore, construction and operation of the Project would not violate any water quality standards or waste discharge requirements established by the Central Valley RWQCB in its Basin Plan for the Sacramento River and San Joaquin River Basins. Impacts would be considered less than significant.

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

Less Than Significant Impact. Project activities involve work within the existing roadway and construction of an ADA ramp. Below ground utilities, including water supply infrastructure, would be avoided to the greatest extent feasible. If conflicts are unavoidable, existing utilities would be relocated in coordination with associated utility providers. If water supply infrastructure relocation is necessary, it would be kept to the minimum amount possible and would not substantially decrease or interfere with groundwater recharge. Therefore, any impacts to water supply infrastructure 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;

(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?

Less Than Significant Impact. There are no water resources located within the Project area. The Sacramento River is located approximately 850 feet from proposed ground disturbing activities and is located on the opposite side of a levee from the Project area. Due to the distance to nearby aquatic features, the Project does not have the potential to impact water resources. Installation of the ADA-ramp would increase impervious surfaces in the area; however, this would be considered nominal in the current landscape within the Project area, as the majority of the site consists of previously paved surfaces. Implementation of the ADA ramp is not anticipated to substantially alter the existing drainage pattern of the Project area. Construction BMPs would be included within the Project ESCP to control erosion and siltation on- and offsite. Construction activity would adhere to all federal, state, and local regulations, including the Project ESCP and City Design Standards. Therefore, the Project is anticipated to have a less than significant impact on erosion, siltation, runoff, and flood flows.

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

Less Than Significant Impact. The Project area is not located within a tsunami or seiche zone. According to the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps (FIRM), the Project area falls within an "area protected from the one percent annual change (100 year) flood by levee, dike, or other structures subject to possible failure or overtopping during larger floods" (FEMA 1990; Appendix B: FEMA FIRM Panel). The levee prevents the Sacramento River from flooding the area; thus, the release of pollutants from potential Project inundation is not anticipated. Therefore, impacts from flooding would be less than significant.

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

No Impact. The Project would not conflict with or obstruct a water quality control plan or sustainable groundwater management plan. Therefore, no impact would occur.

AVOIDANCE AND MINIMIZATION MEASURES

The following construction BMPs shall be incorporated into the Project:

- The City shall ensure the contractor prepares an ESCP, and implements all construction BMPs to keep products of erosion from moving offsite into receiving waters.
- All erosion control and stormwater control measures shall be properly maintained until the site has returned to pre-construction conditions.
- All disturbed areas shall be returned to pre-construction contours.
- All construction materials shall be hauled offsite after completion of construction.

MITIGATION MEASURES

No mitigation is required.

FINDINGS

In compliance with the City of West Sacramento's Stormwater Requirements for Construction and Development Projects and all required regulatory permitting, the Project will have a **Less Than Significant Impact** relating to hydrology and water quality.

2.11 LAND USE AND PLANNING

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Physically divide an established community?	☐	☐	☐	☒
b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☐	☒

DISCUSSION

a) Would the project physically divide an established community?

No Impact. The Project would implement a road diet via restriping to create bike lanes and enhance intersections within existing public right-of-way and install an ADA ramp within a mixed-use neighborhood commercial development area adjacent to the right-of-way. The Project would not physically divide an established community as there are no housing structures within the parcels acquired for the ADA ramp installation. Therefore, no impact would occur.

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

No Impact. The Project would be consistent with the City of West Sacramento General Plan (2016c) and applicable City Ordinances (City of West Sacramento 2024). Therefore, the Project would not conflict with any applicable land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect. No impact would occur.

MITIGATION MEASURES

No mitigation is required.

FINDINGS

The Project would not physically divide an established community or conflict with any land plan, policy or regulation. Therefore, the Project would have **No Impact** relating to land use and planning.

2.12 MINERAL RESOURCES

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☐	☒
b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	☐	☐	☐	☒

DISCUSSION

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

No Impact. The Project area does not have any known mineral resources that would be of value to the region and the residents of the state; therefore, no impact would occur.

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

No Impact. The City of West Sacramento does not have any listed locally-important mineral resource recovery sites in the City's General Plan (2016c); therefore, no impact would occur.

MITIGATION MEASURES

No mitigation is required.

FINDINGS

There are no known mineral resources or listed mineral resource recovery sites located in vicinity of the Project. Therefore, the Project would have **No Impact** relating to mineral resources.

2.13 NOISE

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

AFFECTED ENVIRONMENT

Noise-sensitive land uses generally include those uses where exposure to noise would result in adverse effects, as well as uses where quiet is an essential element of their intended purpose. The City of West Sacramento Code of Ordinances (2015) defines noise-sensitive land uses as: schools, hospitals, churches, and residences. The Project is primarily located within a residential and mixed-use commercial area and is within 0.25 miles of Elkhorn Village School.

DISCUSSION

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 Impact. The overall noise goal for the City is to protect city residents from the harmful effects of excessive noise and vibration. The City of West Sacramento General Plan (2016c) and the City of West Sacramento Code Chapter 17.28 establishes noise standards for maximum allowable noise exposure due to new stationary noise-producing uses. Stationary noise sources are not to exceed 55 dBA (hourly) and 70 dBA (maximum level) during daytime hours (7:00 A.M. to 10:00 P.M.) and 45 dBA (hourly) and 65 dBA (maximum level) during nighttime hours (10:00 P.M. to 7:00 A.M.) as measured at the property line of noise sensitive land uses. The nearest noise-sensitive receptor is located approximately 0.25 miles from ground disturbing activities which may require heavy equipment (i.e. jackhammers). No long-term, operational noise impacts would occur as a result of the Project. Short-term, temporary, construction-related noise would occur intermittently from the use of construction equipment and vehicles; however, ambient construction noise would only occur during permissible hours and would cease upon completion of the Project. The Project is anticipated to comply with all local and regional regulations and includes construction BMPs to minimize the potential for excessive construction noise impacts. Therefore, impacts would be considered less than significant.

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

Less Than Significant Impact. The Project would occur within an existing residential and commercial neighborhood. The Project would not require pile driving or sources of excessive ground borne vibration. The temporary construction activities within the Project area are anticipated to create ground borne noise;

however, this would occur during permissible times. Therefore, any ground-borne noise and vibration 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 two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?*

No Impact. The Project is not located within the vicinity of a private airstrip or an airport land use plan and is not within two miles of a public airport or public use airport. Therefore, the Project would not expose people residing or working in these areas to excessive noise levels, and no impact would occur.

MITIGATION MEASURES

No mitigation is required.

FINDINGS

The Project would cause temporary construction-related noise; however, the Project will implement noise BMPs and be designed in a way that minimizes sound impacts to the extent possible per the City's Code of Ordinances §17.28.110. Therefore, the Project would have a **Less Than Significant Impact** relating to Noise.

2.14 POPULATION AND HOUSING

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

DISCUSSION

a) 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 is surrounded by residential, central business district, and mixed-use neighborhood commercial zoned properties and is within the public right-of-way, mixed-use neighborhood commercial and parks and recreation zoned properties. The purpose of the Project is to reduce the number of driving lanes to install bike lanes, as well as make safety improvements and install an ADA ramp. The installation of these infrastructure and safety improvements would make the area more accessible to a larger variety of users in to use the area; however, because the project area is already a developed neighborhood, these infrastructure improvements are not expected to induce substantial unplanned population growth. The Project would not include the construction of new residential or commercial areas that would directly contribute to population growth in the area. Therefore, Project impacts would be considered less than significant.

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

No Impact. Permanent right-of-way acquisition is anticipated to include three parcels, located on the northeast corner of the 5th Street and A Street intersection; however, these parcels do not have housing structures and would not displace any existing housing or necessitate the construction of replacement housing elsewhere. Therefore, no impact would occur.

MITIGATION MEASURES

No mitigation is required.

FINDINGS

The Project would have a **Less Than Significant Impact** relating to population or housing.

2.15 PUBLIC SERVICES

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

DISCUSSION

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

Less Than Significant Impact. The Project may cause recreation in the area to increase with the installation of an ADA ramp connecting the Riverwalk trail to 5th Street; however, this increase would not require additional parks or public facilities. The Project would not create an unplanned increase in demand for fire or police services, schools, or recreation facilities, nor would it necessitate new or physically altered governmental facilities. However, response times could potentially be temporarily altered during construction. Traffic control would be implemented to ensure that one lane traveling in each direction would be maintained in affected roadways, which will be addressed in Section 2.17 - *Transportation*. . Therefore, impacts would be considered less than significant.

MITIGATION MEASURES

No mitigation is required.

FINDINGS

The Project would have **Less Than Significant Impact** relating to public services.

2.16 RECREATION

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation	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?	☐	☐	☐	☒

DISCUSSION

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 installation of ADA ramp that connects to the Riverwalk Trail could increase use of the Riverwalk Trail; however, this increase would not substantially cause deterioration of the trail. Therefore, a less than significant impact would occur.

b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?

No Impact. The Project does not include recreational facilities, nor does it require the construction or expansion of other recreational facilities. No impact would occur.

MITIGATION MEASURES

No mitigation is required.

FINDINGS

The Project would have a **Less Than Significant Impact** relating to recreation.

2.17 TRANSPORTATION/TRAFFIC

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

DISCUSSION

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

No Impact. The Project would not conflict with an applicable program, plan, ordinance, or policy establishing measures of effectiveness for the performance of the circulation system. This takes into account all elements and modes of transportation, including intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit.

Construction

No full road closures are anticipated to occur and access to each residence would be maintained throughout the duration of construction. Traffic control measures would be implemented to maintain and control traffic throughout construction zones and/or detour routes and would conform to City standards, including requirements of the latest edition of the California Manual on Traffic Control Devices (CA MUTCD), per the City of West Sacramento Code of Ordinances §10.08.140.

Operation

A Traffic Operations Analysis (TOA) was prepared by Wood Rodgers, Inc. on October 27, 2025 (see Appendix C). The TOA compared Near-Term Conditions with Near-Term Plus Project Conditions and included analysis for Near-Term Plus Project With I Street Bridge Improvements Conditions. The following topics were covered in the TOA: Intersection Level of Service (LOS); Intersection Queuing; Safety Evaluation; Active Transportation Program (ATP) Traffic Counts; I Street Bridge Replacement Project; and California Indian Heritage Center (CIHC). Below is a summary of each topic:

- Intersection LOS: All intersections included in the TOA are anticipated to operate within acceptable LOS criteria, as defined by City of West Sacramento General Plan 2024 Mobility Element policy M-3.2
- Intersection Queuing: All intersections included in the TOA are anticipated to fit within queuing storage. The Project is not anticipated to adversely impact vehicle queuing within the Project corridor.
- Safety: 24 collisions have occurred within the Project area over the last five (5) years. The Project's proposed safety improvements, consistent with Caltrans and FHWA Proven Safety Countermeasures, have potential to decrease future collisions in the Project area.

- ATP Traffic Counts: Future bicycle and pedestrian counts will be completed in accordance with *Interim Count Methodology Guidance for Active Transportation Program (ATP)* (Caltrans 2024).
- I Street Bridge Replacement Project: All intersections included in Near-Term Plus Project With I Street Bridge Improvements Conditions are anticipated to operate within acceptable LOS criteria, as defined by the City's General Plan (2024) Mobility Element policy M-3.2. All intersections included are additionally anticipated to fit within queuing storage.
- CIHC: Additional vehicle trips generated would increase delays up to four (4) seconds per vehicle per intersection within the Project area. This increase is still anticipated to result in acceptable intersection LOS criteria and intersection queues fitting within storage.

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

Less Than Significant Impact. The Project would not increase or alter vehicle miles traveled (VMT) within the circulation system and would not conflict with CEQA Guidelines section 15064.3. It is however a transportation project; therefore, it has a less than significant impact per CEQA Guidelines section 15064.3 subdivision (b).

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)?

No Impact. The Project would not substantially increase hazards due to a geometric design feature or incompatible uses. Design features would comply with the City of West Sacramento standards, as appropriate. Therefore, no impact would occur.

d) Would the project result in inadequate emergency access?

Less Than Significant Impact. The Project may temporarily result in slowing of traffic during active construction work, which could potentially impact the response time of emergency services. However, traffic control would be implemented to maintain and control traffic throughout construction routes and would conform to City standards, including requirements of the latest edition of the California Manual on Traffic Control Devices (CA MUTCD), per the City of West Sacramento Code of Ordinances §10.08.140. As discussed in a) above, the TOA found all intersection LOS and queues are anticipated to fit within acceptable parameters during Project operation, thus would not result in inadequate emergency access. Therefore, impacts would be less than significant.

AVOIDANCE AND MINIMIZATION MEASURES

The following construction BMPs shall be incorporated into the Project:

- Traffic control would be implemented in conformance with City standards, including requirements of the latest edition of the California Manual on Traffic Control Devices (CA MUTCD), per the City of West Sacramento Code of Ordinances §10.08.140.

MITIGATION MEASURES

No mitigation is required.

FINDINGS

The Project would have a **Less Than Significant Impact** relating to transportation/traffic.

2.18 TRIBAL CULTURAL RESOURCES

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

REGULATORY SETTING

State Regulations

Tribal Cultural Resources

As defined at PRC § 21074, a tribal cultural resource (TCR) is a site, feature, place, cultural landscape, sacred place or object that is of cultural value to a California Native American tribe and is either: 1) on or eligible for the CRHR or a local historic register; or 2) the lead agency, at its discretion, chooses to treat the resource as a TCR. TCRs are similar to TCPs in terms of their characteristics, identification, and treatment, and may include a cultural landscape to the extent that the landscape is geographically defined in terms of the size and scope of the landscape. Additionally, as defined at PRC § 21074(c), a historical resource, a unique archaeological resource, or a non-unique archaeological resource may also be a TCR if it conforms to the criteria of a TCR in PRC § 21074(a). CEQA mandates that lead agencies determine whether a project will have a significant impact on TCRs that are eligible for listing on the CRHR (i.e., a historical resource), or are determined to be significant by the lead agency in order to appropriately mitigate any such impacts.

Under the CEQA Guidelines, even if a resource is not included on any local, state, or federal register, or identified in a qualifying historical resources survey, a lead agency may still determine that any resource is a historical resource (i.e., TCR) for the purposes of CEQA if there is substantial evidence supporting such a determination (CEQA Guidelines § 15064.5[a]). A lead agency must consider a resource to be historically significant if it finds that the resource meets the em for listing in the CRHR. A resource may be eligible for inclusion in the CRHR if it:

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

In accordance with CEQA Guidelines, cultural resources investigations are necessary to identify TCRs that may have significant impacts as a result of a project (14 CCR §15064.5). The following steps are routinely implemented in a cultural resources investigation for CEQA compliance:

1. Identify cultural resources in the proposed project area.
2. Evaluate against the CRHR criteria of significance (listed below).
3. Evaluate the impacts of the proposed project on all cultural/tribal resources.
4. Develop and implement measures to mitigate proposed project impacts on historical resources or resources deemed significant by the lead agency.

As TCRs hold cultural value to a California Native American tribe, consultation with local Native American tribes is an integral component of each of the cultural resources investigation steps described above.

Assembly Bill 52 and Consultation
The lead agency for CEQA is responsible for consultation with Native American tribes regarding the potential for a project to impact TCRs, pursuant to Assembly Bill 52 and PRC §§ 21073, 21074, 21080.3.1, 21080.3.2, 21082.3, 21083.09, 21084.2, 21084.3, and 5097.94(m). Assembly Bill 52 recognizes that *"…tribes may have expertise with regard to their tribal history and practices, which concern the tribal cultural resources with which they are traditionally and culturally affiliated…"* and that consultation will occur between a lead agency and Native American tribes for covered projects.

PRC §21080.3.1 (a) and Government Code §65352.4 define consultation as *"the meaningful and timely process of seeking, discussing, and considering carefully the views of others, in a manner that is cognizant of all parties' cultural values and, where feasible, seeking agreement. Consultation between government agencies and Native American tribes shall be conducted in a way that is mutually respectful of each party's sovereignty. Consultation shall also recognize the tribes' potential needs for confidentiality with respect to places that have traditional tribal cultural significance."*

As described in Section 2.5, Cultural Resources, a proposed project may induce a significant impact to a historical resource, unique archaeological resource, or a TCR if it causes a substantial adverse change (i.e., physical demolition, destruction, relocation, or alteration) to the resource or immediate surroundings (14 CCR 15064.5[b]), thereby demolishing or significantly altering the physical characteristics that qualify it for listing on the CRHR or local registers (PRC §§ 5020.01[k] and 5024.1[g]). A project that may cause a substantial adverse change in the significance of a TCR is a project that may have a significant effect on the environment (PRC § 21084.2). A lead agency shall establish measures to avoid impacts that would alter significant characteristics of a TCR, when feasible (PRC §21084.3).

Native American Historical, Cultural, and Sacred Sites
Pursuant to PRC 5097.94 the NAHC has authority and duty to "*identify and catalog places of special religious or social significance to Native Americans, and known graves and cemeteries of Native Americans on private lands"* and has the power and duty to make recommendations for acquisition by the state or other public agencies regarding Native American sacred places that are located on private lands, are inaccessible to Native Americans, and have cultural significance to Native Americans.

California Native American Graves Protection and Repatriation Act of 2001
The California Native American Graves Protection and Repatriation Act of 2001 (CalNAGPRA) requires all state agencies and museums that receive state funding and that have possession or control over collections of human remains or cultural items to provide a process for the identification and repatriation of these items to the appropriate tribes.

Local Regulations

City of West Sacramento

The Natural and Cultural Resource Element of the City of West Sacramento 2035 General Plan (2016c) outlines goals and policies intended to protect water, plant and animal species and habitat, urban forest, agricultural land, mineral resources, air, energy, scenic amenities, and historic and cultural resources. Through the implementation of these measures, the City will ensure the preservation of significant historical, archeological, tribal cultural, and paleontological resources. Additionally, the Natural and Cultural Resources Element contains provisions for the inclusion and consultation of Native American tribes and historical organizations during the planning process for development projects, registration of new historic resources, and expansion of the Yolo County Historical Resources Survey.

Yolo County

The Conservation and Open Space Element of the Yolo County 2030 General Plan (2009) outlines the goals and policies intended to conserve the County's open spaces, biological, mineral, cultural, energy, and water resources, air quality, and to address climate change. The Conservation and Open Space Element includes policies for the identification and safeguarding of cultural resources, historic resource outreach and education, working with culturally affiliated tribes through the development review process, and avoiding or mitigating impacts on Native American archaeological and cultural resources.

AFFECTED ENVIRONMENT

The Area of Potential Effects (APE) is located within two tribal territories, the Penutian-speaking Nisenan in the southwestern portion of territory and the Penutian-speaking Hill Patwin in the central portion of the territory. The Nisenan territory included the drainages of the Yuba, Bear, and American Rivers, and the lower reaches of the Feather River to the east banks of the Sacramento River on the west to the mid to high elevations of the western flank of the Sierra Nevada to the East (Wilson and Towne 1978).The Patwin territory extended from the southern portion of the Sacramento River Valley to the west of the river, from the town of Princeton south to San Pablo and Suisun Bays. Tribal Cultural Resources could include, but are not limited to, Native American human remains, funerary objects, items or artifacts, sites, features, places, landscapes, or objects with cultural values to the tribes.

The Yocha Dehe Wintun Nation (YDWN) is a federally recognized Tribe of Patwin Tribal Members. The United Auburn Indian Community (UAIC) is a federally recognized Tribe comprised of both Miwok and Maidu (Nisenan) Tribal members. Both Tribes are traditionally and culturally affiliated with the project area. Both Tribes have deep spiritual, cultural, and physical ties to their ancestral land and are contemporary stewards of their culture and landscapes. The Tribal community represents continuity and endurance of their ancestors by maintaining their connection to their history and culture. It is the goal of both tribes to ensure the preservation and continuance of their cultural heritage for current and future generations.

The YDWN and UAIC conducted background research for the identification of TCRs for this Project. This research included a review of pertinent literature, historic maps, YDWN internal database and a records search using UAIC's Tribal Historic Information System (THRIS). UAIC's THRIS database is composed of UAIC's areas of oral history, ethnographic history, and places of cultural and religious significance, including UAIC Sacred Lands that are submitted to the Native American Heritage Commission (NAHC). The THRIS resources shown in this region also include previously recorded indigenous resources identified through the California Historic Resources Information System Center (CHRIS) as well as historic resources and survey data. According to the YDWN records and the UAIC THRIS data, there are seven known TCRs, including burials/cemeteries, habitation sites, lithic scatters, areas of oral history, and sacred lands documented less than a 1-mile radius of the Project Area. Due to the majority of the project area either

paved or built, neither Tribe conducted a pedestrian survey. No known TCRs are recorded in the Project Area.

NATIVE AMERICAN CONSULTATION

On behalf of the City of West Sacramento, ECORP Consulting Inc. sent a formal notification of the project to tribal representatives who have requested such notice from the City. These notifications were sent on July 17, 2025. Responses from three tribal organizations were received requesting consultation with the City of West Sacramento under AB52. A summary of the ongoing consultation efforts with these groups is provided below.

The Yocha Dehe Wintun Nation (YDWN) responded on August 13, 2025, and indicated that the project is within their Aboriginal territories and has cultural interest and authority in the proposed project area. YDWN requested to initiate formal consultation with the City. On September 4, 2025, a government to government AB52 consultation meeting occurred over Microsoft Teams to discuss the details of the Project with the YDWN. Site Protection Manager Eric Hernandez and Tribal Cultural Monitor Supervisor Socorro Reyes-Gutierrez represented the YDWN. Also in attendance was Christian Asuncion and Joanna Ortiz with the City of West Sacramento; Brian S. Marks, Ph.D., and Erica Ramirez-Schroeder with ECORP (cultural resources consultant); and Tim Chamberlain, with Wood Rodgers (engineering and environmental consultant). The meeting detailed that the project would involve limited ground disturbing activities and mainly consist of hardscaping. The main area of concern, and where the majority of the ground disturbance is anticipated, is a walkway connecting Levee Road with 5th Street. YDWN requested Cultural Sensitivity Training/Contractor Awareness Training for the Project. He requested tribal monitoring for the initial groundwork for the trail access ramp on the levee and during any groundwork for utilities relocation. Additionally, the YDWN requested that the environmental document include their burial treatment protocol.

The United Auburn Indian Community (UAIC) responded on July 21, 2025, and stated that the UAIC would like to consult for the proposed undertaking. UAIC stated that the project is located in a culturally sensitive area. On September 18, 2025, a government to government AB52 consultation meeting occurred over Microsoft Teams to discuss the details of the Project with the UAIC. Tribal Historic Preservation Officer (THPO) Josef Fore and Anna Starkey represented UAIC. Also in attendance was Christian Asuncion and Joanna Ortiz with the City of West Sacramento; Brian S. Marks, Ph.D., and Erica Ramirez-Schroeder with ECORP; and Tim Chamberlain, with Wood Rodgers. The meeting detailed that the project would involve limited ground disturbing activities and mainly consist of hardscaping. The main area of concern, and where the majority of the ground disturbance is anticipated, is a walkway connecting Levee Road with 5th Street. UAIC requested that a paid tribal monitor be present for the ground disturbing work in this area. If the staging area falls outside of the project area that was consulted on and would need to be graded, then additional consultation would be required and a tribal monitor may be needed for that area as well. A tribal monitor should be present for any ground disturbing work that goes into original ground surface/deeper than fill material.

The Shingle Springs Band of Miwok Indians (SSBMI) responded on July 29, 2025, requesting that SSMBI be added as a consulting party to identify tribal cultural properties in the project area. SSMBI requested a copy of the cultural resources record search, prior cultural studies in the area, and a copy of the cultural report being prepared for this project. On October 23, 2025, a government to government AB52 consultation meeting occurred over Microsoft Teams to discuss the details of the Project with the SSBMI. Site Protection Coordinator Mariah Mayberry represented SSBMI. Also in attendance was Christian Asuncion with the City of West Sacramento; Brian S. Marks, Ph.D., with ECORP; and Tim Chamberlain with Wood Rodgers. The meeting detailed that the project would involve limited ground disturbing activities and mainly consist of hardscaping. The main area of concern, and where the majority of the

ground disturbance is anticipated, is a walkway connecting Levee Road with 5th Street. At the conclusion of the meeting, Mariah stated that she would take the information to her superiors for their input.

DISCUSSION

If a lead agency determines that a project may cause a substantial adverse change to a TCR, the lead agency must consider measures to mitigate that impact. Consultation concludes when either: 1) the parties agree to measures to mitigate or avoid a significant effect, if a significant effect exists, on a TCR; or 2) a party, acting in good faith, and after reasonable effort, concludes that mutual agreement cannot be reached (PRC § 21080.3.2). Under existing law, environmental documents must not include information about the locations of an archaeological site or sacred lands or any other information that is exempt from public disclosure pursuant to the Public Records act.

a) *Would the project cause a substantial adverse change in the significance of a tribal cultural resource, listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k)*

Less Than Significant with Mitigation. As mentioned in Section 2.5, the Project area contains silt loam which forms from alluvium created during flood deposits. These flood deposits have the potential to bury pre-contact archeological deposits because many resources used by indigenous Americans were used near waterways. Pre-contact burial and individual pre-contact resources have been recorded within 0.25 miles; however, there have been no recorded observations within or adjacent to the Project area. There will be a minimal amount of ground disturbance from the Project.

The Sacramento River Tribal Cultural Landscape (Resource P-587-1628) encompasses a 2-mile-wide swath on either side of the Sacramento River over a 55-miles stretch in Sacramento and Yolo Counties and includes a portion of the Project area. The landscape in the Project area has been heavily modified through residential use over an extended period of time and does not appear to have the landscape characteristic described in the site record. In 2018, Tremain and Associates evaluated this resource as eligible for the NRHP/CRHR under Criterion A/1; however, consultation with USACE and SHPO on other projects along the River have not reached any federal-agency or SHPO concurrence. For the purposes of this Project, the Landscape would be treated as eligible for the NRHP and CRHR under Criterion A/1. Due to the development vicinity, this resource lacks all integrity in the Project area and adjacent areas except for location.

With the implementation of mitigation measure **CR-1** (see Section 2.5 *Cultural Resources*) and **TCR-1** through **TCR-4**, there would be a less than significant impact.

b) *Would the project cause a substantial adverse change in the significance of 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 Impact. The Sacramento River Tribal Cultural Landscape (Resource P-587-1628) is known to occur in the Project area; however, the landscape in the Project area has been heavily modified through residential use over an extended period of time and does not appear to have the landscape characteristic described in the site record. Project activities include roadway improvements and minimal ground disturbance for the installation of an ADA ramp. Given that the landscape is already heavily modified, these minimal changes from the Project would not cause a substantial adverse change to the resource; therefore, impacts would be less than significant.

MITIGATION MEASURES

The Project would include measure **CR-1**, discussed in Section 2.5, *Cultural Resources*, and measures **TCR-1** through **TCR-4** to mitigate potential impacts to tribal cultural resources.

TCR-1: The City shall ensure that all construction workers and equipment operators receive Cultural Sensitivity Training/Contractor Awareness Training from a Tribal Representative to make them aware of TCRs and the importance to the Tribes. The training shall be provided by a Tribal Representative or brochure to all construction supervisors, forepersons, and operators of ground-disturbing equipment. All personnel shall be required to sign a training roster. The construction manager is responsible for ensuring that all required personnel receive the training. The Construction Manager shall provide a copy of the signed training roster to the City as proof of compliance.

TCR-2: A compensated Tribal monitor shall be invited to monitor ground disturbing work that impacts the ground surface within 50 feet of the levee toe, or where ground disturbing work extends beyond fill material into the original ground surface.

The Tribal Representatives and/or Tribal Monitors act as representatives of their Tribal government. They are experts in their Tribal Cultural Resources (TCRs) and have the statutory authority and expertise to identify sites or objects of cultural value to their Tribe and to recommend appropriate treatment and final disposition of such sites or objects.

The City of West Sacramento or their construction contractor shall comply with the following measure to assist with identification of TCRs at the earliest possible time during project-related earthmoving activities:

- The project proponent shall contact the YDWN Site Protection Manager (ehernandez@yochadehe.gov), and the UAIC THPO (thpo@auburnrancheria.com) at least 2 months, if feasible, prior to project ground-disturbing activities to retain the services of Tribal Monitor(s). The duration of the construction schedule and Tribal Monitoring shall be determined at this time.

- A contracted Tribal Monitor(s) shall monitor the vegetation grubbing, stripping, grading, trenching, and other ground-disturbing activities in the project area. All ground disturbing work that impacts the ground surface within 50 feet of the levee toe, or where ground disturbing work extends beyond fill material into the original ground surface, shall be subject to Tribal Monitoring unless otherwise determined unnecessary by the Tribes.

- Tribal Monitors or Tribal Representatives shall have the authority to direct that work be temporarily paused, diverted, or slowed within 100 feet of the immediate impact area if sites, cultural soils, or objects of potential significance are identified. The temporary pause/diversion shall be of an adequate duration for the Tribal Representative to examine the resource.

- Appropriate treatment of TCRs may include, but is not limited to:
    a. Recordation of the resource(s)
    b. Avoidance and preservation of the resource(s)

c. Recovery and reburial of the resource(s) onsite or in a feasible off-site location in a designated area subject to no future disturbance. The location of the reburial shall be acceptable to the UAIC.

- To track the implementation of this measure, the Tribal Monitor(s) shall document field-monitoring activities on a Tribal Monitor log.

- The Tribal Monitor(s) shall wear the appropriate safety equipment while on the construction site.

- The Tribal Monitor, in consultation with their respective tribes and the City shall determine a mutual end or reduction to the on-site monitoring if/when construction activities have a low potential for impacting Tribal Cultural Resources.

- In the event the Tribal Monitor does not report to the job site at the scheduled time after receiving 24 hour business day notice, construction activities may proceed without tribal monitoring. At no time, regardless of the presence or absence of a Tribal Monitor, shall suspected TCRs be mishandled or disrespected.
- The City shall assist with resolution of disagreements between the contractor and the Tribe if such occurs on the project.

TCR-3: If any suspected TCRs or resources of cultural significance, including but not limited to features, anthropogenic/cultural soils, cultural belongings or objects (artifacts), shell, bone, shaped stones or bone, or ash/charcoal deposits are discovered by any person during construction activities including ground disturbing activities, all work shall pause immediately within 100 feet of the find, or an agreed upon distance based on the project area and nature of the find. Work shall cease in and within the immediate vicinity of the find regardless of whether the construction is being actively monitored by a tribal monitor, cultural resources specialist, or professional archaeologist.

A Tribal Representative and the City of West Sacramento representative shall be immediately notified, and the Tribal Representative in coordination with the City of West Sacramento shall determine if the find is a TCR (PRC §21074) and the Tribal Representative shall make recommendations for further evaluation and treatment as necessary.

Treatment and Documentation:
The culturally affiliated Tribe shall consult with the City of West Sacramento to 1) identify the boundaries of the new TCR and 2) if feasible, identify appropriate preservation in place and avoidance measures, including redesign or adjustments to the existing construction process, and long-term management, or 3) if avoidance is infeasible, a reburial location in proximity of the find where no future disturbance is anticipated. Permanent curation of TCRs will not take place unless approved in writing by the culturally affiliated Tribe.

If requested by the culturally affiliated Tribe, the construction contractor(s) shall provide secure, on-site storage for culturally sensitive soils or objects that are components of TCRs that are found or recovered during construction. Only Tribal representatives shall have access to the storage. Storage size shall be determined by the nature of the TCR and can range from a small lock box to a conex box (shipping container). A secure (locked), fenced area can also provide adequate on-site storage if larger amounts of material must be stored.

The construction contractor(s) and City of West Sacramento shall facilitate the respectful reburial of the culturally sensitive soils or objects. This includes providing a reburial location that is consistent with the culturally affiliated Tribe's preferences, excavation of the reburial location, and assisting with the reburial, upon request.

Any discoveries shall be documented on a Department of Parks and Recreation (DPR) 523 form and submitted to the appropriate CHRIS center in a timely manner.

Work at the TCR discovery location shall not resume until authorization is granted by the City of West Sacramento in coordination with the culturally affiliated Tribe.

If articulated or disarticulated human remains, or human remains in any state of decomposition or skeletal completeness are discovered during construction activities, Cultural Resource Mitigation Measure 1 (**CR-1** in Section 2.5 Cultural Resources) shall be implemented, and the culturally affiliated tribe shall be contacted immediately. As stated in that measure, upon encountering human remains, the Yolo County Coroner shall be contacted. Upon determination by the Coroner that the find is Native American in origin, the Coroner will contact the Native American Heritage Commission who will assign the Most Likely Descendent (MLD) the MLD will work with the City of West Sacramento to define appropriate treatment and disposition of the burials.

TCR-4: If human remains are encountered during the course of the Project, and the remains are determined to be Native American, and the Yocha Dehe Wintun Nation are determined to be the MLD, then the City of West Sacramento shall follow the Treatment Protocol for Handling Human Remains and the Cultural Items Affiliated with the Yocha Dehe Wintun Nation, which in included in Appendix D and shall be attached to the MMRP.

FINDINGS

The Project impacts to tribal cultural resources would be **Less than Significant with Mitigation** incorporated.

2.19 UTILITIES AND SERVICE SYSTEMS

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

Discussion

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

Less Than Significant Impact. The Project does not include any features which would require or result in construction of new or expanded utilities. The Project would be designed to avoid any potential conflicts with utilities to the greatest extent possible. If conflicts are unavoidable, existing utilities would be relocated in coordination with associated utility providers. Therefore, the impact of utility relocation on the environment 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. As discussed in a) above, the Project would avoid utilities, including water lines, to the greatest extent possible. If water lines must be relocated, they would be shut off prior to relocation and then flushed once connected. The amount of water used in this process would be minimal and would not significantly impact water supply availability for future development projects.

The project would temporarily utilize water for dust suppression and other activities during construction. Construction-related water demands would be short-term and minimal in volume. Project operation would not require a permanent water supply. No impact related to future water supply during normal, dry, or multiple dry years would occur. Due to the temporary and intermittent nature of projected water usage during construction, impacts to water availability 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?

No Impact. The project involves a road diet and installation of bike lanes and an ADA ramp and would not include the construction of any wastewater-generating uses. No wastewater would be created during project activities. The project would not induce the growth of the regional or local population. Therefore, no impacts will occur.

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

Less Than Significant Impact. The Project would not generate substantial solid waste during operation. Solid waste may be generated during construction; however, the quantity would not exceed local landfill capacities. Additionally, any generation of solid waste would be temporary and would only occur during the construction period. Therefore, impacts associated with the development of solid waste would be considered less than significant.

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

Less Than Significant Impact. The Project would comply with federal, state, and local statutes and regulations related to solid waste; therefore, impacts associated with compliance with statutes and regulations pertaining to solid waste would be considered less than significant.

MITIGATION MEASURES

No mitigation is required.

FINDINGS

The Project would have a **Less Than Significant Impact** to utilities and service systems.

2.20 WILDFIRE

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

DISCUSSION

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

No Impact. The project has adopted the City of West Sacramento Emergency Operations Plan (EOP) (City of West Sacramento 2016), which addresses the planned response to extraordinary emergency situations associated with natural disasters or human-caused emergencies in or affecting West Sacramento. Project construction or operation would not impair the adopted EOP; therefore, no impact would occur.

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?

No Impact. According to the Yolo County CAL FIRE, Fire Hazard Severity Zone Map (CAL FIRE 2022), the Project area is not within a State-Responsibility Area listed as having a high or moderate potential for wildfire. Therefore, the Project is not anticipated to exacerbate wildfire risks due to slope, prevailing winds, or other factors. No impact would occur.

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. Project construction would involve a road diet and installation of bike lanes via restriping and installation of an ADA ramp, which may require maintenance in the future; however, maintenance activities would not be part of the Project. The Project is not located within or adjacent to a high or moderate fire hazard severity zone and the majority of the project activities would occur within the existing roadway. No ongoing impacts to the environment would occur. Therefore, impacts are 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?

No Impact. The Project's infrastructure and safety improvements would not cause downslope or downstream flooding or landslides. Additionally, there is an existing levee east of the Project area preventing the Sacramento River from flooding the Project and potentially causing runoff or drainage changes within the Project area. Project construction and operation would not expose people or structures to significant risks of downslope or downstream flooding due to runoff, post-fire slope instability, or drainage changes. No impact would occur.

MITIGATION MEASURES

No mitigation is required.

FINDINGS

The Project would have **Less than Significant Impact** relating to wildfire.

2.21 MANDATORY FINDINGS OF SIGNIFICANCE

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

DISCUSSION

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

Less Than Significant Impact. Based upon the review and analysis of potential adverse effects to the environment provided in this Initial Study (including the Project-specific avoidance and minimization measures), the proposed Project would not substantially degrade the overall quality of the environment within the Project area.

Any potentially significant impacts to biological, historical or cultural resources would be reduced to a less-than-significant level with the incorporation of Project-specific avoidance, minimization, and mitigation measures for Cooper's hawk, Swainson's hawk, and purple martin, cultural resources, and tribal cultural resources, as discussed previously in Sections 2.4, 2.5, and 2.18 respectively. Therefore, the Project impacts would be considered less than significant.

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

Less Than Significant Impact. The Sacramento River West North Levee (North Levee) Project is the current portion of West Sacramento Federal Project being planned by the USACE. The North Levee Project is located just east of the North 5th Street Project along the existing levee. According to the USACE, "this area extends for approximately 30,700 feet (5.5 miles) along the Sacramento River right bank levee from the Sacramento Bypass south to the confluence of the Barge Canal and the Sacramento River. The general improvements for this reach include erosion protection on 14,300 feet of the reach and seepage improvements with slurry wall installation ranging from 30 feet to 110 feet in depth on 18,500 feet of the reach." Impacts to trees, including elderberry trees, at the North Levee Project are anticipated and may require mitigation. Sections of the project overlap with the North 5th Street Project on and east of Lighthouse

drive, north of the intersection with 4th Street. One tree is planned for removal for the North Levee Project in these overlapping areas. Although both projects involve tree removal, due to only 3 trees currently planned for removal between both projects within the North 5th Street Project area, as well as tree mitigation requirements for both projects, tree impacts are not cumulatively considerable.

Levee work and installation of the ADA ramp would occur in overlapping and adjacent project areas. These cause greater visual impacts together; however, visual impacts would be temporary and returned to the same or better condition post construction. Visual impacts are not cumulatively considerable.

If both the North Levee and North 5th Street Projects are operating concurrently, noise impacts may increase in the vicinity. However, noise impacts would be temporary and discontinue once construction is complete. Therefore, noise impacts are not cumulatively considerable.

Implementation of the I Street Bridge Replacement Project includes replacement of the bridge spanning the Sacramento River and reducing through lanes on C Street at the 5th Street / C Street intersection from four down to two. Lane reductions of both the North 5th Street Project and the I Street Bridge Replacement Project were studied in the TOA, and no inadequacies were identified which could result in significant impacts. Overall, Project impacts are anticipated to be minimal and are not expected to be cumulatively considerable including the I Street Bridge Project.

Implementation of the CIHC includes a 51-acre development, planned to open near 2028-2030. Potential increases in vehicle trips generated by visitors of the CIHC were studied in the TOA, and no inadequacies were identified which could result in significant impacts. Overall, Project impacts are anticipated to be minimal and are not expected to be cumulatively considerable with implementation of the CIHC.

There are no known past or future impacts that would cause project impacts to be cumulatively considerable. Cumulative impacts are less than significant.

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

Less Than Significant Impact. The Project would not have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly. With respect to the analysis provided in this Initial Study, potential effects of the Project on human beings would be temporary and related to Project construction. Specifically, any Project impacts on human beings would be considered less-than-significant relating to air, noise, hazards and hazardous materials, transportation/traffic, and utilities and service systems. No significant adverse effects to human beings would occur, and Project effects are considered less than significant.

MITIGATION MEASURES

No mitigation is required.

FINDINGS

Through compliance with applicable City of West Sacramento codes, regulations, and regulatory permitting, along with the Project-specific avoidance and minimization measures noted previously, the Project would not have a significant impact relating to degradation of the quality of the environment, nor have impacts that are individually limited, but cumulatively considerable; nor have environmental effects

which would cause substantial adverse effects, either directly or indirectly, on human beings. Therefore, there are no potentially significant determinations for mandatory findings of significance.

3.0 Comments and Coordination

This chapter summarizes City of West Sacramento's efforts to identify, address and resolve Project-related issues through early and continuing coordination.

3.1 CONSULTATION AND COORDINATION WITH PUBLIC AGENCIES

Consultation and/or coordination with the following agencies was, or will be initiated for the Project:

- Yolo-Solano Air Quality Management District
- Central Valey Flood Protection Board
- U.S. Army Corps of Engineers

3.2 PUBLIC PARTICIPATION

The public comment period for the Project will occur from November 15, 2025, to December 15, 2025. All written comments received by the City of West Sacramento will be incorporated into the Final IS/MND and added in an appendix. Any additions or corrections to the IS/MND subsequent to public comments will be addressed within the final document.

4.0 Distribution List

A Notice of Availability was prepared and posted with the Yolo County Clerk and distributed to all owners and occupants of property parcels within a 500-foot radius of the Project area. Additionally, the Draft IS was distributed to the following agencies and interested parties (unless IS hardcopies specified).

City of West Sacramento
1110 West Capitol Avenue, 1st Floor
Sacramento, CA 95354
(IS hardcopies)

State Government

Governor's Office of Planning and Research – California State Clearinghouse
CEQA Submit Online Database

Central Valley Flood Protection Board
3310 El Camino Ave # 170
Sacramento, CA 95821

Local Agencies

Yolo County Clerk-Recorder
625 Court St # B01
Woodland, CA 95695

Yolo County Transportation District
350 Industrial Way
Woodland, CA 95776

Sacramento Regional Transit District
1225 R Street
Sacramento, CA 95811

Washington Unified School District
930 Westacre Road
West Sacramento, CA 95691

5.0 List of Preparers

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Appendix A.
Special Status Species Database Query Results

United States Department of the Interior

FISH AND WILDLIFE SERVICE
San Francisco Bay-Delta Fish And Wildlife
650 Capitol Mall
Suite 8-300
Sacramento, CA 95814
Phone: (916) 930-5603 Fax: (916) 930-5654

In Reply Refer To: 10/29/2025 20:25:53 UTC
Project Code: 2025-0052274
Project Name: North 5th Street Complete Streets and Connectivity Project

Subject: List of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed, and candidate species, as well as proposed, and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)

(c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

https://www.fws.gov/sites/default/files/documents/endangered-species-consultation-handbook.pdf

Migratory Birds: In addition to responsibilities to protect threatened and endangered species under the Endangered Species Act (ESA), there are additional responsibilities under the Migratory Bird Treaty Act (MBTA) and the Bald and Golden Eagle Protection Act (BGEPA) to protect native birds from project-related impacts. Any activity resulting in take of migratory birds, including eagles, is prohibited unless otherwise permitted by the U.S. Fish and Wildlife Service (50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)). For more information regarding these Acts, see https://www.fws.gov/program/migratory-bird-permit/what-we-do.

It is the responsibility of the project proponent to comply with these Acts by identifying potential impacts to migratory birds and eagles within applicable NEPA documents (when there is a federal nexus) or a Bird/Eagle Conservation Plan (when there is no federal nexus). Proponents should implement conservation measures to avoid or minimize the production of project-related stressors or minimize the exposure of birds and their resources to the project-related stressors. For more information on avian stressors and recommended conservation measures, see https://www.fws.gov/library/collections/threats-birds.

In addition to MBTA and BGEPA, Executive Order 13186: *Responsibilities of Federal Agencies to Protect Migratory Birds*, obligates all Federal agencies that engage in or authorize activities that might affect migratory birds, to minimize those effects and encourage conservation measures that will improve bird populations. Executive Order 13186 provides for the protection of both migratory birds and migratory bird habitat. For information regarding the implementation of Executive Order 13186, please visit https://www.fws.gov/partner/council-conservation-migratory-birds.

Please be aware that bald and golden eagles are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668 et seq.), and projects affecting these species may require development of an eagle conservation plan (https://www.fws.gov/program/eagle-management/working-around-eagles). Additionally, wind energy projects should follow the wind energy guidelines (https://www.fws.gov/node/266177) for minimizing impacts to migratory birds and bats.

Guidance for minimizing impacts to migratory birds for projects including communications towers (e.g., cellular, digital television, radio, and emergency broadcast) can be found at:https://www.fws.gov/media/recommended-best-practices-communication-tower-design-siting-construction-operation; and http://www.towerkill.com.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Code in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List

OFFICIAL SPECIES LIST

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

San Francisco Bay-Delta Fish And Wildlife
650 Capitol Mall
Suite 8-300
Sacramento, CA 95814
(916) 930-5603

PROJECT SUMMARY

Project Code: 2025-0052274

Project Name: North 5th Street Complete Streets and Connectivity Project

Project Type: Road/Hwy - Maintenance/Modification

Project Description: The City of West Sacramento (City), in coordination with the California Department of Transportation (Caltrans), is proposing to implement roadway improvements along 5th Street in West Sacramento, California as the North 5th Street Complete Streets and Connectivity Project (project). The project includes 5th Street/Lighthouse Drive from C Street to Fountain Drive; A Street between 5th Street and 4th Street/River Walk Trail; and C Street from 3rd Street to 6th Street.

5th Street is a four-lane minor arterial route with existing bicycle and pedestrian facilities. C Street is primarily a two-lane road in the project area, which transitions from a miner arterial in the west to a major arterial route east of the 5th Street intersection. The design for the project would include the installation of bicycle lanes and intersection enhancements via restriping, and new sidewalks on 5th Street and C Street, along with installation of an ADA ramp connection from 5th Street/A Street to the Riverwalk Trail.

Project Location:

The approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@38.59187245,-121.51224587806078,14z



Counties: Yolo County, California

ENDANGERED SPECIES ACT SPECIES

There is a total of 9 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries[1], as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

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1. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

BIRDS

NAME	STATUS
Least Bell's Vireo *Vireo bellii pusillus* There is **final** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/5945	Endangered

REPTILES

NAME	STATUS
Giant Garter Snake *Thamnophis gigas* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/4482	Threatened
Northwestern Pond Turtle *Actinemys marmorata* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/1111	Proposed Threatened

AMPHIBIANS

NAME	STATUS
California Tiger Salamander *Ambystoma californiense* Population: U.S.A. (Central CA DPS) There is **final** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/2076	Threatened
Western Spadefoot *Spea hammondii* Population: Northern DPS No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/5425	Proposed Threatened

INSECTS

NAME	STATUS
Monarch Butterfly *Danaus plexippus* There is **proposed** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/9743	Proposed Threatened
Valley Elderberry Longhorn Beetle *Desmocerus californicus dimorphus* There is **final** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/7850	Threatened

CRUSTACEANS

NAME	STATUS
Vernal Pool Fairy Shrimp *Branchinecta lynchi* There is **final** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/498	Threatened

NAME	STATUS
Vernal Pool Tadpole Shrimp *Lepidurus packardi*	Endangered

There is **final** critical habitat for this species. Your location does not overlap the critical habitat.
Species profile: https://ecos.fws.gov/ecp/species/2246

CRITICAL HABITATS

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

YOU ARE STILL REQUIRED TO DETERMINE IF YOUR PROJECT(S) MAY HAVE EFFECTS ON ALL ABOVE LISTED SPECIES.

IPAC USER CONTACT INFORMATION

Agency:	Private Entity
Name:	Emma Deal
Address:	3741 Douglas Blvd
Address Line 2:	Suite 150
City:	Roseville
State:	CA
Zip:	95661
Email	edeal@woodrodgers.com
Phone:	9163417711

Selected Elements by Common Name

California Department of Fish and Wildlife

California Natural Diversity Database

Query Criteria: Quad IS (Sacramento East (3812154) OR Sacramento West (3812155) OR Taylor Monument (3812165) OR Rio Linda (3812164))

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
American badger *Taxidea taxus*	AMAJF04010	None	None	G5	S3	SSC
American bumble bee *Bombus pensylvanicus*	IIHYM24260	None	None	G3G4	S2	
bank swallow *Riparia riparia*	ABPAU08010	None	Threatened	G5	S3	
black-crowned night heron *Nycticorax nycticorax*	ABNGA11010	None	None	G5	S4	
Boggs Lake hedge-hyssop *Gratiola heterosepala*	PDSCR0R060	None	Endangered	G2	S2	1B.2
burrowing owl *Athene cunicularia*	ABNSB10010	None	Candidate Endangered	G4	S2	SSC
California black rail *Laterallus jamaicensis coturniculus*	ABNME03041	None	Threatened	G3T1	S2	FP
California linderiella *Linderiella occidentalis*	ICBRA06010	None	None	G2G3	S2S3	
chinook salmon - Central Valley spring-run ESU *Oncorhynchus tshawytscha pop. 11*	AFCHA0205L	Threatened	Threatened	G5T2Q	S2	
chinook salmon - Sacramento River winter-run ESU *Oncorhynchus tshawytscha pop. 7*	AFCHA0205B	Endangered	Endangered	G5T2Q	S2	
Cooper's hawk *Astur cooperii*	ABNKC12040	None	None	G5	S4	WL
Crotch's bumble bee *Bombus crotchii*	IIHYM24480	None	Candidate Endangered	G2	S2	
dwarf downingia *Downingia pusilla*	PDCAM060C0	None	None	GU	S2	2B.2
Elderberry Savanna *Elderberry Savanna*	CTT63440CA	None	None	G2	S2.1	
Ferris' milk-vetch *Astragalus tener var. ferrisiae*	PDFAB0F8R3	None	None	G2T1	S1	1B.1
giant gartersnake *Thamnophis gigas*	ARADB36150	Threatened	Threatened	G2	S2	
great blue heron *Ardea herodias*	ABNGA04010	None	None	G5	S4	
great egret *Ardea alba*	ABNGA04040	None	None	G5	S4	
Great Valley Cottonwood Riparian Forest *Great Valley Cottonwood Riparian Forest*	CTT61410CA	None	None	G2	S2.1	

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
green sturgeon - southern DPS *Acipenser medirostris pop. 1*	AFCAA01031	Threatened	None	G2T1	S1	SSC
hoary bat *Lasiurus cinereus*	AMACC05032	None	None	G3G4	S4	
least Bell's vireo *Vireo bellii pusillus*	ABPBW01114	Endangered	Endangered	G5T2	S3	
legenere *Legenere limosa*	PDCAM0C010	None	None	G2	S2	1B.1
longfin smelt - San Francisco Bay-Delta DPS *Spirinchus thaleichthys pop. 2*	AFCHB03040	Endangered	Threatened	G5TNRQ	S1	
Northern Claypan Vernal Pool *Northern Claypan Vernal Pool*	CTT44120CA	None	None	G1	S1.1	
Northern Hardpan Vernal Pool *Northern Hardpan Vernal Pool*	CTT44110CA	None	None	G3	S3.1	
northwestern pond turtle *Actinemys marmorata*	ARAAD02031	Proposed Threatened	None	G2	SNR	SSC
purple martin *Progne subis*	ABPAU01010	None	None	G5	S3	SSC
Sacramento perch *Archoplites interruptus*	AFCQB07010	None	None	G1	S1	SSC
Sacramento splittail *Pogonichthys macrolepidotus*	AFCJB34020	None	None	G3	S3	SSC
Sacramento Valley tiger beetle *Cicindela hirticollis abrupta*	IICOL02106	None	None	G5TH	SH	
Sanford's arrowhead *Sagittaria sanfordii*	PMALI040Q0	None	None	G3	S3	1B.2
snowy egret *Egretta thula*	ABNGA06030	None	None	G5	S4	
song sparrow ("Modesto" population) *Melospiza melodia pop. 1*	ABPBXA3013	None	None	G5T3?Q	S3?	SSC
steelhead - Central Valley DPS *Oncorhynchus mykiss irideus pop. 11*	AFCHA0209K	Threatened	None	G5T2Q	S2	SSC
stinkbells *Fritillaria agrestis*	PMLIL0V010	None	None	G3	S3	4.2
Suisun Marsh aster *Symphyotrichum lentum*	PDASTE8470	None	None	G2	S2	1B.2
Swainson's hawk *Buteo swainsoni*	ABNKC19070	None	Threatened	G5	S4	
tricolored blackbird *Agelaius tricolor*	ABPBXB0020	None	Threatened	G1G2	S2	SSC
valley elderberry longhorn beetle *Desmocerus californicus dimorphus*	IICOL48011	Threatened	None	G3T3	S3	

Selected Elements by Common Name

California Department of Fish and Wildlife

California Natural Diversity Database

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
vernal pool fairy shrimp *Branchinecta lynchi*	ICBRA03030	Threatened	None	G3	S3	
vernal pool tadpole shrimp *Lepidurus packardi*	ICBRA10010	Endangered	None	G3	S3	
western ridged mussel *Gonidea angulata*	IMBIV19010	None	None	G3	S2	
western yellow-billed cuckoo *Coccyzus americanus occidentalis*	ABNRB02022	Threatened	Endangered	G5T2T3	S1	
white-tailed kite *Elanus leucurus*	ABNKC06010	None	None	G5	S3S4	FP
woolly rose-mallow *Hibiscus lasiocarpos var. occidentalis*	PDMAL0H0R3	None	None	G5T3	S3	1B.2

Record Count: 46

CALIFORNIA NATIVE PLANT SOCIETY

CNPS Rare Plant Inventory

Search Results

10 matches found. Click on scientific name for details

Search Criteria: , Quad is one of [**3812155:3812154:3812164:3812165**]

▲ SCIENTIFIC NAME	COMMON NAME	FAMILY	LIFEFORM	BLOOMING PERIOD	FED LIST	STATE LIST	GLOBAL RANK	STATE RANK	CA RARE PLANT RANK	CA ENDEMIC	DATE ADDED	PHOTO
Astragalus tener var. *ferrisiae*	Ferris' milk-vetch	Fabaceae	annual herb	Apr-May	None	None	G2T1	S1	1B.1	Yes	1994-01-01	No Photo Available
~~*Brodiaea rosea ssp. vallicola*~~	~~valley brodiaea~~	~~Themidaceae~~	~~perennial bulbiferous herb~~	~~Apr-May(Jun)~~	~~None~~	~~None~~	~~G4G5T3~~	~~S3~~	~~4.2~~	~~Yes~~	~~2019-01-07~~	 ~~© 2011 Steven Perry~~
~~*Centromadia parryi ssp. rudis*~~	~~Parry's rough tarplant~~	~~Asteraceae~~	~~annual herb~~	~~May-Oct~~	~~None~~	~~None~~	~~G3T3~~	~~S3~~	~~4.2~~	~~Yes~~	~~2007-05-22~~	 ~~© 2019 John Doyen~~
Downingia pusilla	dwarf downingia	Campanulaceae	annual herb	Mar-May	None	None	GU	S2	2B.2		1980-01-01	 © 2013 Aaron Arthur
~~*Fritillaria agrestis*~~	~~stinkbells~~	~~Liliaceae~~	~~perennial bulbiferous herb~~	~~Mar-Jun~~	~~None~~	~~None~~	~~G3~~	~~S3~~	~~4.2~~	~~Yes~~	~~1980-01-01~~	 ~~© 2016 Aaron Schusteff~~

Gratiola heterosepala	Boggs Lake hedge-hyssop	Plantaginaceae	annual herb	Apr-Aug	None	CE	G2	S2	1B.2		1974-01-01	 ©2004 Carol W. Witham
Hibiscus lasiocarpos var. *occidentalis*	woolly rose-mallow	Malvaceae	perennial rhizomatous herb (emergent)	Jun-Sep	None	None	G5T3	S3	1B.2	Yes	1974-01-01	 © 2020 Steven Perry
Legenere limosa	legenere	Campanulaceae	annual herb	Apr-Jun	None	None	G2	S2	1B.1	Yes	1974-01-01	 ©2000 John Game
Sagittaria sanfordii	Sanford's arrowhead	Alismataceae	perennial rhizomatous herb (emergent)	May-Oct(Nov)	None	None	G3	S3	1B.2	Yes	1984-01-01	 ©2013 Debra L. Cook
Symphyotrichum lentum	Suisun Marsh aster	Asteraceae	perennial rhizomatous herb	(Apr)May-Nov	None	None	G2	S2	1B.2	Yes	1974-01-01	No Photo Available

Showing 1 to 10 of 10 entries

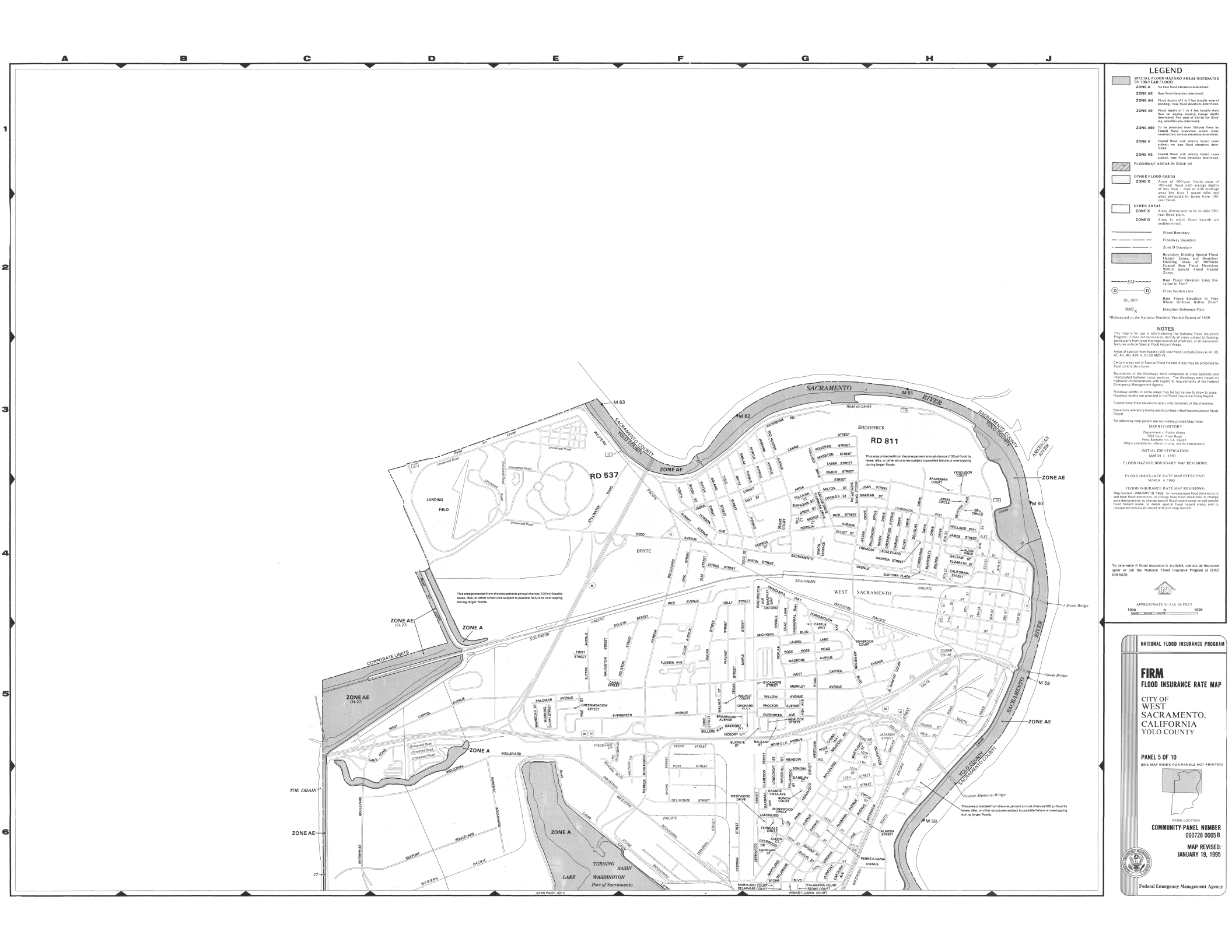
Go to top

Suggested Citation:

California Native Plant Society, Rare Plant Program. 2025. Rare Plant Inventory (online edition, v9.5.1). Website https://www.rareplants.cnps.org [accessed 5 February 2025].

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Appendix B.
Federal Emergency Management Agency (FEMA) Fire Insurance Rate Map (FIRM)



LEGEND

SPECIAL FLOOD HAZARD AREAS INUNDATED BY 100-YEAR FLOOD

- **ZONE A** — No base flood elevations determined.
- **ZONE AE** — Base flood elevations determined.
- **ZONE AH** — Flood depths of 1 to 3 feet (usually areas of ponding); base flood elevations determined.
- **ZONE AO** — Flood depths of 1 to 3 feet (usually sheet flow on sloping terrain); average depths determined. For areas of alluvial fan flooding, velocities also determined.
- **ZONE A99** — To be protected from 100-year flood by Federal flood protection system under construction; no base elevations determined.
- **ZONE V** — Coastal flood with velocity hazard (wave action); no base flood elevations determined.
- **ZONE VE** — Coastal flood with velocity hazard (wave action); base flood elevations determined.

FLOODWAY AREAS IN ZONE AE

OTHER FLOOD AREAS

- **ZONE X** — Areas of 500-year flood; areas of 100-year flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 100-year flood.

OTHER AREAS

- **ZONE X** — Areas determined to be outside 500-year flood plain.
- **ZONE D** — Areas in which flood hazards are undetermined.

Flood Boundary

Floodway Boundary

Zone D Boundary

Boundary Dividing Special Flood Hazard Zones, and Boundary Dividing Areas of Different Coastal Base Flood Elevations Within Special Flood Hazard Zones.

513 — Base Flood Elevation Line; Elevation in Feet*

D — D — Cross Section Line

(EL 987) — Base Flood Elevation in Feet Where Uniform Within Zone*

RM7$_X$ — Elevation Reference Mark

*Referenced to the National Geodetic Vertical Datum of 1929

NOTES

This map is for use in administering the National Flood Insurance Program; it does not necessarily identify all areas subject to flooding, particularly from local drainage sources of small size, or all planimetric features outside Special Flood Hazard Areas.

Areas of special flood hazard (100-year flood) include Zones A, A1-30, AE, AH, AO, A99, V, V1-30 AND VE.

Certain areas not in Special Flood Hazard Areas may be protected by flood control structures.

Boundaries of the floodways were computed at cross sections and interpolated between cross sections. The floodways were based on hydraulic considerations with regard to requirements of the Federal Emergency Management Agency.

Floodway widths in some areas may be too narrow to show to scale. Floodway widths are provided in the Flood Insurance Study Report.

Coastal base flood elevations apply only landward of the shoreline.

Elevations reference marks are described in the Flood Insurance Study Report.

For adjoining map panels see separately printed Map Index

MAP REPOSITORY

Department of Public Works
1951 South River Road
West Sacramento, CA 95691
(Maps available for reference only, not for distribution)

INITIAL IDENTIFICATION:
MARCH 1, 1980

FLOOD HAZARD BOUNDARY MAP REVISIONS:

FLOOD INSURANCE RATE MAP EFFECTIVE:
MARCH 1, 1980

FLOOD INSURANCE RATE MAP REVISIONS:
Map revised JANUARY 19, 1995 to increase base flood elevations, to add base flood elevations, to change base flood elevations, to change zone designations, to change special flood hazard areas, to add special flood hazard areas, to delete special flood hazard areas, and to incorporate previously-issued letters of map revision.

To determine if flood insurance is available, contact an insurance agent or call the National Flood Insurance Program at (800) 638-6620.

APPROXIMATE SCALE IN FEET
1000 0 1000

NATIONAL FLOOD INSURANCE PROGRAM

FIRM
FLOOD INSURANCE RATE MAP

CITY OF
WEST
SACRAMENTO,
CALIFORNIA
YOLO COUNTY

PANEL 5 OF 10
(SEE MAP INDEX FOR PANELS NOT PRINTED)

PANEL LOCATION

COMMUNITY-PANEL NUMBER
060728 0005 B

MAP REVISED:
JANUARY 19, 1995

Federal Emergency Management Agency

Appendix C.
Traffic Operations Analysis Memorandum

Memorandum

WOOD RODGERS
BUILDING RELATIONSHIPS ONE PROJECT AT A TIME

To: Christian Asuncion, PE
City of West Sacramento, Capital Projects Department

From: Mario Tambellini, PE, TE

Date: October 27, 2025

Subject: **Draft North 5th Street Complete Streets and Connectivity Project – Traffic Operations Analysis**

INTRODUCTION

This memorandum has been prepared to present the findings of a Traffic Operations Analysis (TOA) for the North 5th Street Complete Streets and Connectivity Project (Project) in the City of West Sacramento (City). The Project proposes to restripe 5th Street/Lighthouse Drive between C Street and Fountain Drive with buffered bike lanes and on-street parking, reduce travel lanes from four lanes to two lanes, construct Americans with Disabilities Act (ADA) and sidewalk improvements at spot locations, and construct a pedestrian trail connection from 5th Street to the Riverwalk Trail at or near the A Street intersection. The Project location is shown in **Figure 1**.

The purpose of this TOA is to evaluate potential effects on traffic safety and operations along the study corridor with construction of the Project, and to recommend potential additional improvements at study facilities to optimize operations with the Project. This TOA contains the following sections:

- Project Description
- Study Facilities and Analysis Scenarios
- Traffic Operations Analysis
- Safety Evaluation
- Active Transportation Program Traffic Counts
- I Street Bridge Replacement Project
- California Indian Heritage Center
- Conclusion



Legend

(#) Study Intersections

Project Location And Study Facilities

North 5th Street Complete Streets and Connectivity Project TOA

West Sacramento, CA

October 2025

FIGURE 1

0 100 200 400

Feet

WOOD RODGERS

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PROJECT DESCRIPTION

The following corridor improvements are proposed along Lighthouse Drive/5th Street as part of the Project:

- Removal of the outside travel lane along Lighthouse Drive/5th Street in both directions of travel between C Street and Fountain Drive/Watercolor Lane. (i.e., road diet from four lanes to two lanes)
- Construction/striping of green buffered bicycle lanes in both directions of 5th Street between C Street and Fountain Drive/Watercolor Lane.
- Construction/striping of a 3-foot striped buffer and 10-foot parking spaces between the bike lane and vehicular lane in both directions of 5th Street between C Street and A Street.
- Construction/striping of a 13-foot striped buffer between the bike lane and vehicular lane in both directions of Lighthouse Drive between A Street and Marina Way.
- Construction/striping of a 13-foot striped buffer between the bike lane and vehicular lane along the southbound/eastbound direction of Lighthouse Drive between Marina Way and Fountain Drive.
- Construction of an ADA compliant ramp / pedestrian trail connection from A Street to Levee Road/Riverwalk Trail.

The Project also includes the following intersection improvements:

- **Fountain Drive/Watercolor Lane & Lighthouse Drive:**
  - Restripe the eastbound through-right lane to an eastbound right turn lane and shift the bike lane to the left of the right turn lane at the intersection.
- **Lighthouse Drive & Marina Way:**
  - Stripe a crosswalk on the east leg of the intersection (Marina Way).
- **Lighthouse Drive & Watercolor Lane:**
  - N/A
- **Lighthouse Drive/5th Street & A Street:**
  - Stripe a crosswalk on the north leg of the intersection (Lighthouse Drive). Install a sidewalk and curb ramp on the northeast corner of the intersection. Extend the median on the north leg of the intersection (Lighthouse Drive) and include a cut-through for the new crosswalk. Install a Rectangular Rapid Flashing Beacon (RRFB) for the new crosswalk on the north leg.
- **5th Street & B Street:**
  - Stripe a crosswalk on the west leg and east leg of the intersection (B Street).
- **5th Street & C Street:**
  - Restripe the northbound through-right lane to a northbound right turn lane and shift the bike lane to the left of the right turn lane at the intersection.

Exhibits illustrating Project improvements are contained in **Attachment A**.

STUDY FACILITIES AND ANALYSIS SCENARIOS

This TOA includes the following study intersections:

1. Fountain Drive/Watercolor Lane & Lighthouse Drive
2. Lighthouse Drive & Marina Way
3. Lighthouse Drive & Watercolor Lane
4. Lighthouse Drive/5th Street & A Street
5. 5th Street & B Street
6. 5th Street & C Street

Study facilities are shown in **Figure 1**.

The following analysis scenarios are included in this study:

- **Near-Term Conditions**: In this scenario, the study corridor is evaluated using near-term future traffic volumes with the existing roadway and lane configurations in place. Near-term future traffic volumes are estimated by adding traffic generated by the undeveloped/unoccupied homes at the Trailside at The Rivers residential development, located on Fountain Drive, to existing (2025) conditions traffic volumes. Near-Term conditions were selected for analysis in this TOA to capture the effects of traffic from currently in-progress developments that will generate new trips on the study Corridor by the time the Project is constructed.
- **Near-Term Plus Project Conditions**: In this scenario, the study corridor is evaluated using Near-Term traffic volumes with the Project's proposed roadway improvements in place.

The following supplemental analysis scenario is included in this study:

- **Near-Term Plus Project With I Street Bridge Improvements Conditions:** In this scenario, the study corridor is evaluated using Near-Term traffic volumes assuming both the North 5th Street Complete Streets and Connectivity Project (Project) and the I Street Bridge Replacement Project have been completed. The I Street Bridge Replacement Project is discussed on pages 13-15 of this TOA.

TRAFFIC OPERATIONS ANALYSIS

METHODOLOGY

Model Parameters

A model of the study network was built in *Synchro 12* using signal timing inputs consistent with timing sheets provided by the City. It was determined that microsimulation analysis using *SimTraffic 12* would provide the best estimate of traffic operations along the corridor as microsimulation can account for interaction between closely spaced intersections, including potential queue spillback. To maintain volume balance between intersections during the microsimulation runs, a network average peak hour factor (PHF) was calculated for Near-Term conditions based on existing traffic counts (contained at the end of this memorandum as **Attachment B**).

The *Synchro* model was utilized to run microsimulation models of the study network using *SimTraffic 12*. Ten (10) 1-hour model runs (with a 10-minute warm-up period) were run and averaged to obtain delay, level of service (LOS), and 95th percentile queueing results at all study intersections.

Level of Service Thresholds

For signalized intersections, the intersection delays and LOS reported are the "average" values for the full intersection. For two-way stop-controlled (TWSC) and one-way stop-controlled (OWSC) intersections, the intersection delays and LOS reported are the "worst-case" movement values. The delay-based HCM 7th Edition LOS criteria for different types of intersection controls are outlined in **Table 1.**

Table 1. HCM 7th Edition Intersection LOS Thresholds

Level of Service	Description	Intersection Control Delay (seconds/vehicle)	
		Unsignalized	Signalized
A	Free-flow conditions with negligible to minimal delays.	delay ≤ 10.0	delay ≤ 10.0
B	Good progression with slight delays.	10.0 < delay ≤ 15.0	10.0 < delay ≤ 20.0
C	Relatively higher delays.	15.0 < delay ≤ 25.0	20.0 < delay ≤ 35.0
D	Somewhat congested conditions with longer but tolerable delays.	25.0 < delay ≤ 35.0	35.0 < delay ≤ 55.0
E	Congested conditions with significant delays.	35.0 < delay ≤ 50.0	55.0 < delay ≤ 80.0
F	Jammed or grid-lock type operating conditions.	delay > 50.0	delay > 80.0
Source: HCM 7th Edition Exhibit 19-8 and 20-2.			

City LOS Criteria

This analysis adheres to the *City of West Sacramento General Plan 2024 Mobility Element* policy M-3.2 which states:

"For planning purposes, the City shall endeavor to maintain a vehicular Level of Service "C" on all streets within the City, except at intersections and on roadway segments within one-quarter mile of a freeway interchange or bridge crossing of the Deep Water Ship Channel, barge canal, or Sacramento River, where a Level of Service "D" shall be deemed acceptable, and within pedestrian oriented, high-density, mixed-use areas, such as the Pioneer Bluff and Stone Lock Reuse Master Plan area, Bridge District Specific Plan area, Washington District Specific Plan area, and Sacramento Avenue and West Capitol Avenue corridors east of Harbor Boulevard, where a vehicular Level of Service "E" shall be deemed acceptable."

The 5th Street & C Street intersection is located within one-quarter mile of the I Street Bridge. Therefore, this TOA assumes LOS "D" as the minimum acceptable LOS at the 5th Street & C Street intersection, and LOS "C" as the minimum acceptable LOS at the rest of the study facilities.

NEAR-TERM CONDITIONS

Lane Geometrics

Near-Term (without Project) conditions assume that no improvements are made to the existing lane geometrics and control along the study corridor. Lane geometrics and control for Near-Term conditions are shown in **Figure 2.**

Near-Term Plus Project conditions assume that the proposed Project improvements are made to the existing lane geometrics and control along the study corridor. Lane geometrics and control for Near-Term Plus Project conditions are shown in **Figure 3**.

Volumes

Vehicle, bicycle, and pedestrian counts were collected at all study intersections during weekday AM (7AM-9AM) and PM (4PM-6PM) peak hours. Traffic counts at Fountain Drive/Watercolor Lane & Lighthouse Drive, Lighthouse Drive/5th Street & A Street, and 5th Street & C Street intersections were collected on Thursday, November 17, 2022 (counts were provided by the City). Traffic counts at Lighthouse Drive & Marina Way, Lighthouse Drive & Watercolor Lane, and 5th Street & B Street intersections were collected on Tuesday, February 11, 2025. Existing traffic volume count sheets are included in **Attachment B**.

Traffic volumes were balanced between study intersections. Traffic volumes were balanced up to the highest volume along the study corridor to be conservative. A single average peak hour factor was calculated for each peak hour in order to maintain balanced volumes between intersections in *SimTraffic*.

Traffic projected to be generated by the currently undeveloped/unoccupied homes in the Trailside at The Rivers residential development, located on Fountain Drive, was calculated using the trip generation data contained in the *Institute of Transportation Engineers (ITE) Trip Generation Manual, 11th Edition.* The number of undeveloped/unoccupied homes was calculated by reviewing a recent aerial photograph of the site as well as the development's Homesite Map available on www.centurycommunities.com (visited March 3, 2025). The ITE land use category of Single-Family Detached Housing (ITE Code 210) was used to represent the Project. **Table 2** shows the average single-family detached housing trip generation rates. **Table 3** shows the trip generation estimate for the undeveloped/unoccupied homes in the Trailside at The Rivers residential development.

Table 2. Trip Generation Rates

Land Use	ITE Code	Units	Daily	AM Peak Hour			PM Peak Hour		
				In	Out	Rate	In	Out	Rate
Single-Family Detached Housing	210	DU[2]	9.43	25%	75%	0.70	63%	37%	0.94

Notes:
[1]Trip rates are calculated based on ITE Trip Generation Manual (11th Edition) average rates.
[2]DU = Dwelling Unit

Table 3. Trip Generation Estimate - Undeveloped Homes in Trailside at The Rivers

Land Use	ITE Code	Quantity	Units	Daily[1]	AM Peak Hour[1]			PM Peak Hour[1]		
					In	Out	Total	In	Out	Total
Single-Family Detached Housing	210	39	DU[2]	368	7	20	27	23	14	37

Notes:
[1]Trip rates are calculated based on ITE Trip Generation (11th Edition) average rates.
[2]DU = Dwelling Units

As shown in **Table 3**, completion of the currently undeveloped homes in the Trailside at The Rivers development is estimated to add a total of 368 Daily trips, 27 AM peak hour trips (7 Inbound, 20 Outbound), and 37 PM peak hour trips (23 Inbound, 14 Outbound) to the surrounding roadway network.

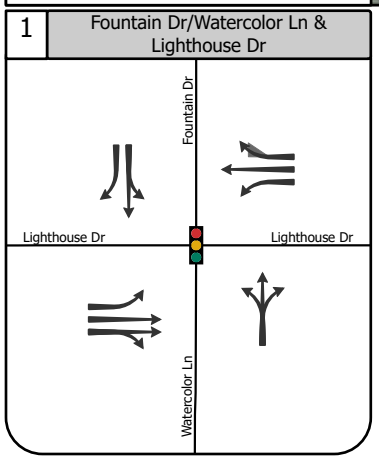
The following trip distribution was developed for the undeveloped Trailside at The Rivers home traffic based on existing traffic volumes, knowledge of the area, and engineering judgement:

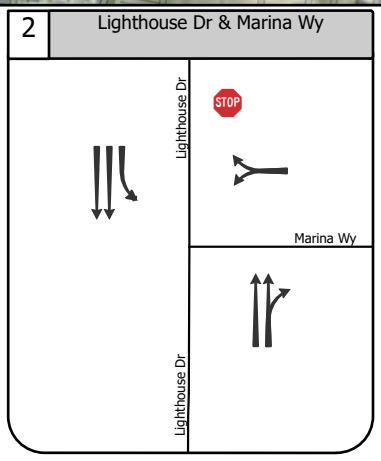
Trailside at The Rivers Undeveloped Home Trip Distribution:

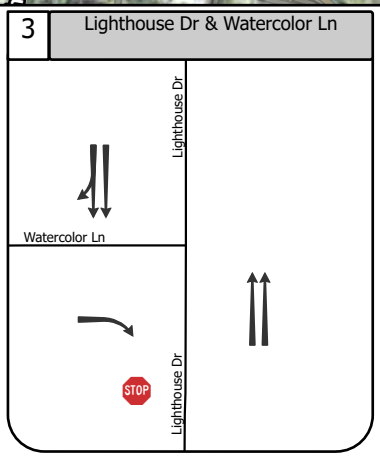
- 15% to Lighthouse Drive/Douglas Street via Douglas Street
- 5% to/from Lighthouse Drive west of Fountain Drive/Watercolor Lane
- 8% to/from C Street west of 5th Street
- 44% to/from 5th Street south of C Street
- 28% to/from C Street east of 5th Street.

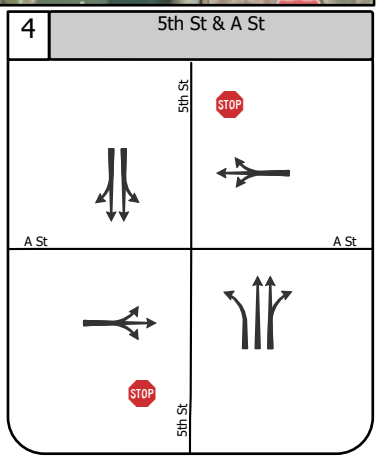
The trips generated by the undeveloped homes in the Trailside at The Rivers development were assigned to the study intersections using the trip distribution listed above and added to the balanced existing traffic volumes in order to obtain Near-Term traffic volumes. Near-Term traffic volumes are shown in **Figure 4**. The unbalanced existing counts, balanced existing volumes, and Trailside at The Rivers undeveloped homes trip assignment volumes are included in **Attachment C** at the end of this memorandum.

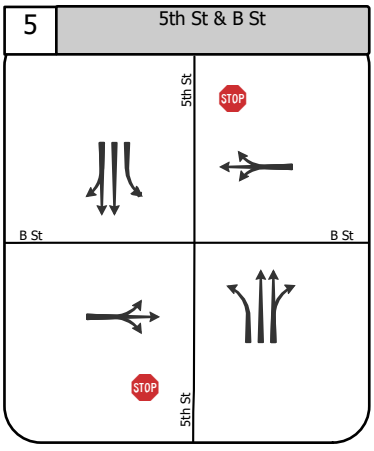


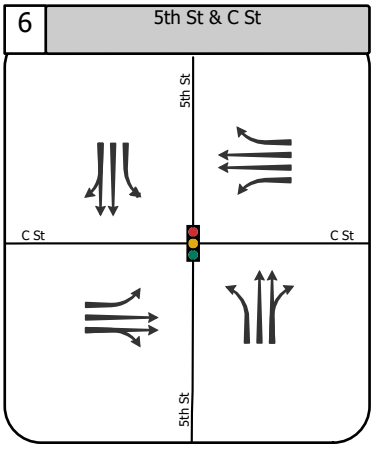












Near Term Conditions Lane Geometrics and Control

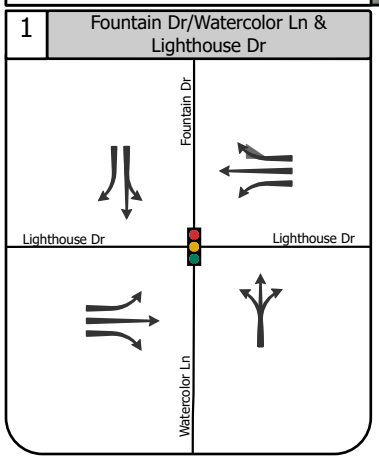
North 5th Street Complete Streets and Connectivity Project TOA
West Sacramento, CA
October 2025

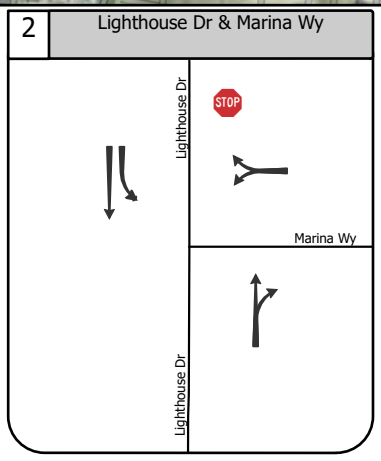
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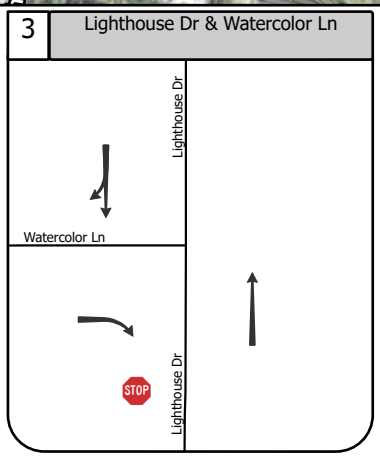
Figure 2

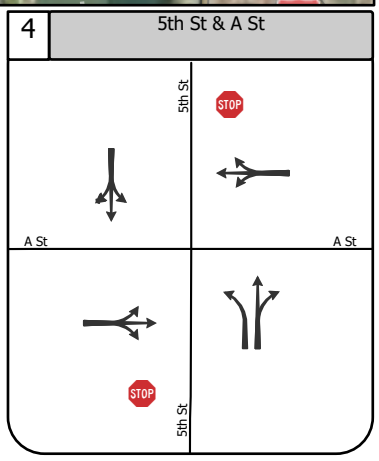
WOOD RODGERS

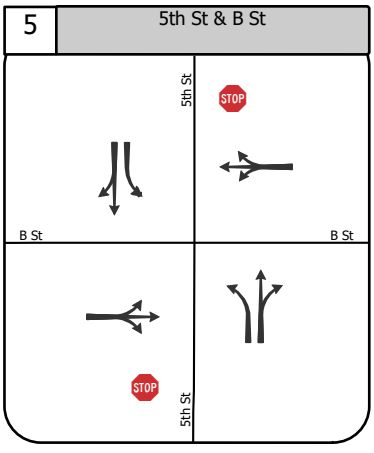


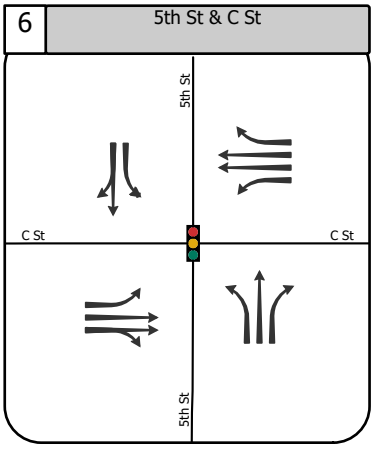












Near Term Plus Project Conditions Lane Geometrics and Control

North 5th Street Complete Streets and Connectivity Project TOA
West Sacramento, CA
October 2025

0 200 400 800
Feet

Figure 3

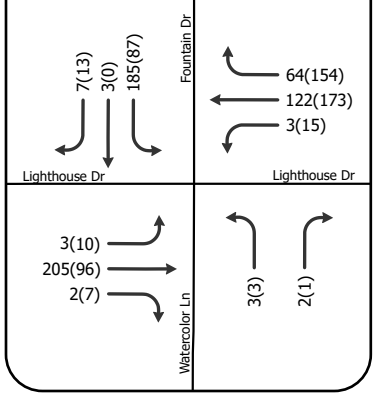
WOOD RODGERS



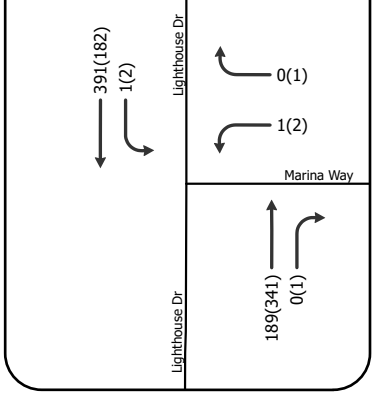
Legend

- (#) Intersection Location
- xx(xx) AM(PM) Peak Hour Volumes
- Turning Movement

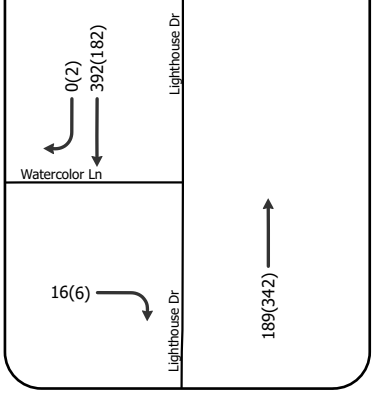
1 Fountain Dr/Watercolor Ln & Lighthouse Dr



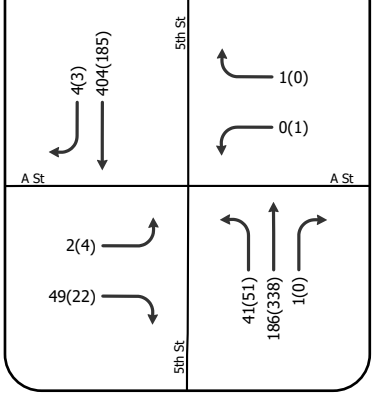
2 Lighthouse Dr & Marina Way



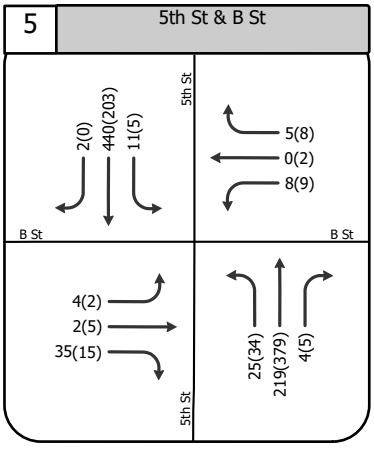
3 Lighthouse Dr & Watercolor Ln



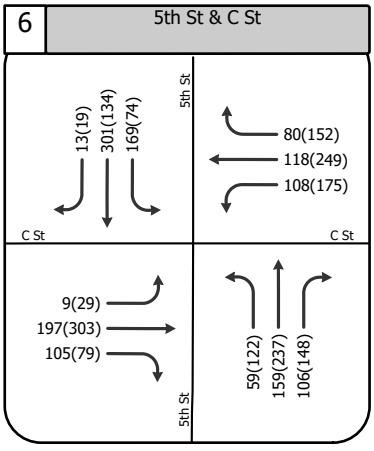
4 5th St & A St



5 5th St & B St



6 5th St & C St



Near Term Conditions Traffic Volumes

North 5th Street Complete Streets and Connectivity Project TOA
West Sacramento, CA
October 2025

0 200 400 800
Feet

Figure 4

WOOD RODGERS

INTERSECTION LEVEL OF SERVICE

Intersection LOS and delay for Near-Term and Near-Term Plus Project conditions were evaluated using *SimTraffic* software and are shown in **Table 4**.

Table 4. Intersection LOS

#	Intersection	Control Type[1]	LOS Criteria	Peak Hour	Near-Term Conditions		Near-Term Plus Project Conditions	
					Delay (S/V)[2]	LOS	Delay (S/V)[2]	LOS
1	Fountain Drive/Watercolor Lane & Lighthouse Drive	Signal	C	AM	5.3	A	5.4	A
				PM	3.9	A	3.9	A
2	Lighthouse Drive & Marina Way	OWSC	C	AM	5.7	A	7.2	A
				PM	9.6	A	4.2	A
3	Lighthouse Drive & Watercolor Lane	OWSC	C	AM	2.8	A	3.4	A
				PM	2.6	A	2.8	A
4	Lighthouse Drive/5th Street & A Street	TWSC	C	AM	10.1	B	8.0	A
				PM	12.5	B	11.3	B
5	5th Street & B Street	TWSC	C	AM	10.9	B	11.4	B
				PM	9.7	A	8.6	A
6	5th Street & C Street	Signal	D	AM	18.5	B	19.4	B
				PM	22.0	C	22.1	C

Notes:
1 OWSC = One-Way Stop-Controlled, TWSC= Two-Way Stop Controlled
2 "Average" control delays (in seconds/vehicle) are indicated for Signal controlled intersections. "Worst-movement delay" (in seconds/vehicle) is indicated for One-Way Stop-Controlled (OWSC) and Two-Way Stop-Controlled (TWSC) intersections.

As shown in **Table 4**, all study intersections are projected to operate at acceptable LOS under Near-Term and Near-Term Plus Project conditions. *SimTraffic* intersection delay reports are contained in **Attachment D**.

INTERSECTION QUEUEING

95th percentile queue lengths for Near-Term and Near-Term Plus Project conditions were evaluated using *SimTraffic* software and are shown in **Table 5**.

As shown in **Table 5**, all of the AM and PM peak hour movements experience queues that fit within storage under Near-Term and Near-Term Plus Project conditions. *SimTraffic* queueing reports are contained in **Attachment E**.

Table 5. Intersection Queueing

#	Intersection	Movement	Near-Term Conditions (ft)			Near-Term Plus Project Conditions (ft)		
			Available Storage	AM	PM	Available Storage	AM	PM
1	Fountain Drive/Watercolor Lane & Lighthouse Drive	NBLTR	*500*	18	15	*500*	17	14
		SBLT	*680*	89	67	*680*	87	65
		SBR	*680*	22	33	*680*	19	33
		EBL	*175*	15	29	*175*	17	26
		EBT	*1225*	53	35	*1225*	85	47
		EBTR	*1225*	55	35	-	-	-
		EBR	-	-	-	*1225*	8	16
		WBL	*100*	15	35	*100*	14	36
		WBT	*250*	71	81	*250*	65	67
2	Lighthouse Drive & Marina Way	NBTR	*525*	0	6	*525*	0	3
		SBL	*75*	3	6	*75*	0	7
		SBT	*250*	0	3	*250*	0	6
		WBLR	*275*	7	13	*275*	11	20
3	Lighthouse Drive & Watercolor Lane	NBT	*800*	2	2	*800*	0	0
		EBR	*300*	28	20	*300*	29	19
4	Lighthouse Drive/5th Street & A Street	NBL	*75*	39	31	*75*	40	30
		NBT	*450*	3	4	-	-	-
		NBTR	*450*	4	4	*450*	6	4
		SBLT	*800*	0	4	-	-	-
		SBLTR	-	-	-	*800*	6	3
		SBTR	*800*	9	5	-	-	-
		EBLTR	*325*	47	36	*325*	43	38
		WBLTR	*180*	10	11	*180*	7	11
5	5th Street & B Street	NBL	*75*	30	28	*75*	30	26
		NBT	*380*	0	9	-	-	-
		NBTR	*380*	0	6	*380*	6	8
		SBL	*75*	13	12	*75*	15	11
		SBT	*450*	0	8	-	-	-
		SBTR	*450*	0	0	*450*	7	6
		EBLTR	*330*	52	44	*330*	49	43
		WBLTR	*300*	38	41	*300*	34	41
6	5th Street & C Street	NBL	*140*	73	127	*140*	78	138
		NBT	*875*	89	121	*875*	130	184
		NBTR	*875*	99	155	-	-	-
		NBR	-	-	-	*875*	53	70
		SBL	*180*	144	94	*180*	152	83
		SBT	*380*	85	55	-	-	-
		SBTR	*380*	98	65	*380*	185	121
		EBL	*110*	29	53	*110*	26	54
		EBT	*380*	121	167	*380*	120	155
		EBTR	*380*	108	145	*380*	110	134
		WBL	*180*	113	168	*180*	112	164
		WBT	*300*	91	177	*300*	88	162
		WBR	*130*	60	81	*130*	48	69

Notes: Bold *exceeds storage*

SAFETY EVALUATION

EXISTING COLLISION HISTORY

Five years of crash data (2019 –2024) was obtained from the City to identify high collision locations and common collision characteristics. City collision data is included in **Appendix F**.

Table 6 summarizes the collisions in the study area and describes the collision severity (fatal, serious injury, other visible injury, complaint of pain, and property damage (PDO), and the collision type (head-on, sideswipe, rear-end, broadside, hit object, overturned, vehicle/bicycle, and other/unknown). The City collision data indicated that a total of 24 collisions occurred at the study facilities over the last five years. The severity of most collisions involved PDO (19 collisions), followed by Complaint of Pain and Other Visible Injury (2 collisions each). The most common collision types were broadside collisions, followed by sideswipe and hit object type collisions.

Table 6. Summary of Collision Severity and Type in Study Area (2019 – 2024)

Intersection	Total Collisions	Severity					Type							
		Fatal	Serious Injury	Other Visible Injury	Complaint of Pain	PDO	Head On	Sideswipe	Rear-End	Broadside	Hit Object	Overturned	Vehicle/Bicycle	Other/Unknown
Lighthouse Drive & Watercolor Lane	2	0	0	0	0	2	0	1	0	0	1	0	0	0
Lighthouse Drive & Fountain Drive	1	0	0	1	0	0	0	0	0	0	1	0	0	0
Lighthouse Drive & Marina Way	2	0	0	0	0	2	0	0	0	0	2	0	0	0
Lighthouse Drive/5th Street & A Street	1	0	0	0	0	1	0	1	0	0	0	0	0	0
5th Street & B Street	5	0	0	0	1	4	0	1	1	2	0	0	0	1
5th Street & C Street	13	0	1	1	1	10	2	3	1	6	0	0	1	0
Totals	**24**	**0**	**1**	**2**	**2**	**19**	**2**	**6**	**2**	**8**	**4**	**0**	**1**	**1**

Table 7 shows the primary collision factors (PCFs) at each study intersection. The most common PCFs were traffic signals and signs violation, followed by improper/unsafe turning.

Table 7. Summary of Primary Collision Factors in Study Area (2019 – 2024)

Intersection	Total Collisions	Primary Collision Factor											
		Unsafe Speed	Improper/Unsafe Turning	Making Left Turn	Making Right Turn	Automobile Right of Way	Pedestrian Right of Way	Pedestrian Violation	Traffic Signals and Signs Violation	Other Than Driver (or Pedestrian)	Ran Off Road	Other Improper Driving	Unknown
Lighthouse Drive & Watercolor Lane	2	0	1	1	0	0	0	0	0	0	0	0	0
Lighthouse Drive & Fountain Drive	1	0	0	0	0	0	0	0	0	0	1	0	0
Lighthouse Drive & Marina Way	2	0	1	0	1	0	0	0	0	0	0	0	0
Lighthouse Drive/5th Street & A Street	1	0	1	0	0	0	0	0	0	0	0	0	0
5th Street & B Street	5	0	2	0	0	2	0	0	0	0	0	0	1
5th Street & C Street	13	2	1	0	0	1	0	0	8	1	0	0	0
Totals	**24**	**2**	**6**	**1**	**1**	**3**	**0**	**0**	**8**	**1**	**1**	**0**	**1**

Table 8 shows the summary of involved parties during collisions at each study intersection. There were two collisions involving bicycles in the study area.

Table 8. Summary of Involved Parties

Intersection	Total Collisions	Vehicle-Vehicle	Vehicle-Bicycle	Vehicle-Pedestrian	Vehicle-Object	Vehicle-Other/Unknown
Lighthouse Drive & Watercolor Lane	2	1	0	0	1	0
Lighthouse Drive & Fountain Drive	1	0	0	0	1	0
Lighthouse Drive & Marina Way	2	0	0	0	2	0
5th Street & A Street	1	1	0	0	0	0
5th Street & B Street	5	4	0	0	0	1
5th Street & C Street	13	10	2	0	0	1
Totals	**24**	**16**	**2**	**0**	**4**	**2**

PROPOSED SAFETY IMPROVEMENTS

The Project proposes a number of improvements consistent with Caltrans and Federal Highway Administration (FHWA) Proven Safety Countermeasures which would potentially decrease future collisions in the study area. The proposed road diet and reduced lane widths on 5th Street/Lighthouse Drive would potentially lead to lower speeds, reducing overall collisions. The proposed buffered bike lanes would provide a more comfortable riding experience for cyclists in the corridor and decrease conflict points with vehicles. The proposed striped crosswalks and Rectangular Rapid Flashing Beacon would provide more visibility at pedestrian crossings, alerting drivers to the presence of pedestrians.

ACTIVE TRANSPORTATION PROGRAM TRAFFIC COUNTS

Additional bicycle and pedestrian counts will be collected at three (3) locations at or near affordable housing / senior living facilities along the corridor, or locations with the highest number of expected users, before and after construction of the Project to document the effectiveness of the Project. Data will be collected over the course of a week, consistent with *Interim Count Methodology Guidance for Active Transportation Program* (ATP) (August 2024). Pre-construction counts will be conducted no more than six (6) months before construction begins. Post-construction counts will be conducted at least six (6) months after construction is completed. Before and after counts will be conducted on the same days of the week, time of day, and week of the year as feasible.

ATP bicycle and pedestrian counts will be collected at the following locations:

1. Lighthouse Drive between Fountian Drive/Watercolor Lane and Marina Way
2. 5th Street between A Street and B Street
3. New levee trail connection at A Street

I STREET BRIDGE REPLACEMENT PROJECT

The City of Sacramento, in cooperation with the City of West Sacramento and the California Department of Transportation (Caltrans), proposes to construct a new bridge over the Sacramento River to replace the existing I Street Bridge. This project, known as the I Street Bridge Replacement Project, would also reconfigure C Street in West Sacramento, including reducing the number of eastbound and westbound through lanes at the 5th Street & C Street intersection.

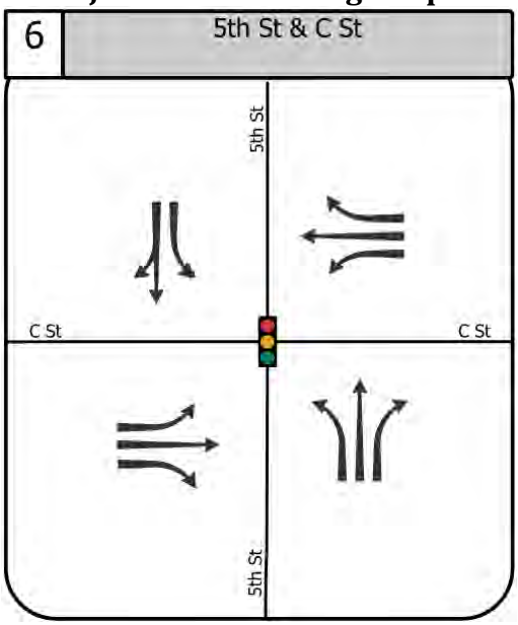
Proposed lane geometric changes at the 5th Street & C Street intersection are listed in **Table 9**.

Table 9. I Street Bridge Replacement Project: 5th Street & C Street Lane Geometry Changes

Intersection	Leg	Geometry Modification[1]
5th Street & C Street	East Leg (C Street)	Reduce the receiving lanes from two to one. Reduce the WBT lanes from two to one. The modified WB approach would consist of a WBL, WBT, and WBR lane.
	West Leg (C Street)	Reduce the receiving lanes from two to one. Convert the outside EBTR lane into an EBR lane. The modified EB approach would consist of an EBL, EBT, and EBR lane.
Notes: *[1]Modified C Street Corridor featured in I Street Bridge Replacement Project DEIR (September, 2017)*		

This section of the TOA evaluates a "Near-Term Plus Project With I Street Bridge Improvements" scenario where both the North 5th Street Complete Streets and Connectivity Project (Project) and the I Street Bridge Replacement Project have been completed. Near-Term future traffic volumes were used (shown in **Figure 4**). Near-Term Plus Project With I Street Bridge Improvements lane geometrics at the 5th Street & C Street intersection are shown in **Figure 5**.

Figure 5. Near-Term Plus Project With I St Bridge Improvements Lane Geometrics



Intersection LOS and delay for Near-Term Plus Project With I Street Bridge Improvements conditions were evaluated using *SimTraffic* software and are shown in **Table 10**.

Table 10. Intersection LOS – Near-Term Plus Project With I St Bridge Improvements

#	Intersection	Control Type[1]	LOS Criteria	Peak Hour	Near-Term Plus Project Conditions With I Street Bridge Improvements	
					Delay (S/V)[1]	LOS
6	5th Street & C Street	Signal	D	AM	19.4	B
				PM	24.4	C

Notes:
1 "Average" control delays (in seconds/vehicle) are indicated for Signal controlled intersections.

As shown in **Table 10**, all study intersections are projected to operate at acceptable LOS under Near-Term Plus Project With I Street Bridge Improvements conditions. *SimTraffic* intersection delay reports are contained in **Attachment G**.

As shown in **Table 11**, all of the AM and PM peak hour movements experience queues that fit within storage under Near-Term Plus Project With I Street Bridge Improvements conditions. *SimTraffic* queueing reports are contained in **Attachment G**.

Table 11. Intersection Queueing – Near-Term Plus Project with I St Bridge Improvements

#	Intersection	Movement	Near-Term Plus Project Conditions With I Street Bridge Improvements (ft)		
			Available Storage	AM	PM
6	5th Street & C Street	NBL	*140*	86	138
		NBT	*875*	131	196
		NBR	*875*	55	79
		SBL	*180*	142	93
		SBTR	*380*	193	126
		EBL	*110*	24	78
		EBT	*380*	164	243
		EBR	*125*	91	122
		WBL	*180*	106	179
		WBT	*300*	92	212
		WBR	*130*	47	91

CALIFORNIA INDIAN HERITAGE CENTER

A 51-acre California Indian Heritage Center (CIHC) project is planned near the study corridor at the confluence of the American and Sacramento Rivers. The CIHC would be located east of Levee Road from approximately River Crest Drive to A Street. The CIHC is currently in development and planned to open around the 2028 to 2030 timeframe. The CIHC will include approximately 120,000 square feet of building space accommodating a wide range of programmatic areas, including but not limited to:

- Entry/Orientation center
- Library, Display, and Interpretive Exhibits
- Collection Storage
- Space for Public Art
- Community Forums
- Outdoor Plaza
- Exhibition and Educational Facilities
- Outdoor Venues

- Interpretative/ Educational Trail Connections to the Sacramento River

According to the *California Indian Heritage Center Final General Plan & Environmental Impact Report* (EIR) (Approved by the State Parks and recreation Commission on July 8, 2011), the CIHC may be completed in four (4) phases. The main traffic entrance to the CIHC would be located off of Lighthouse Drive & 5th Street via Marina Way. According to the CIHC EIR, peak attendance days would occur during the summer, and peak vehicle trip generation would occur on the weekends.

While the exact timing and phasing of the CIHC is not currently available, the CIHC will add traffic to the study corridor when complete. Therefore, the *ITE Trip Generation Manual, 11th Edition* was used to estimate trips generated by the CIHC during the weekday AM and PM peak hours, which is the period when the study corridor experiences the highest levels of traffic. The trip generation for the CIHC was conservatively prepared assuming full buildout of the 120,000 square feet of building space. **Table 12** shows the average museum trip generation rates from the *ITE Trip Generation Manual, 11th Edition*. **Table 13** shows the trip generation estimate for the CIHC.

Table 12. Weekday Trip Generation Rates - CIHC

Land Use	ITE Code	Units	Daily[1]	AM Peak Hour[1]			PM Peak Hour[1]		
				In	Out	Rate	In	Out	Rate
Museum	580	KSF[2]	n/a	86%	14%	0.28	16%	84%	0.18

Notes:
[1]Trip rates are calculated based on ITE Trip Generation Manual (11th Edition) average rates. The ITE Trip Generation Manual (11th Edition) does not provide Museum trip rates for weekday daily conditions.
[2]KSF = Thousand square feet gross floor area.

Table 13. Weekday Trip Generation Estimate - CIHC

Land Use	ITE Code	Quantity	Units	Daily[1]	AM Peak Hour[1]			PM Peak Hour[1]		
					In	Out	Total	In	Out	Total
Museum	580	120	KSF[2]	n/a	29	5	34	3	19	22

Notes:
[1]Trip rates are calculated based on ITE Trip Generation (11th Edition) average rates. The ITE Trip Generation Manual (11th Edition) does not provide Museum trip rates for weekday daily conditions.
[2]KSF = Thousand square feet gross floor area.

As shown in **Table 13**, the CIHC would add approximately 34 AM peak hour and 22 PM peak hour trips to the study corridor as the trips travel to/from the Lighthouse Drive & 5th Street intersection (main CIHC access). The trips generated by the CIHC were distributed to the study intersections using the CIHC trip distribution contained in the CIHC EIR. Intersection LOS and delay were evaluated using *SimTraffic* software under a "Near-Term Plus Project With I Street Bridge Improvements and CIHC Traffic" scenario where the North 5th Street Complete Streets and Connectivity Project (Project), the I Street Bridge Replacement Project, and the CIHC were all assumed to be completed.

Based on the *SimTraffic* analysis, the addition of CIHC trips would increase study corridor delay by up to four (4) seconds per vehicle at each intersection compared to the LOS results summarized in **Tables 4** and **10** of this TOA. The small increase in intersection delay would continue to result in acceptable LOS A/B/C at all study intersections. Study intersection 95th percentile queue lengths are generally projected to see small increases (less than one vehicle length) with the addition of CIHC trips. 95th Percentile queues would increase the most at the Lighthouse Drive & Marnia Way intersection (CIHC access), where queues would be up to two vehicle lengths. All study intersection queues are projected to continue to fit within available storage with the addition of CIHC trips. *SimTraffic* intersection delay and queueing reports are contained in **Attachment H**.

CONCLUSION

INTERSECTION LEVEL OF SERVICE

All study intersections are projected to operate at acceptable LOS C or better under Near-Term and Near-Term Plus Project AM and PM peak hour conditions. Implementation of the Project is shown to not adversely affect vehicle delay along the study corridor.

INTERSECTION QUEUEING

All intersections are projected to experience queues that fit within storage under Near-Term and Near-Term Plus Project AM and PM peak hour conditions. Implementation of the Project is shown to not adversely affect vehicle queuing along the study corridor.

SAFETY EVALUATION

A total of 24 collisions occurred at the study facilities over the last five years. The severity of most collisions involved PDO (19 collisions), followed by Complaint of Pain and Other Visible Injury (2 collisions each). The most common collision types were broadside collisions (8), followed by sideswipe (6) and hit object (4) type collisions. The most common primary collision factors were traffic signals and signs violation (8), followed by improper/unsafe turning (6). There were two (2) collisions involving bicycles in the study area.

The Project proposes a number of improvements consistent with Caltrans and FHWA Proven Safety Countermeasures which would potentially decrease future collisions in the study area. Those improvements include the road diet, reduced lane widths, buffered bike lanes, striped crosswalks, and Rectangular Rapid Flashing Beacon on the 5th Street/Lighthouse Drive corridor.

ACTIVE TRANSPORTATION PROGRAM TRAFFIC COUNTS

Additional bicycle and pedestrian counts will be collected at three (3) locations to document the effectiveness of the Project consistent with *Interim Count Methodology Guidance for Active Transportation Program* (ATP) (August 2024). Pre-construction counts will be conducted no more than six (6) months before construction begins. Post-construction counts will be conducted at least six (6) months after construction is completed. Before and after counts will be conducted on the same days of the week, time of day, and week of the year as feasible.

I STREET BRIDGE REPLACEMENT PROJECT

The City of Sacramento, in cooperation with the City of West Sacramento and the California Department of Transportation (Caltrans), proposes to construct a new bridge over the Sacramento River to replace the existing I Street Bridge. This project, known as the I Street Bridge Replacement Project, would also reconfigure C Street in West Sacramento, including reducing the number of eastbound and westbound through lanes at the 5th Street & C Street intersection. Intersection LOS and delay for Near-Term Plus Project With I Street Bridge Improvements conditions were evaluated using *SimTraffic* software. All study intersections are projected to operate at acceptable LOS under Near-Term Plus Project With I Street Bridge Improvements conditions. All of the AM and PM peak hour movements experience queues that fit within storage under Near-Term Plus Project With I Street Bridge Improvements conditions.

CALIFORNIA INDIAN HERITAGE CENTER

A 51-acre CIHC project is planned near the study corridor at the confluence of the American and Sacramento Rivers. The CIHC would be located east of Levee Road from approximately River Crest Drive to A Street. The CIHC is currently in development and planned to open around the 2028 to 2030 timeframe. The CIHC will include approximately 120,000 square feet of building space accommodating a wide range of museum and state park type uses. Peak attendance days would occur during the summer, and peak vehicle trip generation would occur on the weekends. The main traffic entrance to the CIHC would be located off of Lighthouse Drive & 5th Street via Marina Way.

A trip generation for the CIHC was conservatively prepared assuming full buildout of the 120,000 square feet of building space using average museum trip generation rates from the *ITE Trip Generation Manual, 11th Edition.* It is projected that the CIHC would add approximately 34 weekday AM peak hour and 22 weekday PM peak hour trips to the study corridor as the trips travel to/from the Lighthouse Drive & 5th Street intersection (main CIHC access). The addition of CIHC trips would increase study corridor delay by up to four (4) seconds per vehicle at each intersection. The small increase in intersection delay would continue to result in acceptable LOS A/B/C at all study intersections. All study intersection queues are projected to continue to fit within available storage with the addition of CIHC trips.

ATTACHMENTS:

Attachment A: Project Exhibits

Attachment B: Traffic Counts

Attachment C: Study Intersection Volumes (Counts, Balanced Volumes, Development Assignment)

Attachment D: SimTraffic LOS Reports

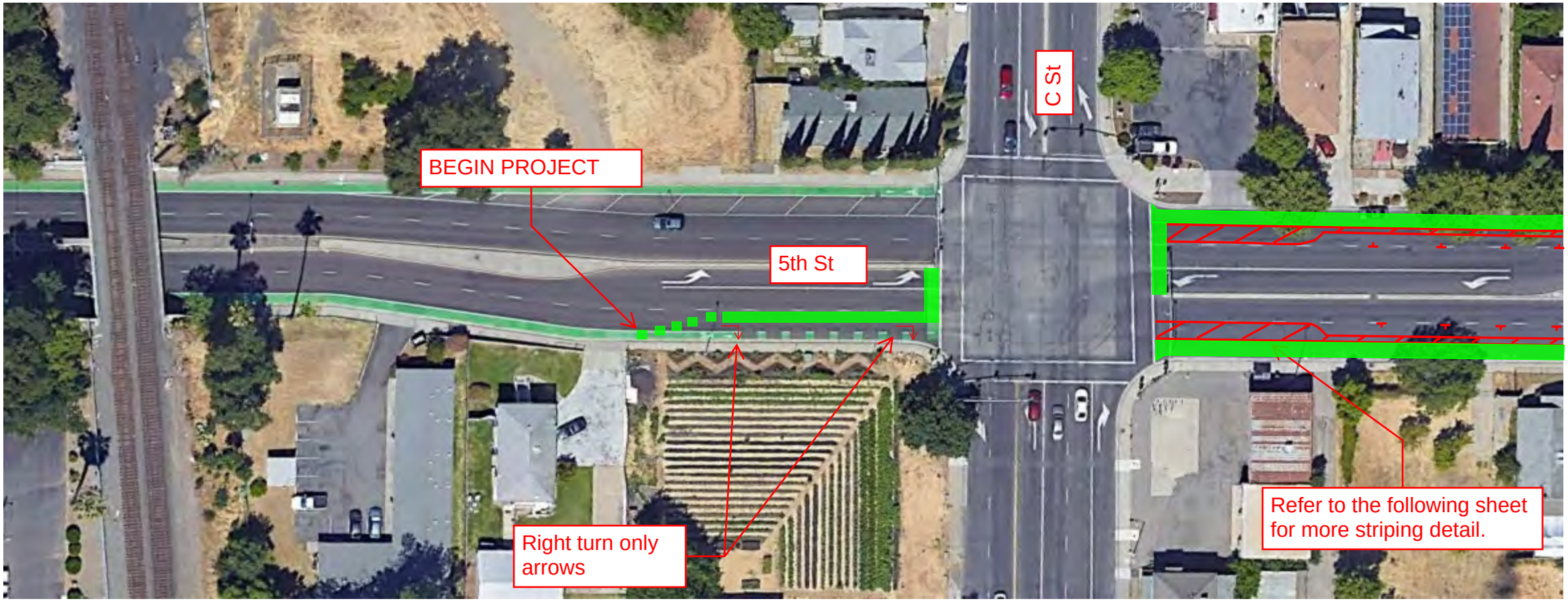
Attachment E: SimTraffic Queueing Reports

Attachment F: Collision Data

Attachment G: Near Term Plus Project With I Street Bridge Improvements SimTraffic Reports

Attachment H: Near Term Plus Project With I Street Bridge Improvements and CIHC Traffic SimTraffic Reports

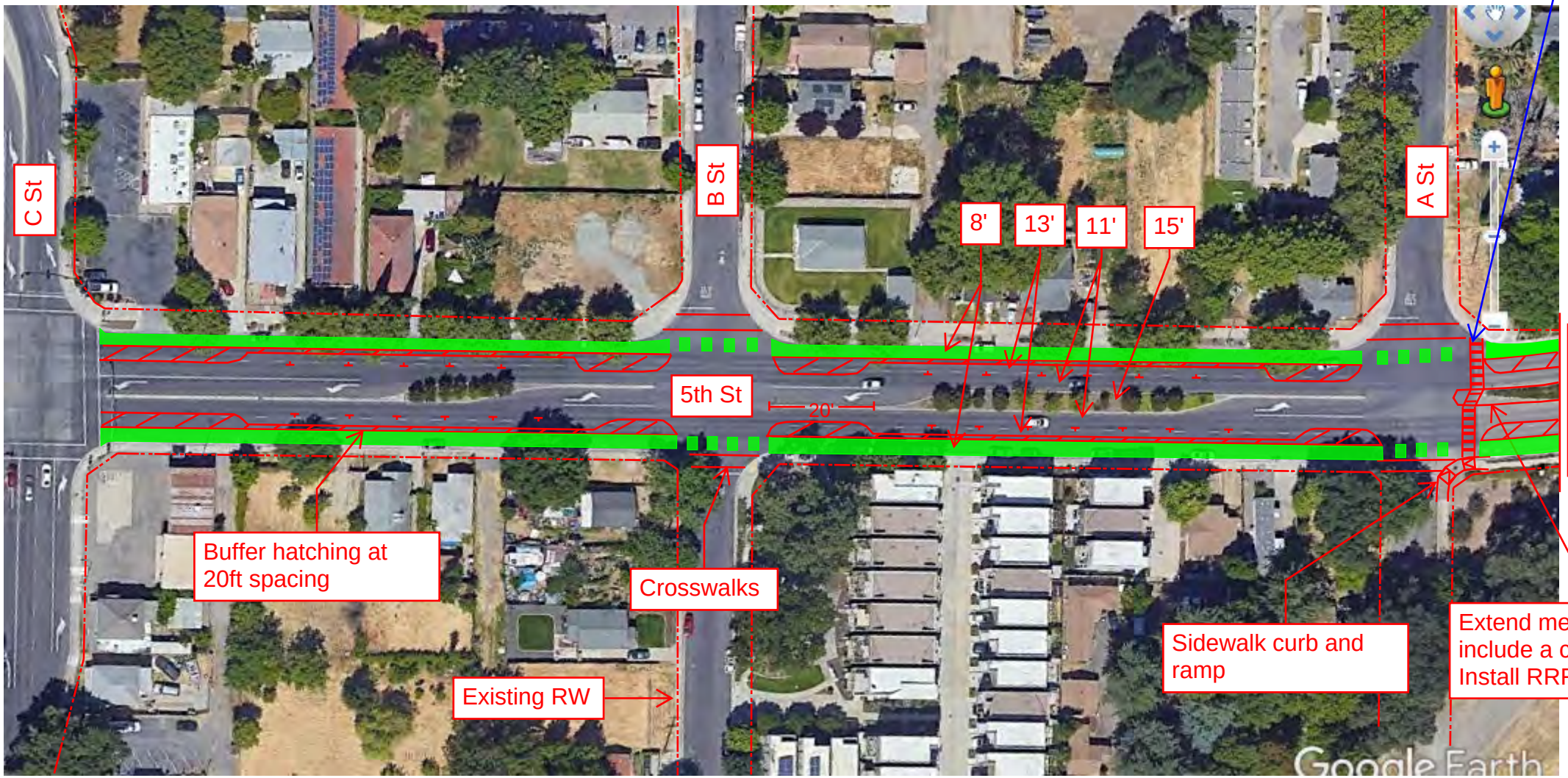
Attachment A:
Project Exhibits

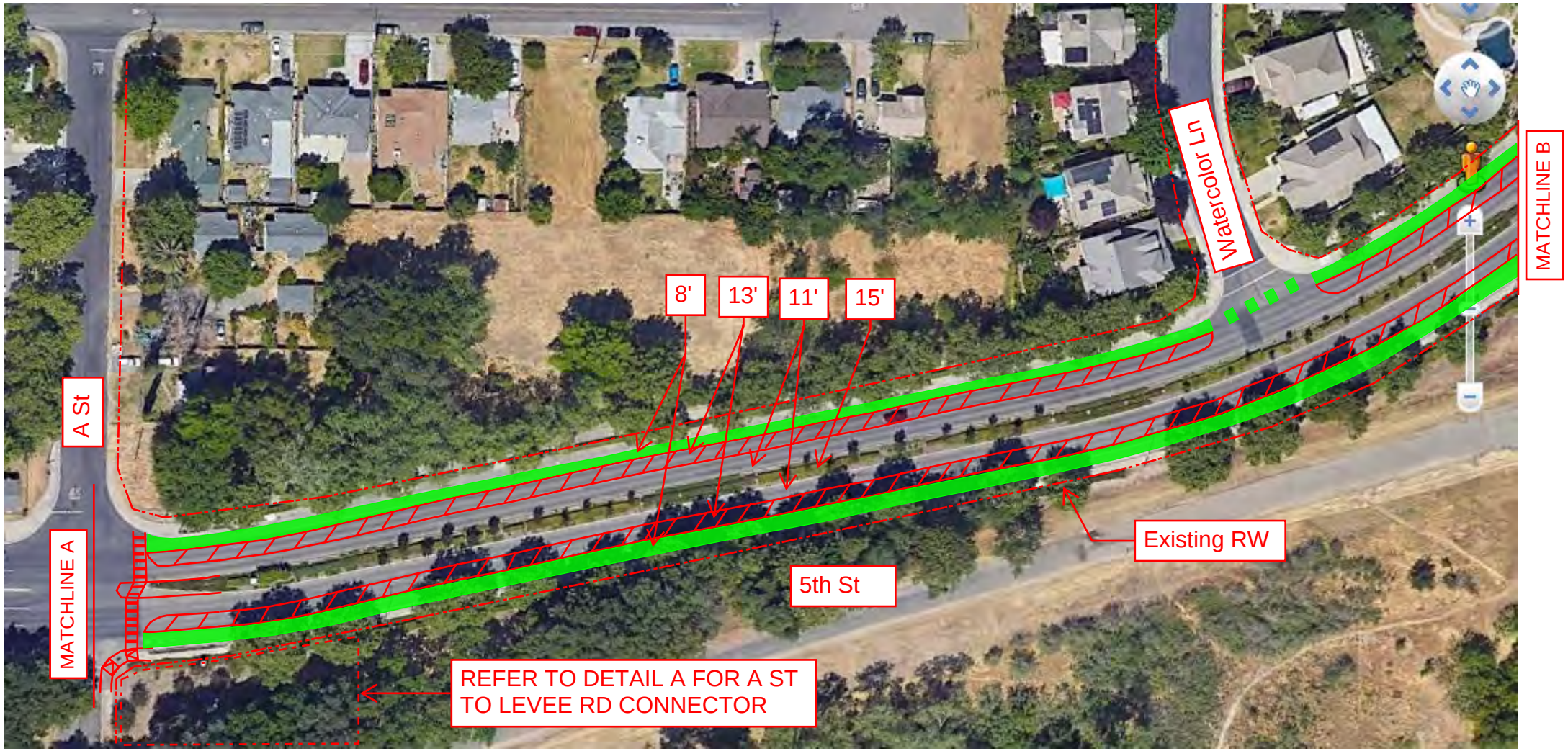


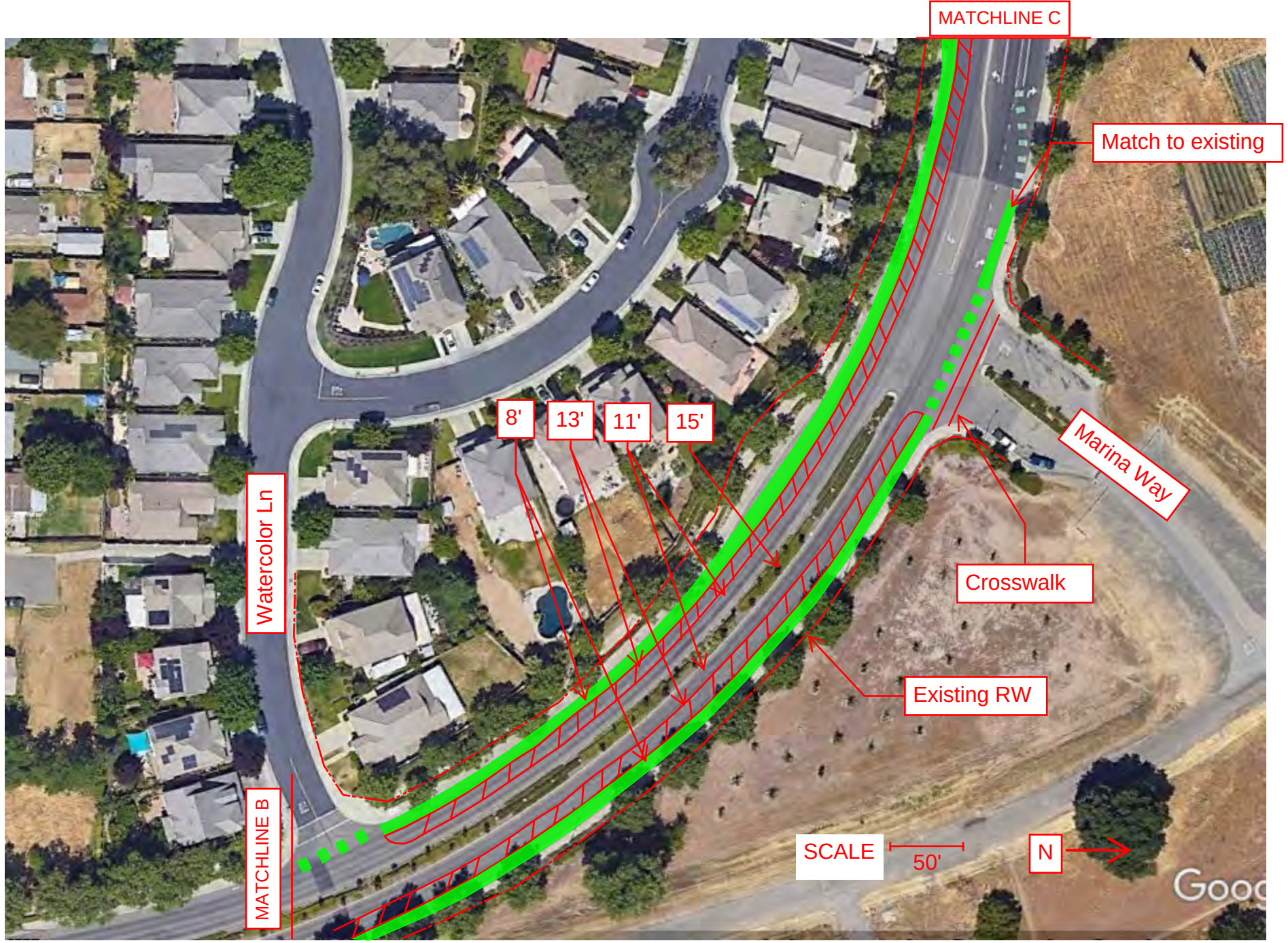
Note: The scale on this page is different from the rest of the sheets. Must recalibrate and use the scale provided.

50'

N


Crosswalk will have a Flashing Beacon
C St
B St
A St
8'
13'
11'
15'
5th St
20'
MATCHLINE A
Buffer hatching at 20ft spacing
Crosswalks
Existing RW
Sidewalk curb and ramp
Extend median and include a cut through. Install RRFB
Google Earth
SCALE
50'
N


A St
MATCHLINE A
8'
13'
11'
15'
Watercolor Ln
MATCHLINE B
Existing RW
5th St
REFER TO DETAIL A FOR A ST
TO LEVEE RD CONNECTOR
SCALE
50'
N


MATCHLINE C
Match to existing
8'
13'
11'
15'
Watercolor Ln
Marina Way
Crosswalk
Existing RW
MATCHLINE B
SCALE
50'
N

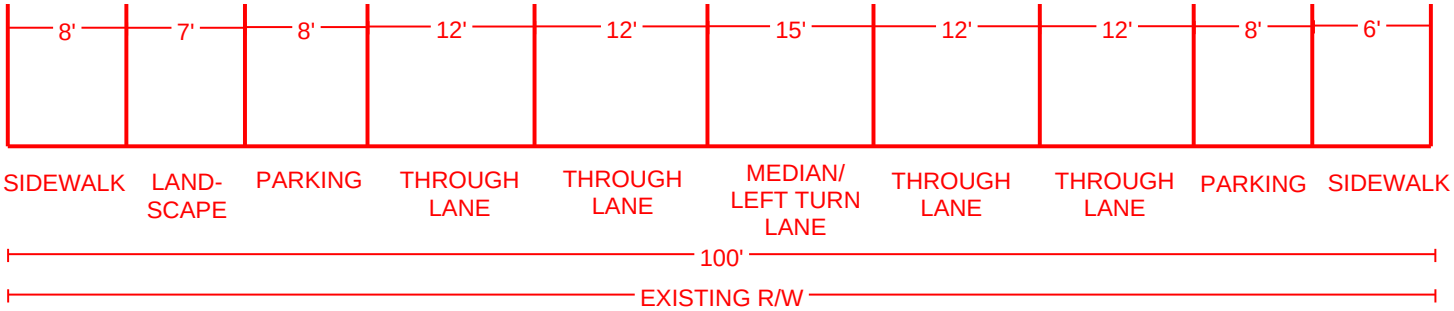

END PROJECT SCOPE
Right turn only arrows
Watercolor Ln
Fountain Dr
Existing RW
MATCHLINE C
SCALE
50'
N

DETAIL A

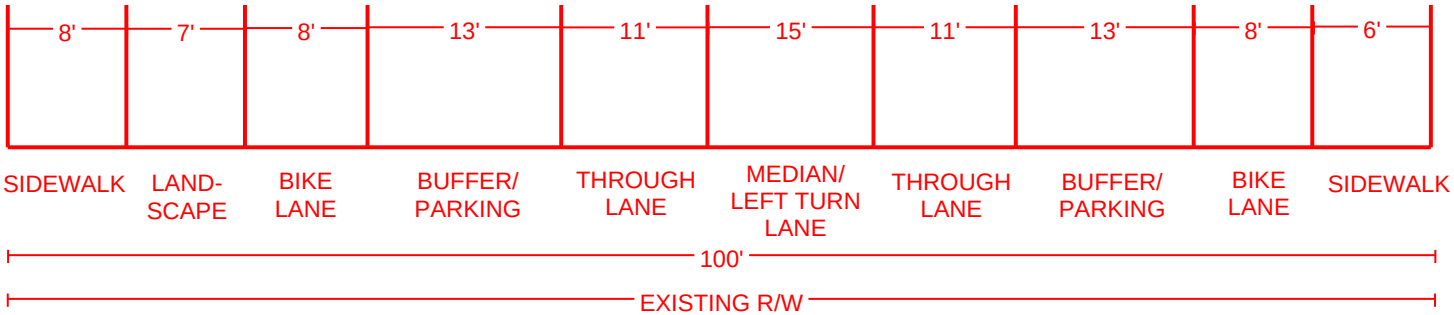
N

SCALE 20'

EXISTING CROSS SECTION



PROPOSED CROSS SECTION



NOTE:
This sheet is only for the proposed sidewalk. Refer to the next sheet for striping plans. Only markups and callouts in red apply. All other notes, markups, and notes do not apply.

BIKE LANE

SIDEWALK

EXISTING TREE TO REMAIN

65% (NOT FOR CONSTRUCTION)

MATCH LINE "RY" 18+00 SEE BELOW

MATCH LINE "RY" 18+00 SEE ABOVE

MATCH LINE "RY" 23+50 SEE SHEET SS-3

MATCH LINE "3RD" 14+30 SEE SHEET SS-9

MATCH LINE "3RD" 12+30 SEE SHEET SS-10

SS-2

REVISIONS NO.	DESCRIPTION	DATE	BY

BENCH MARK ELEV. _____

FIELD BOOK

SCALE
HORIZ. 1"=20'
VERT. _____

CITY OF SACRAMENTO
DEPARTMENT OF PUBLIC WORKS

DRAWN BY: C. MARINO
DATE NOVEMBER 2021

DESIGNED BY: K. CASELLI
R.C.E. 86464 DATE NOVEMBER 2021

CHECKED BY: Z. SIVIGLIA
R.C.E. 73128 DATE NOVEMBER 2021

MARK THOMAS
UNDER THE SUPERVISION OF: ZACH SIVIGLIA
R.C.E. 73128
EXP. 12-31-22

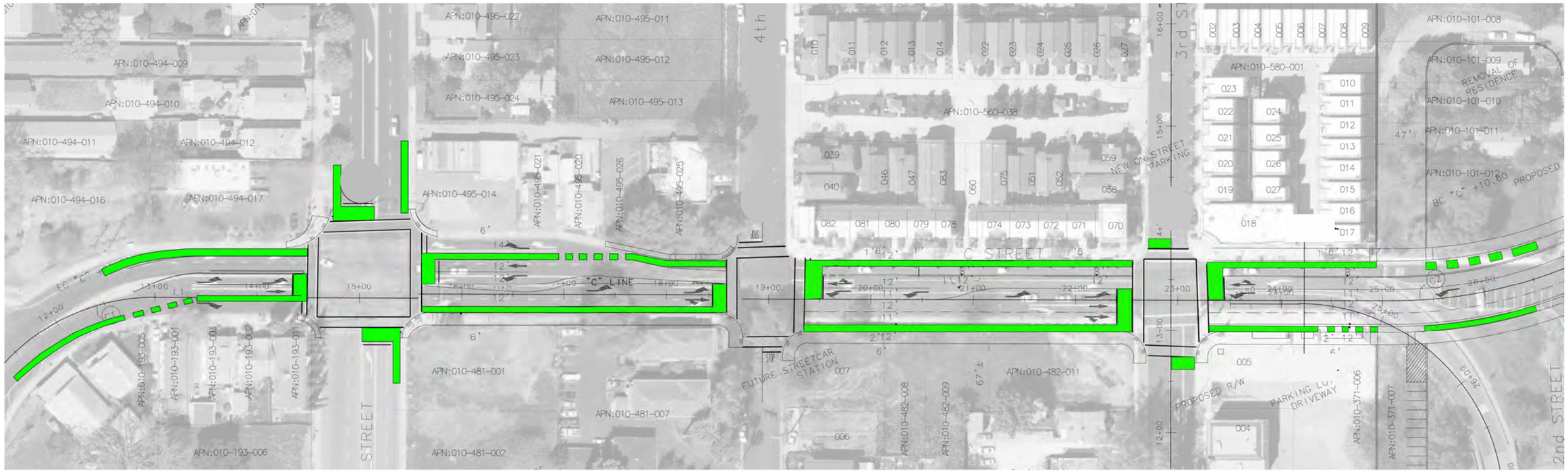
I STREET BRIDGE REPLACEMENT
OVER SACRAMENTO RIVER

SIGNING AND STRIPING PLANS

T15136000

SHEET 105 — OF — 195

C St Striping Plan



NOTE:
This sheet is only for the proposed green bike lane. Only markups in green apply. All other notes, markups, and notes do not apply.

50'

N

Attachment B:
Traffic Counts

QUALITY COUNTS REPORT
====================

Intersectio	8 - Fountai	Lighthouse Dr	Lane Configuration:											
City/State:	West Sacra	CA		SIGNAL	SBLane1	SBLane2	SBLane3	SBLane4	SBLane5	SBLane6	SBLane7			
QCJobNo:	1.68E+08				R	LT							SIGNAL	
ClientID:			EBLane7									R	WBLane1	
Date:	12/5/2024		EBLane6									T	WBLane2	
Comments:			EBLane5									L	WBLane3	
Latitude/Lo	38.5953	-121.515	EBLane4										WBLane4	
PEAK HOUI	7:30 AM		EBLane3	L									WBLane5	
PEAK HOUI	8:30 AM		EBLane2	T									WBLane6	
PEAK 15-M	7:45 AM		EBLane1	TR									WBLane7	
PEAK 15-M	8:00 AM		SIGNAL								LTR			
PHF	0.82				NBLane7	NBLane6	NBLane5	NBLane4	NBLane3	NBLane2	NBLane1	SIGNAL		

PEAK-HOUR VOLUMES

	NBLeft	NBThru	NBRight	SBLeft	SBThru	SBRight	EBLeft	EBThru	EBRight	WBLeft	WBThru	WBRight	NBEntering	SBEntering	EBEntering	WBEntering	NBLeaving	SBLeaving	EBLeaving	WBLeaving
	3	0	2	169	3	6	3	205	2	3	122	58	5	178	210	183	61	8	376	131

PERCENT HEAVY VEHICLES

	NBLeft	NBThru	NBRight	SBLeft	SBThru	SBRight	EBLeft	EBThru	EBRight	WBLeft	WBThru	WBRight	NBEntering	SBEntering	EBEntering	WBEntering	NBLeaving	SBLeaving	EBLeaving	WBLeaving
HEAVY VEH	0	0	0	0.6	0	0	0	2.4	0	0	1.6	10.3	0	0.6	2.4	4.4	9.8	0	1.6	1.5
BUSES																				

PEAK-HOUR VOLUMES - PEDESTRIANS

Leg/Crossw	South	North	West	East
	2	6	3	0

PEAK-HOUR VOLUMES - MICROMOBILITY

	NBLeft	NBThru	NBRight	SBLeft	SBThru	SBRight	EBLeft	EBThru	EBRight	WBLeft	WBThru	WBRight
Bicycles	0	0	0	1	0	0	1	1	0	0	1	0
Scooters												

PEAK 15-MIN FLOWRATES

VehicleTyp	NBLeft	NBThru	NBRight	NBU-Turn	NBRTOR	SBLeft	SBThru	SBRight	SBU-Turn	SBRTOR	EBLeft	EBThru	EBRight	EBU-Turn	EBRTOR	WBLeft	WBThru	WBRight	WBU-Turn	WBRTOR	Total
All Vehicles	8	0	0	0	0	204	4	4	0	0	4	240	4	0	0	0	184	48	0	0	700
Heavy Truc	0	0	0			0	0	0			0	4	0			0	0	4			8
Buses																					
Pedestrians		4					4					12					0				20
Bicycles	0	0	0			4	0	0			4	0	0			0	0	0			8
Scooters																					

ALL-VEHICLE VOLUMES

Time Period	NB Left	NB Thru	NB Right	NB U-Turn	NB RTOR	SB Left	SB Thru	SB Right	SB U-Turn	SB RTOR	EB Left	EB Thru	EB Right	EB U-Turn	EB RTOR	WB Left	WB Thru	WB Right	WB U-Turn	WB RTOR	Total	Hourly Totals
7:00 AM	0	0	0	0		7	0	1	0		0	8	0	0		0	5	2	0		23	
7:05 AM	0	0	0	0		7	0	0	0		0	7	0	0		0	5	4	0		23	
7:10 AM	0	0	0	0		8	0	0	0		0	6	0	0		0	2	2	0		18	
7:15 AM	1	0	1	0		14	0	1	0		0	7	0	0		1	2	3	0		30	
7:20 AM	0	0	0	0		8	0	0	0		0	11	0	0		0	5	1	0		25	
7:25 AM	0	0	0	0		14	0	0	0		0	12	0	0		1	7	2	0		36	
7:30 AM	0	0	1	0		15	0	0	0		1	12	0	0		0	9	0	0		38	
7:35 AM	0	0	0	0		16	0	0	0		0	18	0	0		1	8	6	0		49	
7:40 AM	0	0	0	0		11	1	1	0		1	14	0	0		0	11	2	0		41	
7:45 AM	1	0	0	0		22	0	0	0		0	20	0	0		0	15	5	0		63	
7:50 AM	1	0	0	0		21	1	0	0		0	24	1	0		0	16	2	0		66	
7:55 AM	0	0	0	0		8	0	1	0		1	16	0	0		0	15	5	0		46	458
8:00 AM	0	0	0	0		12	0	0	0		0	21	0	0		0	12	9	0		54	489
8:05 AM	0	0	0	0		16	0	0	0		0	24	0	0		0	11	1	0		52	518
8:10 AM	0	0	0	0		14	0	0	0		0	16	1	0		1	6	9	0		47	547
8:15 AM	0	0	1	0		11	0	0	0		0	13	0	0		0	6	6	0		37	554
8:20 AM	0	0	0	0		7	0	1	0		0	12	0	0		0	10	7	0		37	566
8:25 AM	1	0	0	0		16	1	3	0		0	15	0	0		1	3	6	0		46	576
8:30 AM	0	0	0	0		7	0	0	0		0	7	0	0		0	7	6	0		27	565
8:35 AM	1	0	0	0		10	0	0	0		0	11	1	0		0	8	1	0		32	548
8:40 AM	1	0	0	0		8	0	1	0		0	7	0	0		1	3	9	0		30	537
8:45 AM	1	0	0	0		8	0	0	0		0	12	1	1		0	1	4	0		28	502
8:50 AM	0	0	0	0		8	0	0	0		0	8	0	0		3	3	7	0		29	465
8:55 AM	0	0	0	0		7	0	0	0		0	4	1	0		0	6	5	0		23	442

HEAVY-VEHICLE VOLUMES

Time Period	NB Left	NB Thru	NB Right	SB Left	SB Thru	SB Right	EB Left	EB Thru	EB Right	WB Left	WB Thru	WB Right	Total
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:05 AM	0	0	0	0	0	0	0	0	0	0	1	0	1
7:10 AM	0	0	0	0	0	0	0	0	0	0	1	0	1
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:20 AM	0	0	0	0	0	0	0	1	0	0	0	0	1
7:25 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	2	0	2
7:35 AM	0	0	0	0	0	0	0	0	0	0	0	1	1
7:40 AM	0	0	0	0	0	0	0	1	0	0	0	1	2
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	1	1
7:50 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:55 AM	0	0	0	0	0	0	0	1	0	0	0	0	1
8:00 AM	0	0	0	0	0	0	0	1	0	0	0	1	2
8:05 AM	0	0	0	1	0	0	0	0	0	0	0	0	1
8:10 AM	0	0	0	0	0	0	0	0	0	0	0	1	1
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:20 AM	0	0	0	0	0	0	0	1	0	0	0	1	2
8:25 AM	0	0	0	0	0	0	0	1	0	0	0	0	1
8:30 AM	0	0	0	0	0	0	0	0	0	0	1	0	1
8:35 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:40 AM	0	0	0	0	0	0	0	1	0	0	0	0	1
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:50 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:55 AM	0	0	0	1	0	0	0	0	0	0	0	0	1

BUS VOLUMES

Time Perio	NB Left	NB Thru	NB Right	SB Left	SB Thru	SB Right	EB Left	EB Thru	EB Right	WB Left	WB Thru	WB Right	Total
7:00 AM													
7:05 AM													
7:10 AM													
7:15 AM													
7:20 AM													
7:25 AM													
7:30 AM													
7:35 AM													
7:40 AM													
7:45 AM													
7:50 AM													
7:55 AM													
8:00 AM													
8:05 AM													
8:10 AM													
8:15 AM													
8:20 AM													
8:25 AM													
8:30 AM													
8:35 AM													
8:40 AM													
8:45 AM													
8:50 AM													
8:55 AM													

PEDESTRIAN VOLUMES

Time Perio	South Leg	North Leg	West Leg	East Leg	Total
7:00 AM	0	2	0	0	2
7:05 AM	0	0	0	1	1
7:10 AM	0	1	0	1	2
7:15 AM	0	0	1	0	1
7:20 AM	0	5	0	0	5
7:25 AM	0	0	0	0	0
7:30 AM	0	0	0	0	0
7:35 AM	0	5	0	0	5
7:40 AM	0	0	0	0	0
7:45 AM	0	0	1	0	1
7:50 AM	1	1	2	0	4
7:55 AM	0	0	0	0	0
8:00 AM	0	0	0	0	0
8:05 AM	0	0	0	0	0
8:10 AM	1	0	0	0	1
8:15 AM	0	0	0	0	0
8:20 AM	0	0	0	0	0
8:25 AM	0	0	0	0	0
8:30 AM	1	0	0	0	1
8:35 AM	0	0	1	0	1
8:40 AM	0	0	0	0	0
8:45 AM	0	0	0	0	0
8:50 AM	0	0	1	0	1
8:55 AM	0	0	1	0	1

BICYCLE VOLUMES

Time Perio	NB Left	NB Thru	NB Right	SB Left	SB Thru	SB Right	EB Left	EB Thru	EB Right	WB Left	WB Thru	WB Right	Total
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:05 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:10 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:20 AM	0	0	0	0	0	0	0	1	0	0	0	0	1
7:25 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:35 AM	0	0	0	0	0	0	0	0	0	0	1	0	1
7:40 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	1	0	0	0	0	0	0	0	0	1
7:50 AM	0	0	0	0	0	0	1	0	0	0	0	0	1
7:55 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:05 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:10 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	1	0	0	0	0	1
8:20 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:25 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:35 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:40 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	1	0	0	1	0	2
8:50 AM	0	0	0	0	0	1	0	0	0	0	0	0	1
8:55 AM	0	0	0	0	0	0	0	0	0	0	0	0	0

SCOOTER VOLUMES

Time Perio	NB Left	NB Thru	NB Right	SB Left	SB Thru	SB Right	EB Left	EB Thru	EB Right	WB Left	WB Thru	WB Right	Total
7:00 AM													
7:05 AM													
7:10 AM													
7:15 AM													
7:20 AM													
7:25 AM													
7:30 AM													
7:35 AM													
7:40 AM													
7:45 AM													
7:50 AM													
7:55 AM													
8:00 AM													
8:05 AM													
8:10 AM													
8:15 AM													
8:20 AM													
8:25 AM													
8:30 AM													
8:35 AM													
8:40 AM													
8:45 AM													
8:50 AM													
8:55 AM													

QUALITY COUNTS REPORT
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Intersectio	8 - Fountai	Lighthouse Dr			Lane Configuration:										
City/State:	West Sacra	CA				SIGNAL	SBLane1	SBLane2	SBLane3	SBLane4	SBLane5	SBLane6	SBLane7		
QCJobNo:	1.68E+08						R	LT							SIGNAL
ClientID:					EBLane7									R	WBLane1
Date:	12/5/2024				EBLane6									T	WBLane2
Comments:					EBLane5									L	WBLane3
Latitude/Lc	38.5953	-121.515			EBLane4										WBLane4
PEAK HOUI	4:10 PM				EBLane3	L									WBLane5
PEAK HOUI	5:10 PM				EBLane2	T									WBLane6
PEAK 15-M	4:35 PM				EBLane1	TR									WBLane7
PEAK 15-M	4:50 PM				SIGNAL								LTR		
PHF	0.94						NBLane7	NBLane6	NBLane5	NBLane4	NBLane3	NBLane2	NBLane1	SIGNAL	

PEAK-HOUR VOLUMES

	NBLeft	NBThru	NBRight	SBLeft	SBThru	SBRight	EBLeft	EBThru	EBRight	WBLeft	WBThru	WBRight	NBEntering	SBEntering	EBEntering	WBEnterin	NBLeaving	SBLeaving	EBLeaving	WBLeaving
	3	0	1	76	0	12	9	96	7	13	146	115	4	88	112	274	120	20	173	165

PERCENT HEAVY VEHICLES

	NBLeft	NBThru	NBRight	SBLeft	SBThru	SBRight	EBLeft	EBThru	EBRight	WBLeft	WBThru	WBRight	NBEntering	SBEntering	EBEntering	WBEnterin	NBLeaving	SBLeaving	EBLeaving	WBLeaving
HEAVY VEH	0	0	0	0	0	0	11.1	3.1	14.3	0	1.4	1.7	0	0	4.5	1.5	2.5	5	1.7	1.2
BUSES																				

PEAK-HOUR VOLUMES - PEDESTRIANS

Leg/Crossv	South	North	West	East
	3	0	3	0

PEAK-HOUR VOLUMES - MICROMOBILITY

	NBLeft	NBThru	NBRight	SBLeft	SBThru	SBRight	EBLeft	EBThru	EBRight	WBLeft	WBThru	WBRight
Bicycles	0	0	0	0	0	0	0	1	0	0	1	0
Scooters												

PEAK 15-MIN FLOWRATES

VehicleTyp	NBLeft	NBThru	NBRight	NBU-Turn	NBRTOR	SBLeft	SBThru	SBRight	SBU-Turn	SBRTOR	EBLeft	EBThru	EBRight	EBU-Turn	EBRTOR	WBLeft	WBThru	WBRight	WBU-Turn	WBRTOR	Total
All Vehicles	8	0	0	0	0	92	0	4	0	0	0	100	12	4	0	8	164	116	0	0	508
Heavy Truc	0	0	0			0	0	0			0	8	0			0	4	4			16
Buses																					
Pedestrians		0					0					0					0				0
Bicycles	0	0	0			0	0	0			0	4	0			0	0	0			4
Scooters																					

ALL-VEHICLE VOLUMES

Time Perio	NB Left	NB Thru	NB Right	NB U-Turn	NB RTOR	SB Left	SB Thru	SB Right	SB U-Turn	SB RTOR	EB Left	EB Thru	EB Right	EB U-Turn	EB RTOR	WB Left	WB Thru	WB Right	WB U-Turn	WB RTOR	Total	Hourly Totals
4:00 PM	0	0	0	0		9	0	1	0		0	10	0	0		0	11	12	0		43	
4:05 PM	0	0	0	0		6	0	2	0		1	10	1	0		3	11	5	0		39	
4:10 PM	0	0	0	0		7	0	1	0		1	10	1	0		1	16	10	0		47	
4:15 PM	0	0	0	0		3	0	1	0		0	7	1	0		1	8	14	0		35	
4:20 PM	0	0	0	0		0	0	3	0		0	5	0	0		1	12	8	0		29	
4:25 PM	0	0	0	0		5	0	1	0		1	11	0	0		0	12	8	0		38	
4:30 PM	0	0	0	0		5	0	0	0		0	5	0	1		3	11	12	0		37	
4:35 PM	1	0	0	0		10	0	1	0		0	8	2	0		1	12	14	0		49	
4:40 PM	1	0	0	0		11	0	0	0		0	5	0	0		0	8	9	0		34	
4:45 PM	0	0	0	0		2	0	0	0		0	12	1	1		1	21	6	0		44	
4:50 PM	0	0	0	0		4	0	1	0		0	10	0	1		1	16	9	0		42	
4:55 PM	0	0	0	0		8	0	2	0		2	12	1	0		1	6	5	0		37	474
5:00 PM	0	0	0	0		10	0	1	0		0	4	0	1		2	10	9	0		37	468
5:05 PM	1	0	1	0		11	0	1	0		1	7	1	0		1	14	11	0		49	478
5:10 PM	0	0	1	0		2	0	1	0		0	5	0	0		2	7	8	0		26	457
5:15 PM	0	0	0	0		3	0	0	0		1	13	0	0		3	5	9	0		34	456
5:20 PM	0	0	0	0		5	0	0	0		0	7	1	0		5	15	13	0		46	473
5:25 PM	0	0	0	0		9	0	1	0		0	9	0	0		1	9	6	0		35	470
5:30 PM	0	0	0	0		4	1	0	0		0	11	0	1		2	14	7	0		40	473
5:35 PM	0	0	0	0		8	0	0	0		0	9	0	0		0	13	5	0		35	459
5:40 PM	0	0	0	0		1	0	0	0		0	11	0	0		0	5	13	0		30	455
5:45 PM	0	1	0	0		2	0	0	0		0	8	0	0		1	11	3	0		26	437
5:50 PM	0	0	0	0		7	0	0	0		1	7	0	0		1	7	10	0		33	428
5:55 PM	1	0	0	0		4	1	0	0		0	12	1	0		3	3	6	0		31	422

HEAVY-VEHICLE VOLUMES

Time Perio	NB Left	NB Thru	NB Right	SB Left	SB Thru	SB Right	EB Left	EB Thru	EB Right	WB Left	WB Thru	WB Right	Total
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:05 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:10 PM	0	0	0	0	0	0	1	0	0	0	0	0	1
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:20 PM	0	0	0	0	0	0	0	0	0	0	1	1	2
4:25 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:35 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:40 PM	0	0	0	0	0	0	0	1	0	0	1	1	3
4:45 PM	0	0	0	0	0	0	0	1	0	0	0	0	1
4:50 PM	0	0	0	0	0	0	0	1	0	0	0	0	1
4:55 PM	0	0	0	0	0	0	0	0	1	0	0	0	1
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:05 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:10 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	1	0	0	0	0	1
5:20 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:25 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:35 PM	0	0	0	1	0	0	0	0	0	0	0	0	1
5:40 PM	0	0	0	0	0	0	0	1	0	0	0	0	1
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:50 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:55 PM	0	0	0	0	0	0	0	0	0	0	0	0	0

BUS VOLUMES

Time Perio	NB Left	NB Thru	NB Right	SB Left	SB Thru	SB Right	EB Left	EB Thru	EB Right	WB Left	WB Thru	WB Right	Total
4:00 PM													
4:05 PM													
4:10 PM													
4:15 PM													
4:20 PM													
4:25 PM													
4:30 PM													
4:35 PM													
4:40 PM													
4:45 PM													
4:50 PM													
4:55 PM													
5:00 PM													
5:05 PM													
5:10 PM													
5:15 PM													
5:20 PM													
5:25 PM													
5:30 PM													
5:35 PM													
5:40 PM													
5:45 PM													
5:50 PM													
5:55 PM													

PEDESTRIAN VOLUMES

Time Perio	South Leg	North Leg	West Leg	East Leg	Total
4:00 PM	0	3	0	0	3
4:05 PM	1	2	1	0	4
4:10 PM	0	0	0	0	0
4:15 PM	0	0	0	0	0
4:20 PM	0	0	0	0	0
4:25 PM	0	0	0	0	0
4:30 PM	1	0	1	0	2
4:35 PM	0	0	0	0	0
4:40 PM	0	0	0	0	0
4:45 PM	0	0	0	0	0
4:50 PM	0	0	0	0	0
4:55 PM	0	0	1	0	1
5:00 PM	1	0	0	0	1
5:05 PM	1	0	1	0	2
5:10 PM	0	0	0	0	0
5:15 PM	0	0	0	0	0
5:20 PM	0	0	0	0	0
5:25 PM	0	0	0	0	0
5:30 PM	0	0	0	0	0
5:35 PM	0	0	0	0	0
5:40 PM	0	0	0	0	0
5:45 PM	0	0	0	0	0
5:50 PM	0	0	0	0	0
5:55 PM	0	0	0	0	0

BICYCLE VOLUMES

Time Perio	NB Left	NB Thru	NB Right	SB Left	SB Thru	SB Right	EB Left	EB Thru	EB Right	WB Left	WB Thru	WB Right	Total
4:00 PM	0	0	1	0	0	1	0	1	1	0	0	0	4
4:05 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:10 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:20 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:25 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:35 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:40 PM	0	0	0	0	0	0	0	1	0	0	0	0	1
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:50 PM	0	0	0	0	0	0	0	0	0	0	1	0	1
4:55 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:05 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:10 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:20 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:25 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:35 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:40 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:50 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:55 PM	0	0	0	0	0	0	0	0	0	0	0	0	0

SCOOTER VOLUMES

Time Perio	NB Left	NB Thru	NB Right	SB Left	SB Thru	SB Right	EB Left	EB Thru	EB Right	WB Left	WB Thru	WB Right	Total
4:00 PM													
4:05 PM													
4:10 PM													
4:15 PM													
4:20 PM													
4:25 PM													
4:30 PM													
4:35 PM													
4:40 PM													
4:45 PM													
4:50 PM													
4:55 PM													
5:00 PM													
5:05 PM													
5:10 PM													
5:15 PM													
5:20 PM													
5:25 PM													
5:30 PM													
5:35 PM													
5:40 PM													
5:45 PM													
5:50 PM													
5:55 PM													

National Data & Surveying Services

Intersection Turning Movement Count

Location: Lighthouse Dr & Marina Way
City: West Sacramento
Control: 1-Way Stop(WB)

Project ID: 25-070037-001
Date: 2/11/2025

Data - Totals

NS/EW Streets:	Lighthouse Dr				Lighthouse Dr				Marina Way				Marina Way				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	2	0	0	1	2	0	0	0	0	0	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	17	0	0	0	37	0	0	0	0	0	0	0	0	0	0	54
7:15 AM	0	20	0	0	0	72	0	0	0	0	0	0	0	0	0	0	92
7:30 AM	0	38	0	0	0	97	0	0	0	0	0	0	0	0	0	0	135
7:45 AM	0	46	0	0	1	101	0	0	0	0	0	0	0	0	0	0	148
8:00 AM	0	37	0	0	0	91	0	0	0	0	0	0	1	0	0	0	129
8:15 AM	0	34	0	0	0	69	0	0	0	0	0	0	0	0	0	0	103
8:30 AM	0	33	0	0	0	58	0	0	0	0	0	0	0	0	0	0	91
8:45 AM	0	33	0	0	0	52	0	0	0	0	0	0	0	0	0	0	85
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	258	0	0	1	577	0	0	0	0	0	0	1	0	0	0	837
APPROACH %'s :	0.00%	100.00%	0.00%	0.00%	0.17%	99.83%	0.00%	0.00%					100.00%	0.00%	0.00%	0.00%	
PEAK HR :	07:30 AM - 08:30 AM																TOTAL
PEAK HR VOL :	0	155	0	0	1	358	0	0	0	0	0	0	1	0	0	0	515
PEAK HR FACTOR :	0.000	0.842	0.000	0.000	0.250	0.886	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.870
		0.842				0.880								0.250			

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	2	0	0	1	2	0	0	0	0	0	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	51	1	0	0	37	0	0	0	0	0	0	1	0	0	0	90
4:15 PM	0	56	0	0	0	48	0	1	0	0	0	0	0	0	0	0	105
4:30 PM	0	76	1	1	0	43	0	0	0	0	0	0	0	0	0	0	121
4:45 PM	0	65	0	1	0	37	0	0	0	0	0	0	0	0	0	0	103
5:00 PM	0	59	1	0	0	38	0	0	0	0	0	0	1	0	0	0	99
5:15 PM	0	76	0	0	0	42	0	0	0	0	0	0	1	0	0	0	119
5:30 PM	0	56	0	0	2	35	0	0	0	0	0	0	0	0	1	0	94
5:45 PM	0	84	0	1	0	47	0	0	0	0	0	0	0	0	0	0	132
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	523	3	3	2	327	0	1	0	0	0	0	3	0	1	0	863
APPROACH %'s :	0.00%	98.87%	0.57%	0.57%	0.61%	99.09%	0.00%	0.30%					75.00%	0.00%	25.00%	0.00%	
PEAK HR :	05:00 PM - 06:00 PM																TOTAL
PEAK HR VOL :	0	275	1	1	2	162	0	0	0	0	0	0	2	0	1	0	444
PEAK HR FACTOR :	0.000	0.818	0.250	0.250	0.250	0.862	0.000	0.000	0.000	0.000	0.000	0.000	0.500	0.000	0.250	0.000	0.841
		0.815				0.872								0.750			

National Data & Surveying Services

Intersection Turning Movement Count

Location: Lighthouse Dr & Marina Way
City: West Sacramento
Control: 1-Way Stop(WB)

Project ID: 25-070037-001
Date: 2/11/2025

Data - Bikes

NS/EW Streets:	Lighthouse Dr				Lighthouse Dr				Marina Way				Marina Way				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	2	0	0	1	2	0	0	0	0	0	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	2	0	0	0	1	0	0	0	0	0	0	0	0	0	0	3
8:00 AM	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0	2
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	2	0	0	2	2	0	0	0	0	0	0	0	0	1	0	7
APPROACH %'s :	0.00%	100.00%	0.00%	0.00%	50.00%	50.00%	0.00%	0.00%					0.00%	0.00%	100.00%	0.00%	
PEAK HR :	07:30 AM - 08:30 AM																TOTAL
PEAK HR VOL :	0	2	0	0	1	1	0	0	0	0	0	0	0	0	0	0	4
PEAK HR FACTOR :	0.000	0.250	0.000	0.000	0.250	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.333
	0.250				0.500												

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	2	0	0	1	2	0	0	0	0	0	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	2
4:15 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	2
4:30 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	2
4:45 PM	0	1	0	0	0	1	0	0	0	0	0	0	0	0	1	0	3
5:00 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
5:15 PM	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	2	2	0	1	3	0	0	0	0	0	0	0	0	3	0	11
APPROACH %'s :	0.00%	50.00%	50.00%	0.00%	25.00%	75.00%	0.00%	0.00%					0.00%	0.00%	100.00%	0.00%	
PEAK HR :	05:00 PM - 06:00 PM																TOTAL
PEAK HR VOL :	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	2
PEAK HR FACTOR :	0.000	0.000	0.250	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.500
	0.250				0.250												

National Data & Surveying Services

Intersection Turning Movement Count

Location: Lighthouse Dr & Marina Way
City: West Sacramento

Project ID: 25-070037-001
Date: 2/11/2025

Data - Pedestrians (Crosswalks)

NS/EW Streets:	Lighthouse Dr		Lighthouse Dr		Marina Way		Marina Way		
AM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
7:00 AM	0	0	0	0	1	1	0	0	2
7:15 AM	0	0	1	0	1	1	0	0	3
7:30 AM	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	1	0	0	0	1
8:15 AM	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	0	0	1	0	3	2	0	0	6
APPROACH %'s :			100.00%	0.00%	60.00%	40.00%			
PEAK HR :	07:30 AM - 08:30 AM								TOTAL
PEAK HR VOL :	0	0	0	0	1	0	0	0	1
PEAK HR FACTOR :					0.250				0.250
		0.250			0.250				

PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
4:00 PM	0	1	0	0	1	0	0	0	2
4:15 PM	0	0	0	1	0	1	0	0	2
4:30 PM	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	2	1	0	0	3
5:00 PM	0	0	0	0	2	1	0	0	3
5:15 PM	0	1	0	0	1	1	0	0	3
5:30 PM	0	0	0	0	0	1	0	0	1
5:45 PM	0	0	0	0	0	0	0	0	0
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	0	2	0	1	6	5	0	0	14
APPROACH %'s :	0.00%	100.00%	0.00%	100.00%	54.55%	45.45%			
PEAK HR :	05:00 PM - 06:00 PM								TOTAL
PEAK HR VOL :	0	1	0	0	3	3	0	0	7
PEAK HR FACTOR :		0.250			0.375	0.750			0.583
		0.250			0.500				

Prepared by National Data & Surveying Services

Lighthouse Dr & Marina Way

Peak Hour Turning Movement Count

ID: 25-070037-001
City: West Sacramento

Day: Tuesday
Date: 2/11/2025

PEAK HOURS	COUNT PERIODS
07:30 AM - 08:30 AM	7:00 AM - 09:00 AM
NONE	NONE
05:00 PM - 06:00 PM	4:00 PM - 06:00 PM

SOUTHBOUND (Lighthouse Dr)

AM	0	358	1	0	155	AM
NOON	0	0	0	0	0	NOON
PM	0	162	2	0	276	PM

EASTBOUND (Marina Way)

AM	NOON	PM
0	0	0
0	0	0
0	0	0
0	0	0
0	0	0

AM NOON PM

WESTBOUND (Marina Way)

PM	NOON	AM
1	0	0
0	0	0
2	0	1
0	0	0
3	0	1

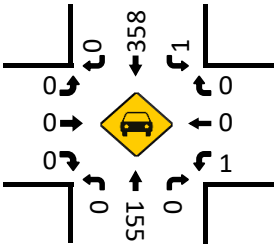
PM NOON AM

NORTHBOUND (Lighthouse Dr)

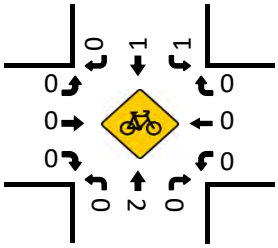
PM	165	1	0	275	1	PM
NOON	0	0	0	0	0	NOON
AM	359	0	0	155	0	AM

CONTROL			
1-Way Stop(WB)			
TEV	515	0	444
	AM	NOON	PM
PHF	0.87		0.84

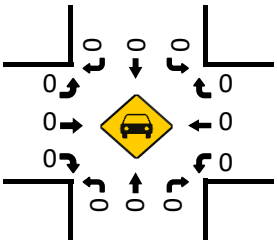
Totals (AM)



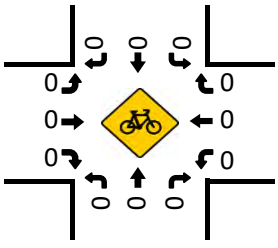
Total Bikes (AM)



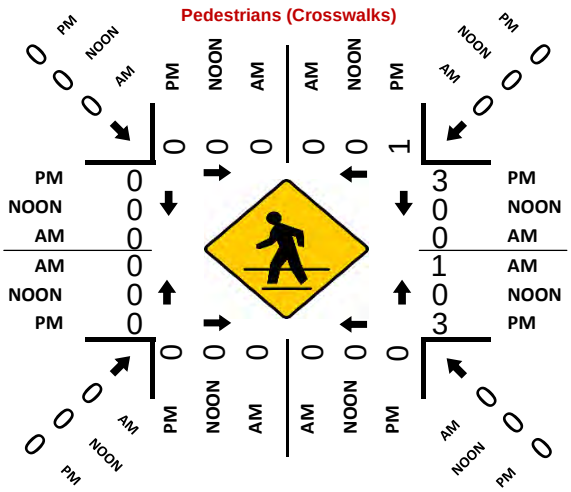
Totals (NOON)



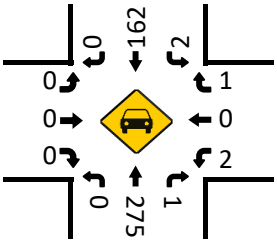
Total Bikes (NOON)



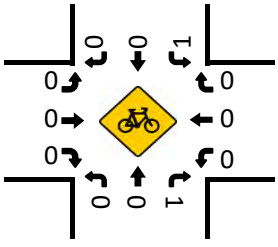
Pedestrians (Crosswalks)



Totals (PM)



Total Bikes (PM)



National Data & Surveying Services

Intersection Turning Movement Count

Location: Lighthouse Dr & Watercolor Ln
City: West Sacramento
Control: 1-Way Stop(EB)

Project ID: 25-070037-002
Date: 2/11/2025

Data - Totals

NS/EW Streets:	Lighthouse Dr				Lighthouse Dr				Watercolor Ln				Watercolor Ln				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	2	0	0	0	1	0	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	0	38	0	0	0	0	2	0	0	0	0	0	40
7:15 AM	0	0	0	0	0	71	0	0	0	0	3	0	0	0	0	0	74
7:30 AM	0	0	0	0	0	98	0	0	0	0	6	0	0	0	0	0	104
7:45 AM	0	0	0	0	0	100	0	0	0	0	5	0	0	0	0	0	105
8:00 AM	0	0	0	0	0	93	0	0	0	0	2	0	0	0	0	0	95
8:15 AM	0	0	0	0	0	68	0	0	0	0	3	0	0	0	0	0	71
8:30 AM	0	0	0	0	0	59	0	0	0	0	5	0	0	0	0	0	64
8:45 AM	0	0	0	0	0	51	1	0	0	0	4	0	0	0	0	0	56
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	578	1	0	0	0	30	0	0	0	0	0	609
APPROACH %'s :					0.00%	99.83%	0.17%	0.00%	0.00%	0.00%	100.00%	0.00%					
PEAK HR :	07:15 AM - 08:15 AM																TOTAL
PEAK HR VOL :	0	0	0	0	0	362	0	0	0	0	16	0	0	0	0	0	378
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.905	0.000	0.000	0.000	0.000	0.667	0.000	0.000	0.000	0.000	0.000	0.900
					0.905				0.667								

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	2	0	0	0	1	0	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	0	0	0	0	41	0	0	0	0	2	0	0	0	0	0	43
4:15 PM	0	0	0	0	0	47	0	0	0	0	1	0	0	0	0	0	48
4:30 PM	0	0	0	0	0	44	1	0	0	0	2	0	0	0	0	0	47
4:45 PM	0	0	0	0	0	37	1	0	0	0	1	0	0	0	0	0	39
5:00 PM	0	0	0	0	0	39	0	0	0	0	1	0	0	0	0	0	40
5:15 PM	0	0	0	0	0	43	0	0	0	0	3	0	0	0	0	0	46
5:30 PM	0	0	0	0	0	35	0	0	0	0	2	0	0	0	0	0	37
5:45 PM	0	0	0	0	0	46	1	0	0	0	5	0	0	0	0	0	52
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	332	3	0	0	0	17	0	0	0	0	0	352
APPROACH %'s :					0.00%	99.10%	0.90%	0.00%	0.00%	0.00%	100.00%	0.00%					
PEAK HR :	04:00 PM - 05:00 PM																TOTAL
PEAK HR VOL :	0	0	0	0	0	169	2	0	0	0	6	0	0	0	0	0	177
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.899	0.500	0.000	0.000	0.000	0.750	0.000	0.000	0.000	0.000	0.000	0.922
					0.910				0.750								

National Data & Surveying Services

Intersection Turning Movement Count

Location: Lighthouse Dr & Watercolor Ln
City: West Sacramento
Control: 1-Way Stop(EB)

Project ID: 25-070037-002
Date: 2/11/2025

Data - Bikes

NS/EW Streets:	Lighthouse Dr				Lighthouse Dr				Watercolor Ln				Watercolor Ln				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	2	0	0	0	1	0	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	2
APPROACH %'s :					0.00%	100.00%	0.00%	0.00%									
PEAK HR :	07:15 AM - 08:15 AM																TOTAL
PEAK HR VOL :	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250
						0.250											

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	2	0	0	0	1	0	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	2
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	3
APPROACH %'s :					0.00%	100.00%	0.00%	0.00%									
PEAK HR :	04:00 PM - 05:00 PM																TOTAL
PEAK HR VOL :	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	3
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.375	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.375
						0.375											

National Data & Surveying Services

Intersection Turning Movement Count

Location: Lighthouse Dr & Watercolor Ln
City: West Sacramento
Project ID: 25-070037-002
Date: 2/11/2025

Data - Pedestrians (Crosswalks)

NS/EW Streets:	Lighthouse Dr		Lighthouse Dr		Watercolor Ln		Watercolor Ln		
AM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
7:00 AM	0	0	0	0	0	0	0	1	1
7:15 AM	0	0	0	0	0	0	1	0	1
7:30 AM	0	0	0	0	0	0	2	0	2
7:45 AM	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	1	1
8:15 AM	0	0	0	0	0	0	0	1	1
8:30 AM	0	0	0	0	0	0	0	1	1
8:45 AM	0	0	0	0	0	0	0	0	0
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	3	4	7
APPROACH %'s :							42.86%	57.14%	
PEAK HR :	07:15 AM - 08:15 AM								TOTAL
PEAK HR VOL :	0	0	0	0	0	0	3	1	4
PEAK HR FACTOR :							0.375	0.250	0.500
							0.500		

PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
4:00 PM	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	2	2	4
4:30 PM	0	0	0	0	0	0	0	1	1
4:45 PM	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	2	3	5
APPROACH %'s :							40.00%	60.00%	
PEAK HR :	04:00 PM - 05:00 PM								TOTAL
PEAK HR VOL :	0	0	0	0	0	0	2	3	5
PEAK HR FACTOR :							0.250	0.375	0.313
							0.313		

Prepared by National Data & Surveying Services

Lighthouse Dr & Watercolor Ln

Peak Hour Turning Movement Count

ID: 25-070037-002
City: West Sacramento

Day: Tuesday
Date: 2/11/2025

PEAK HOURS

AM: 07:15 AM - 08:15 AM
NOON: NONE
PM: 04:00 PM - 05:00 PM

COUNT PERIODS

AM: 7:00 AM - 09:00 AM
NOON: NONE
PM: 4:00 PM - 06:00 PM

SOUTHBOUND (Lighthouse Dr)

AM	0	362	0	0	0	AM
NOON	0	0	0	0	0	NOON
PM	2	169	0	0	0	PM

Totals: 0 2 0 0

EASTBOUND (Watercolor Ln)

AM	NOON	PM	
0	0	2	
0	0	0	0
0	0	0	0
0	0	0	1
16	0	6	0
AM	NOON	PM	

WESTBOUND (Watercolor Ln)

PM	NOON	AM	
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	
PM	NOON	AM	

NORTHBOUND (Lighthouse Dr)

PM	175	0	0	0	0	PM
NOON	0	0	0	0	0	NOON
AM	378	0	0	0	0	AM

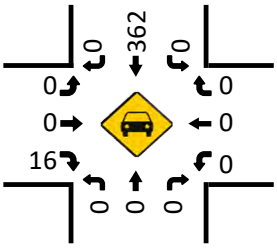
Totals: 0 0 0 0

CONTROL

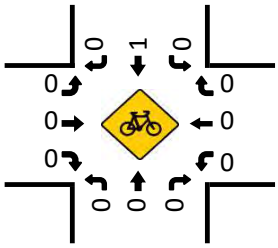
1-Way Stop(EB)

	AM	NOON	PM
TEV	378	0	177
PHF	0.90		0.92

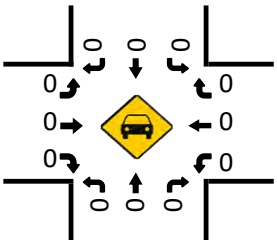
Totals (AM)



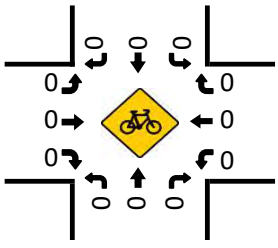
Total Bikes (AM)



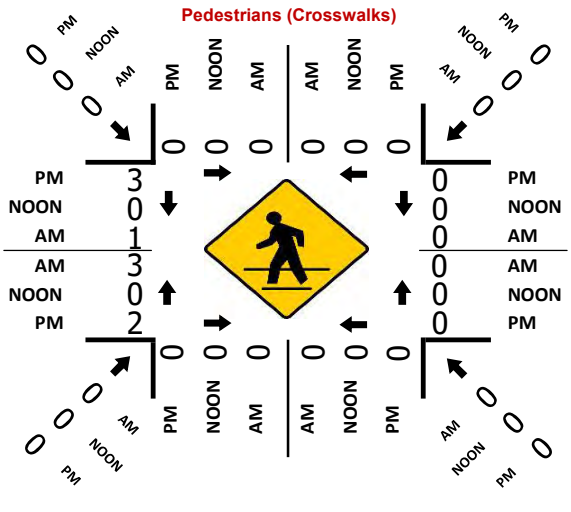
Totals (NOON)



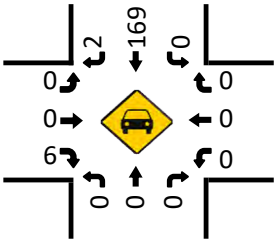
Total Bikes (NOON)



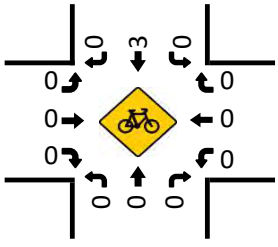
Pedestrians (Crosswalks)



Totals (PM)



Total Bikes (PM)



National Data & Surveying Services

Intersection Turning Movement Count

Location: Lighthouse Dr/5th St & A St
City: West Sacramento
Control: 2-Way Stop(EB/WB)

Project ID: 24-070003-002
Date: 1/11/2024

Data - Total

NS/EW Streets:	Lighthouse Dr/5th St				Lighthouse Dr/5th St				A St				A St				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	2	0	0	0	2	0	0	0	1	0	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	3	19	0	1	0	33	0	0	0	0	5	0	0	0	0	0	61
7:15 AM	4	27	0	1	0	49	0	0	0	0	6	0	0	0	0	0	87
7:30 AM	10	48	0	3	0	98	2	0	0	0	12	0	0	0	0	0	173
7:45 AM	12	45	0	0	0	92	0	0	2	0	10	0	0	0	0	0	161
8:00 AM	13	29	1	0	0	95	1	0	0	0	14	0	0	0	1	0	154
8:15 AM	2	40	0	1	0	70	1	0	0	0	13	0	0	0	0	0	127
8:30 AM	6	36	0	1	0	55	1	0	0	0	10	0	0	0	0	0	109
8:45 AM	9	33	0	1	0	58	0	0	0	0	8	0	0	0	0	0	109
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	59	277	1	8	0	550	5	0	2	0	78	0	0	0	1	0	981
APPROACH %'s :	17.10%	80.29%	0.29%	2.32%	0.00%	99.10%	0.90%	0.00%	2.50%	0.00%	97.50%	0.00%	0.00%	0.00%	100.00%	0.00%	
PEAK HR :	07:30 AM - 08:30 AM																TOTAL
PEAK HR VOL :	37	162	1	4	0	355	4	0	2	0	49	0	0	0	1	0	615
PEAK HR FACTOR :	0.712	0.844	0.250	0.333	0.000	0.906	0.500	0.000	0.250	0.000	0.875	0.000	0.000	0.000	0.250	0.000	0.889
	0.836				0.898				0.911				0.250				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	2	0	0	0	2	0	0	0	1	0	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	6	51	0	1	0	39	0	0	0	0	8	0	0	0	0	0	105
4:15 PM	8	50	0	0	0	36	1	0	2	0	6	0	0	0	0	0	103
4:30 PM	7	56	1	0	0	48	1	0	0	0	10	0	0	0	0	0	123
4:45 PM	14	65	0	0	0	41	0	0	0	0	4	0	0	0	0	0	124
5:00 PM	12	74	0	1	0	30	0	0	0	0	2	0	0	0	0	0	119
5:15 PM	10	85	0	2	0	40	0	0	1	0	6	0	1	0	0	0	145
5:30 PM	16	77	0	2	0	40	1	0	3	0	7	0	0	0	0	0	146
5:45 PM	5	84	0	3	0	47	2	0	0	0	7	0	0	0	0	0	148
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	78	542	1	9	0	321	5	0	6	0	50	0	1	0	0	0	1013
APPROACH %'s :	12.38%	86.03%	0.16%	1.43%	0.00%	98.47%	1.53%	0.00%	10.71%	0.00%	89.29%	0.00%	100.00%	0.00%	0.00%	0.00%	
PEAK HR :	05:00 PM - 06:00 PM																TOTAL
PEAK HR VOL :	43	320	0	8	0	157	3	0	4	0	22	0	1	0	0	0	558
PEAK HR FACTOR :	0.672	0.941	0.000	0.667	0.000	0.835	0.375	0.000	0.333	0.000	0.786	0.000	0.250	0.000	0.000	0.000	0.943
	0.956				0.816				0.650				0.250				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Lighthouse Dr/5th St & A St
City: West Sacramento
Control: 2-Way Stop(EB/WB)

Project ID: 24-070003-002
Date: 1/11/2024

Data - Cars

NS/EW Streets:	Lighthouse Dr/5th St				Lighthouse Dr/5th St				A St				A St				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	2	0	0	0	2	0	0	0	1	0	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	3	18	0	1	0	32	0	0	0	0	5	0	0	0	0	0	59
7:15 AM	4	27	0	1	0	49	0	0	0	0	6	0	0	0	0	0	87
7:30 AM	10	47	0	3	0	96	1	0	0	0	12	0	0	0	0	0	169
7:45 AM	12	42	0	0	0	92	0	0	2	0	10	0	0	0	0	0	158
8:00 AM	13	28	1	0	0	93	1	0	0	0	14	0	0	0	1	0	151
8:15 AM	2	40	0	1	0	68	1	0	0	0	13	0	0	0	0	0	125
8:30 AM	5	36	0	1	0	54	0	0	0	0	10	0	0	0	0	0	106
8:45 AM	7	31	0	1	0	56	0	0	0	0	8	0	0	0	0	0	103
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	56	269	1	8	0	540	3	0	2	0	78	0	0	0	1	0	958
APPROACH %'s :	16.77%	80.54%	0.30%	2.40%	0.00%	99.45%	0.55%	0.00%	2.50%	0.00%	97.50%	0.00%	0.00%	0.00%	100.00%	0.00%	
PEAK HR :	07:30 AM - 08:30 AM																TOTAL
PEAK HR VOL :	37	157	1	4	0	349	3	0	2	0	49	0	0	0	1	0	603
PEAK HR FACTOR :	0.712	0.835	0.250	0.333	0.000	0.909	0.750	0.000	0.250	0.000	0.875	0.000	0.000	0.000	0.250	0.000	0.892
	0.829				0.907				0.911				0.250				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	2	0	0	0	2	0	0	0	1	0	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	6	51	0	1	0	38	0	0	0	0	8	0	0	0	0	0	104
4:15 PM	7	50	0	0	0	35	1	0	2	0	6	0	0	0	0	0	101
4:30 PM	6	56	1	0	0	48	0	0	0	0	10	0	0	0	0	0	121
4:45 PM	14	65	0	0	0	40	0	0	0	0	4	0	0	0	0	0	123
5:00 PM	12	74	0	1	0	30	0	0	0	0	2	0	0	0	0	0	119
5:15 PM	10	85	0	2	0	40	0	0	1	0	6	0	1	0	0	0	145
5:30 PM	16	77	0	2	0	40	1	0	3	0	7	0	0	0	0	0	146
5:45 PM	5	84	0	3	0	47	1	0	0	0	7	0	0	0	0	0	147
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	76	542	1	9	0	318	3	0	6	0	50	0	1	0	0	0	1006
APPROACH %'s :	12.10%	86.31%	0.16%	1.43%	0.00%	99.07%	0.93%	0.00%	10.71%	0.00%	89.29%	0.00%	100.00%	0.00%	0.00%	0.00%	
PEAK HR :	05:00 PM - 06:00 PM																TOTAL
PEAK HR VOL :	43	320	0	8	0	157	2	0	4	0	22	0	1	0	0	0	557
PEAK HR FACTOR :	0.672	0.941	0.000	0.667	0.000	0.835	0.500	0.000	0.333	0.000	0.786	0.000	0.250	0.000	0.000	0.000	0.947
	0.956				0.828				0.650				0.250				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Lighthouse Dr/5th St & A St
City: West Sacramento
Control: 2-Way Stop(EB/WB)

Project ID: 24-070003-002
Date: 1/11/2024

Data - HT

NS/EW Streets:	Lighthouse Dr/5th St				Lighthouse Dr/5th St				A St				A St				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	2	0	0	0	2	0	0	0	1	0	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	2
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	1	0	0	0	2	1	0	0	0	0	0	0	0	0	0	4
7:45 AM	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
8:00 AM	0	1	0	0	0	2	0	0	0	0	0	0	0	0	0	0	3
8:15 AM	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	2
8:30 AM	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	3
8:45 AM	2	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	6
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	3	8	0	0	0	10	2	0	0	0	0	0	0	0	0	0	23
APPROACH %'s :	27.27%	72.73%	0.00%	0.00%	0.00%	83.33%	16.67%	0.00%									
PEAK HR :	07:30 AM - 08:30 AM																TOTAL
PEAK HR VOL :	0	5	0	0	0	6	1	0	0	0	0	0	0	0	0	0	12
PEAK HR FACTOR :	0.000	0.417	0.000	0.000	0.000	0.750	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.750
		0.417				0.583											

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	2	0	0	0	2	0	0	0	1	0	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
4:15 PM	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	2
4:30 PM	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	2
4:45 PM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	2	0	0	0	0	3	2	0	0	0	0	0	0	0	0	0	7
APPROACH %'s :	100.00%	0.00%	0.00%	0.00%	0.00%	60.00%	40.00%	0.00%									
PEAK HR :	05:00 PM - 06:00 PM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250
						0.250											

National Data & Surveying Services

Intersection Turning Movement Count

Location: Lighthouse Dr/5th St & A St
City: West Sacramento
Control: 2-Way Stop(EB/WB)

Project ID: 24-070003-002
Date: 1/11/2024

Data - Bikes

NS/EW Streets:	Lighthouse Dr/5th St				Lighthouse Dr/5th St				A St				A St				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	2	0	0	0	2	0	0	0	1	0	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
8:15 AM	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	1	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	3
APPROACH %'s :	100.00%	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%					
PEAK HR :	07:30 AM - 08:30 AM																TOTAL
PEAK HR VOL :	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	2
PEAK HR FACTOR :	0.250	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.500
	0.250				0.250												

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	2	0	0	0	2	0	0	0	1	0	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	2
4:15 PM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
4:30 PM	1	1	0	0	0	1	0	0	0	1	0	0	0	0	0	0	4
4:45 PM	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	2
5:00 PM	0	3	0	0	0	1	0	0	0	0	1	0	0	0	1	0	6
5:15 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
5:30 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	1	7	1	0	0	4	0	0	0	1	2	0	0	0	1	0	17
APPROACH %'s :	11.11%	77.78%	11.11%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	33.33%	66.67%	0.00%	0.00%	0.00%	100.00%	0.00%	
PEAK HR :	05:00 PM - 06:00 PM																TOTAL
PEAK HR VOL :	0	5	0	0	0	1	0	0	0	0	1	0	0	0	1	0	8
PEAK HR FACTOR :	0.000	0.417	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.250	0.000	0.333
	0.417				0.250				0.250				0.250				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Lighthouse Dr/5th St & A St
City: West Sacramento

Project ID: 24-070003-002
Date: 1/11/2024

Data - Pedestrians (Crosswalks)

NS/EW Streets:	Lighthouse Dr/5th St		Lighthouse Dr/5th St		A St		A St		
AM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	1	0	0	0	0	0	1
8:00 AM	0	0	0	2	0	0	0	0	2
8:15 AM	0	0	0	0	0	0	0	0	0
8:30 AM	0	1	0	0	0	0	0	0	1
8:45 AM	0	0	0	0	0	0	0	1	1
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	0	1	1	2	0	0	0	1	5
APPROACH %'s :	0.00%	100.00%	33.33%	66.67%			0.00%	100.00%	
PEAK HR :	07:30 AM - 08:30 AM								TOTAL
PEAK HR VOL :	0	0	1	2	0	0	0	0	3
PEAK HR FACTOR :			0.250	0.250					0.375
			0.375						

PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
4:00 PM	0	0	0	0	0	2	2	0	4
4:15 PM	0	0	0	0	0	0	1	0	1
4:30 PM	0	0	0	0	1	0	0	2	3
4:45 PM	1	0	0	0	0	2	0	2	5
5:00 PM	0	0	0	0	0	0	2	1	3
5:15 PM	0	0	0	0	1	0	0	0	1
5:30 PM	0	1	0	0	0	0	0	1	2
5:45 PM	2	0	0	0	0	0	1	0	3
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	3	1	0	0	2	4	6	6	22
APPROACH %'s :	75.00%	25.00%			33.33%	66.67%	50.00%	50.00%	
PEAK HR :	05:00 PM - 06:00 PM								TOTAL
PEAK HR VOL :	2	1	0	0	1	0	3	2	9
PEAK HR FACTOR :	0.250	0.250			0.250		0.375	0.500	0.750
	0.375				0.250		0.417		

Prepared by National Data & Surveying Services

Lighthouse Dr/5th St & A St

Peak Hour Turning Movement Count

ID: 24-070003-002
City: West Sacramento

Day: Thursday
Date: 1/11/2024

PEAK HOURS		COUNT PERIODS
AM	07:30 AM - 08:30 AM	7:00 AM - 09:00 AM
NOON	NONE	NONE
PM	05:00 PM - 06:00 PM	4:00 PM - 06:00 PM

SOUTHBOUND — Lighthouse Dr/5th St

	Right	Through	Left	U-Turn	Departing
AM	4	355	0	0	165
NOON	0	0	0	0	0
PM	3	157	0	0	324
(red)	0	2	0	0	

WESTBOUND — A St

	PM	NOON	AM	(red)
Right	0	0	1	0
Through	0	0	0	1
Left	1	0	0	0
U-Turn	0	0	0	0
Departing	0	0	1	

EASTBOUND — A St

	AM	NOON	PM	(red)
Departing	41	0	46	
U-Turn	0	0	0	0
Left	2	0	4	0
Through	0	0	0	1
Right	49	0	22	0

NORTHBOUND — Lighthouse Dr/5th St

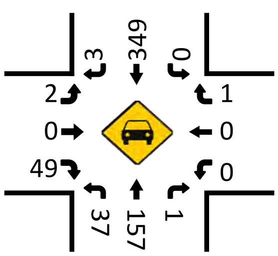
	Departing	U-Turn	Left	Through	Right
(red)		0	1	2	0
PM	188	8	43	320	0
NOON	0	0	0	0	0
AM	408	4	37	162	1

CONTROL

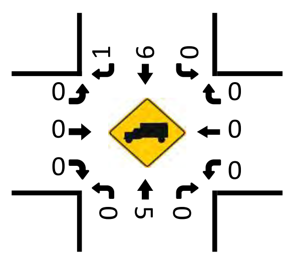
2-Way Stop(EB/WB)

	AM	NOON	PM
TEV	615	0	558
PHF	0.89		0.94

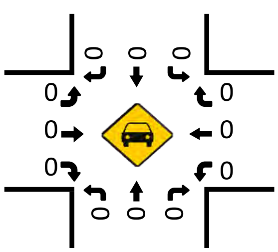
Cars (AM)



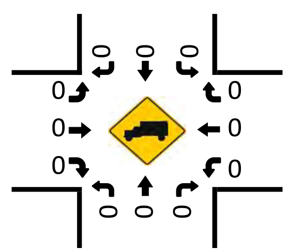
HT (AM)



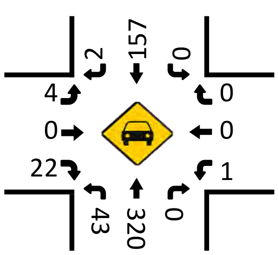
Cars (NOON)



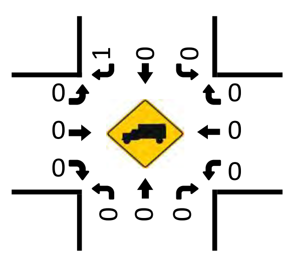
HT (NOON)



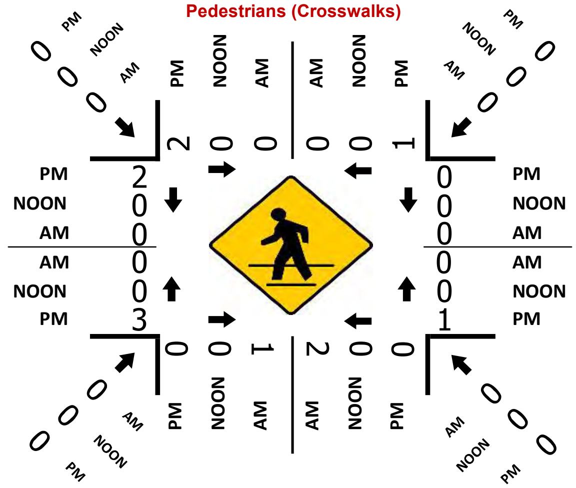
Cars (PM)



HT (PM)



Pedestrians (Crosswalks)



National Data & Surveying Services

Intersection Turning Movement Count

Location: 5th St & B St
City: West Sacramento
Control: 2-Way Stop(EB/WB)

Project ID: 25-070037-003
Date: 2/11/2025

Data - Totals

NS/EW Streets:	5th St				5th St				B St				B St				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	2	0	0	1	2	0	0	0	1	0	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	3	20	0	0	0	45	0	0	0	0	1	0	0	0	0	0	69
7:15 AM	0	28	1	1	2	82	0	0	0	0	8	0	3	0	1	0	126
7:30 AM	5	53	0	1	1	114	0	0	0	1	9	0	1	0	0	0	185
7:45 AM	8	44	2	4	5	112	2	1	1	0	11	0	1	0	3	0	194
8:00 AM	5	45	1	1	2	112	0	0	2	1	7	0	3	0	0	0	179
8:15 AM	2	35	1	2	2	74	0	0	0	0	6	0	0	0	1	0	123
8:30 AM	5	33	0	0	0	73	0	0	0	0	5	0	1	0	1	0	118
8:45 AM	5	39	0	2	2	62	1	0	0	0	6	0	0	0	0	0	117
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	33	297	5	11	14	674	3	1	3	2	53	0	9	0	6	0	1111
APPROACH %'s :	9.54%	85.84%	1.45%	3.18%	2.02%	97.40%	0.43%	0.14%	5.17%	3.45%	91.38%	0.00%	60.00%	0.00%	40.00%	0.00%	
PEAK HR :	07:15 AM - 08:15 AM																TOTAL
PEAK HR VOL :	18	170	4	7	10	420	2	1	3	2	35	0	8	0	4	0	684
PEAK HR FACTOR :	0.563	0.802	0.500	0.438	0.500	0.921	0.250	0.250	0.375	0.500	0.795	0.000	0.667	0.000	0.333	0.000	0.881
	0.843				0.902				0.833				0.750				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	2	0	0	1	2	0	0	0	1	0	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	6	56	2	2	1	51	1	0	0	0	5	0	2	1	3	0	130
4:15 PM	6	74	2	1	3	47	2	0	0	0	4	0	1	0	2	0	142
4:30 PM	7	92	3	0	3	44	0	0	0	4	6	0	3	1	1	0	164
4:45 PM	5	80	0	3	0	43	0	0	1	1	5	0	1	0	0	0	139
5:00 PM	11	61	1	2	1	46	0	0	1	0	2	0	2	0	2	0	129
5:15 PM	6	82	1	0	1	50	0	0	0	0	2	0	3	1	4	0	150
5:30 PM	11	61	0	1	2	43	0	0	0	1	4	0	5	0	1	0	129
5:45 PM	7	90	0	1	3	49	0	1	0	2	6	0	2	0	3	0	164
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	59	596	9	10	14	373	3	1	2	8	34	0	19	3	16	0	1147
APPROACH %'s :	8.75%	88.43%	1.34%	1.48%	3.58%	95.40%	0.77%	0.26%	4.55%	18.18%	77.27%	0.00%	50.00%	7.89%	42.11%	0.00%	
PEAK HR :	04:30 PM - 05:30 PM																TOTAL
PEAK HR VOL :	29	315	5	5	5	183	0	0	2	5	15	0	9	2	7	0	582
PEAK HR FACTOR :	0.659	0.856	0.417	0.417	0.417	0.915	0.000	0.000	0.500	0.313	0.625	0.000	0.750	0.500	0.438	0.000	0.887
	0.868				0.922				0.550				0.563				

National Data & Surveying Services

Intersection Turning Movement Count

Location: 5th St & B St
City: West Sacramento
Control: 2-Way Stop(EB/WB)

Project ID: 25-070037-003
Date: 2/11/2025

Data - Bikes

NS/EW Streets:	5th St				5th St				B St				B St				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	2	0	0	1	2	0	0	0	1	0	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	2	0	0	1	0	0	0	0	0	0	0	0	0	0	0	3
8:00 AM	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	2
8:15 AM	0	0	0	0	1	0	0	0	0	0	0	0	0	1	1	0	3
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
8:45 AM	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	2	0	0	5	0	0	0	0	1	0	0	0	2	1	0	11
APPROACH %'s :	0.00%	100.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	66.67%	33.33%	0.00%	
PEAK HR :	07:15 AM - 08:15 AM																TOTAL
PEAK HR VOL :	0	2	0	0	2	0	0	0	0	1	0	0	0	0	0	0	5
PEAK HR FACTOR :	0.000	0.250	0.000	0.000	0.500	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.417
		0.250				0.500				0.250							

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	2	0	0	1	2	0	0	0	1	0	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
4:15 PM	0	1	0	0	1	0	0	1	0	0	0	0	0	0	0	0	3
4:30 PM	0	0	0	0	0	0	0	0	0	2	0	0	0	0	1	0	3
4:45 PM	0	0	0	0	1	0	0	0	0	0	0	0	0	0	2	0	3
5:00 PM	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	2
5:15 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	2
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
5:45 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	1	0	0	2	0	0	2	0	5	1	0	0	2	3	0	16
APPROACH %'s :	0.00%	100.00%	0.00%	0.00%	50.00%	0.00%	0.00%	50.00%	0.00%	83.33%	16.67%	0.00%	0.00%	40.00%	60.00%	0.00%	
PEAK HR :	04:30 PM - 05:30 PM																TOTAL
PEAK HR VOL :	0	0	0	0	1	0	0	1	0	3	1	0	0	1	3	0	10
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.250	0.000	0.375	0.250	0.000	0.000	0.250	0.375	0.000	0.833
						0.500				0.500				0.500			

National Data & Surveying Services

Intersection Turning Movement Count

Location: 5th St & B St
City: West Sacramento

Project ID: 25-070037-003
Date: 2/11/2025

Data - Pedestrians (Crosswalks)

NS/EW Streets:	5th St		5th St		B St		B St		
AM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
7:00 AM	0	0	0	0	0	0	0	1	1
7:15 AM	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0
8:00 AM	1	0	0	0	0	0	0	0	1
8:15 AM	0	0	0	2	0	0	0	2	4
8:30 AM	0	0	0	0	0	0	1	0	1
8:45 AM	0	0	0	0	0	0	0	0	0
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	1	0	0	2	0	0	1	3	7
APPROACH %'s :	100.00%	0.00%	0.00%	100.00%			25.00%	75.00%	
PEAK HR :	07:15 AM - 08:15 AM								TOTAL
PEAK HR VOL :	1	0	0	0	0	0	0	0	1
PEAK HR FACTOR :	0.250								0.250
	0.250								

PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
4:00 PM	0	0	1	0	0	0	0	1	2
4:15 PM	0	0	0	0	0	1	0	1	2
4:30 PM	2	1	0	0	1	0	0	0	4
4:45 PM	0	1	0	1	2	0	0	0	4
5:00 PM	0	0	0	1	0	1	0	0	2
5:15 PM	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	1	0	0	0	1
5:45 PM	0	0	0	1	0	0	0	0	1
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	2	2	1	3	4	2	0	2	16
APPROACH %'s :	50.00%	50.00%	25.00%	75.00%	66.67%	33.33%	0.00%	100.00%	
PEAK HR :	04:30 PM - 05:30 PM								TOTAL
PEAK HR VOL :	2	2	0	2	3	1	0	0	10
PEAK HR FACTOR :	0.250	0.500		0.500	0.375	0.250			0.625
	0.333			0.500		0.500			

Prepared by National Data & Surveying Services

5th St & B St

Peak Hour Turning Movement Count

ID: 25-070037-003
City: West Sacramento

Day: Tuesday
Date: 2/11/2025

PEAK HOURS	COUNT PERIODS
07:15 AM - 08:15 AM	7:00 AM - 09:00 AM
NONE	NONE
04:30 PM - 05:30 PM	4:00 PM - 06:00 PM

SOUTHBOUND (5th St)

AM	2	420	10	1	178	AM
NOON	0	0	0	0	0	NOON
PM	0	183	5	0	324	PM

EASTBOUND (B St)

AM	NOON	PM	
20	0	31	
0	0	0	0
3	0	2	0
2	0	5	1
35	0	15	0

WESTBOUND (B St)

	PM	NOON	AM
0	7	0	4
1	2	0	0
0	9	0	8
0	0	0	0
	15	0	16

NORTHBOUND (5th St)

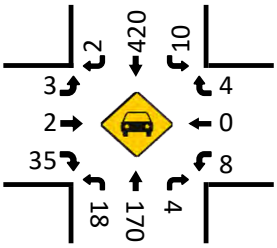
PM	212	5	29	315	5	PM
NOON	0	0	0	0	0	NOON
AM	470	7	18	170	4	AM

CONTROL

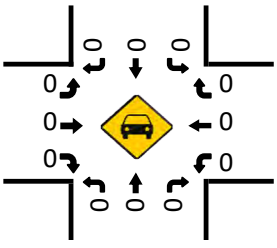
2-Way Stop(EB/WB)

TEV	684 AM	0 NOON	582 PM
PHF	0.88		0.89

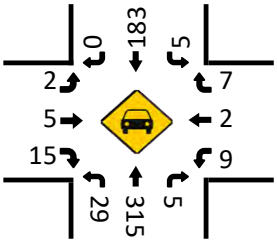
Totals (AM)



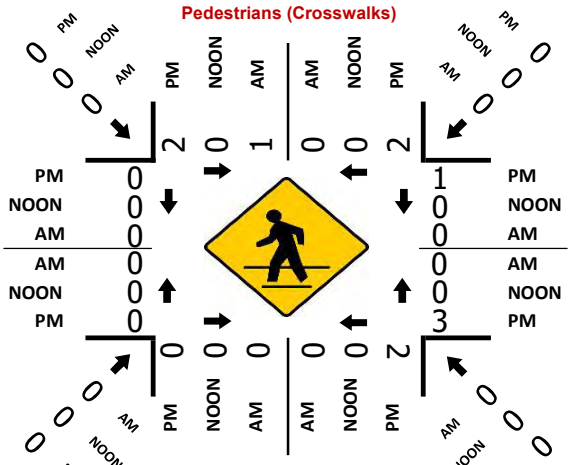
Totals (NOON)



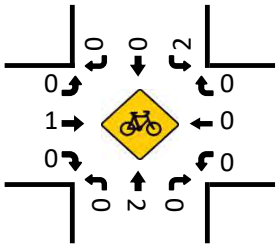
Totals (PM)



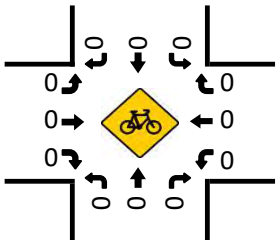
Pedestrians (Crosswalks)



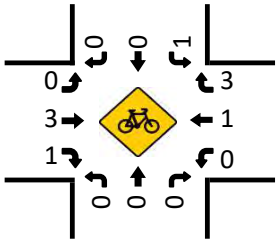
Total Bikes (AM)



Total Bikes (NOON)



Total Bikes (PM)



National Data & Surveying Services Intersection Turning Movement Count

Location: 5th St & C St
City: West Sacramento
Control: Signalized

Project ID: 22-070243-009
Date: 11/17/2022

Data - Totals

AM

NS/EW Streets:	5th St				5th St				C St				C St				
	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	17	14	12	0	14	28	0	0	1	29	21	0	20	25	13	0	194
7:15 AM	12	23	19	0	23	31	2	0	1	24	19	0	18	32	7	0	211
7:30 AM	10	29	23	0	44	68	3	0	0	47	25	0	34	35	15	0	333
7:45 AM	12	30	36	0	37	54	2	0	3	62	31	0	24	37	24	0	352
8:00 AM	23	28	29	0	25	60	2	0	1	46	28	0	29	23	9	0	303
8:15 AM	14	22	18	0	16	36	2	0	1	42	21	0	21	23	7	0	223
8:30 AM	4	28	21	0	21	44	1	0	2	46	12	0	20	23	5	0	227
8:45 AM	15	26	18	0	13	32	1	0	4	28	10	0	17	30	7	0	201
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	107	200	176	0	193	353	13	0	13	324	167	0	183	228	87	0	2044
APPROACH %'s :	22.15%	41.41%	36.44%	0.00%	34.53%	63.15%	2.33%	0.00%	2.58%	64.29%	33.13%	0.00%	36.75%	45.78%	17.47%	0.00%	
PEAK HR :	07:30 AM - 08:30 AM																TOTAL
PEAK HR VOL :	59	109	106	0	122	218	9	0	5	197	105	0	108	118	55	0	1211
PEAK HR FACTOR :	0.641	0.908	0.736	0.000	0.693	0.801	0.750	0.000	0.417	0.794	0.847	0.000	0.794	0.797	0.573	0.000	0.860
	0.856				0.759				0.799				0.826				

PM

	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
3:00 PM	23	37	20	0	17	27	7	0	2	41	25	0	39	76	18	0	332
3:15 PM	21	31	32	0	21	33	1	0	6	50	17	0	22	44	13	0	291
3:30 PM	30	39	29	0	20	33	3	0	5	50	18	0	29	69	17	0	342
3:45 PM	28	51	27	0	18	34	2	0	6	58	17	0	41	85	27	0	394
4:00 PM	30	46	32	0	17	34	2	0	4	70	30	0	29	55	20	0	369
4:15 PM	28	37	29	0	24	22	1	0	4	72	18	0	37	61	15	0	348
4:30 PM	36	37	38	0	11	34	6	0	5	78	17	0	31	64	17	0	374
4:45 PM	21	43	36	0	21	25	6	0	5	80	23	0	52	67	29	0	408
5:00 PM	30	44	36	0	21	42	2	0	8	86	20	0	37	68	29	0	423
5:15 PM	35	45	38	0	14	22	4	0	2	59	19	0	55	50	34	0	377
5:30 PM	26	48	47	0	20	31	3	0	5	47	17	0	42	59	24	0	369
5:45 PM	31	38	30	0	17	21	2	0	6	55	23	0	20	49	30	0	322
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	339	496	394	0	221	358	39	0	58	746	244	0	434	747	273	0	4349
APPROACH %'s :	27.58%	40.36%	32.06%	0.00%	35.76%	57.93%	6.31%	0.00%	5.53%	71.18%	23.28%	0.00%	29.85%	51.38%	18.78%	0.00%	
PEAK HR :	04:30 PM - 05:30 PM																TOTAL
PEAK HR VOL :	122	169	148	0	67	123	18	0	20	303	79	0	175	249	109	0	1582
PEAK HR FACTOR :	0.847	0.939	0.974	0.000	0.798	0.732	0.750	0.000	0.625	0.881	0.859	0.000	0.795	0.915	0.801	0.000	0.935
	0.930				0.800				0.882				0.900				

National Data & Surveying Services Intersection Turning Movement Count

Location: 5th St & C St
City: West Sacramento
Control: Signalized

Project ID: 22-070243-009
Date: 11/17/2022

Data - Bikes

NS/EW Streets:	5th St				5th St				C St				C St				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	2
7:15 AM	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2
7:30 AM	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
7:45 AM	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	2
8:00 AM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	2
8:45 AM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	1	2	0	0	2	1	0	0	0	2	4	0	0	0	0	0	12
APPROACH %'s :	33.33%	66.67%	0.00%	0.00%	66.67%	33.33%	0.00%	0.00%	0.00%	33.33%	66.67%	0.00%					
PEAK HR :	07:30 AM - 08:30 AM																TOTAL
PEAK HR VOL :	1	2	0	0	0	1	0	0	0	1	0	0	0	0	0	0	5
PEAK HR FACTOR :	0.250	0.500	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.625
	0.375				0.250				0.250								

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
3:00 PM	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	2
3:15 PM	1	0	1	0	0	0	0	0	0	0	0	0	2	2	0	0	6
3:30 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	2
3:45 PM	0	2	0	0	0	0	0	0	0	0	0	0	0	0	1	0	3
4:00 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	1	1	0	3
4:15 PM	0	2	0	0	0	5	0	0	0	1	0	0	0	1	0	0	9
4:30 PM	0	1	0	0	0	0	0	0	0	0	0	0	1	1	1	0	4
4:45 PM	1	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	3
5:00 PM	1	2	0	0	0	0	0	0	0	1	1	0	1	0	0	0	6
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
5:30 PM	0	2	0	0	1	0	0	0	0	0	0	0	0	0	0	0	3
5:45 PM	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	2
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	4	11	2	0	1	5	0	0	0	4	1	0	5	8	3	0	44
APPROACH %'s :	23.53%	64.71%	11.76%	0.00%	16.67%	83.33%	0.00%	0.00%	0.00%	80.00%	20.00%	0.00%	31.25%	50.00%	18.75%	0.00%	
PEAK HR :	04:30 PM - 05:30 PM																TOTAL
PEAK HR VOL :	2	4	0	0	0	0	0	0	0	1	1	0	2	3	1	0	14
PEAK HR FACTOR :	0.500	0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.250	0.000	0.500	0.750	0.250	0.000	0.583
	0.500								0.250				0.500				

National Data & Surveying Services Intersection Turning Movement Count

Location: 5th St & C St
City: West Sacramento
Project ID: 22-070243-009
Date: 11/17/2022

Data - Pedestrians (Crosswalks)

NS/EW Streets:	5th St		5th St		C St		C St		
AM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0
7:15 AM	1	0	0	0	0	0	1	0	2
7:30 AM	0	0	0	0	1	0	0	1	2
7:45 AM	0	0	1	0	1	0	2	2	6
8:00 AM	0	1	0	0	1	1	0	0	3
8:15 AM	1	0	0	0	0	0	0	0	1
8:30 AM	0	2	0	0	0	0	1	0	3
8:45 AM	2	0	0	0	0	0	0	1	3
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	4	3	1	0	3	1	4	4	20
APPROACH %'s :	57.14%	42.86%	100.00%	0.00%	75.00%	25.00%	50.00%	50.00%	
PEAK HR :	07:30 AM - 08:30 AM								TOTAL
PEAK HR VOL :	1	1	1	0	3	1	2	3	12
PEAK HR FACTOR :	0.250	0.250	0.250		0.750	0.250	0.250	0.375	0.500
	0.500		0.250		0.500		0.313		

PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
3:00 PM	1	1	1	1	0	0	0	1	5
3:15 PM	2	3	0	0	0	0	0	0	5
3:30 PM	1	4	1	0	5	0	1	0	12
3:45 PM	0	2	0	0	1	0	1	2	6
4:00 PM	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	1	0	0	1
4:30 PM	2	0	0	1	0	0	0	0	3
4:45 PM	1	0	0	0	0	0	3	0	4
5:00 PM	1	0	0	0	0	0	1	2	4
5:15 PM	0	0	0	0	1	0	1	3	5
5:30 PM	0	0	0	1	0	0	1	0	2
5:45 PM	1	0	1	0	0	1	1	1	5
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	9	10	3	3	7	2	9	9	52
APPROACH %'s :	47.37%	52.63%	50.00%	50.00%	77.78%	22.22%	50.00%	50.00%	
PEAK HR :	04:30 PM - 05:30 PM								TOTAL
PEAK HR VOL :	4	0	0	1	1	0	5	5	16
PEAK HR FACTOR :	0.500			0.250	0.250		0.417	0.417	0.800
	0.500		0.250		0.250		0.625		

Prepared by National Data & Surveying Services

5th St & C St

Peak Hour Turning Movement Count

ID: 22-070243-009
City: West Sacramento

Day: Thursday
Date: 11/17/2022

PEAK HOURS	COUNT PERIODS
07:30 AM - 08:30 AM	7:00 AM - 09:00 AM
NONE	NONE
04:30 PM - 05:30 PM	3:00 PM - 06:00 PM

SOUTHBOUND (5th St)

AM	9	218	122	0	169	AM
NOON	0	0	0	0	0	NOON
PM	18	123	67	0	298	PM

EASTBOUND (C St)

AM	NOON	PM	
186	0	389	⇦
0	0	0	↶ 0
5	0	20	↱ 0
197	0	303	→ 0
105	0	79	↴ 0
AM	NOON	PM	

WESTBOUND (C St)

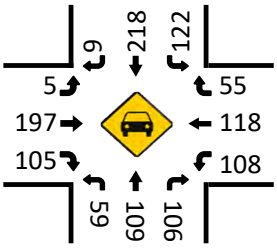
PM	NOON	AM	
109	0	55	0 ↰
249	0	118	0 ←
175	0	108	0 ↲
0	0	0	0 ↶
518	0	425	⇨
PM	NOON	AM	

NORTHBOUND (5th St)

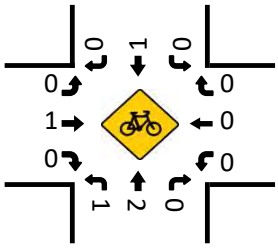
PM	377	0	122	169	148	PM
NOON	0	0	0	0	0	NOON
AM	431	0	59	109	106	AM

CONTROL			
Signalized			
TEV	1211 AM	0 NOON	1582 PM
PHF	0.86		0.93

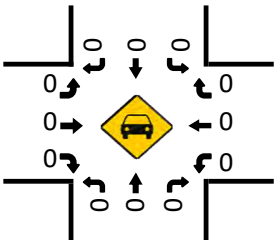
Totals (AM)



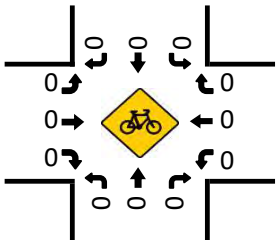
Total Bikes (AM)



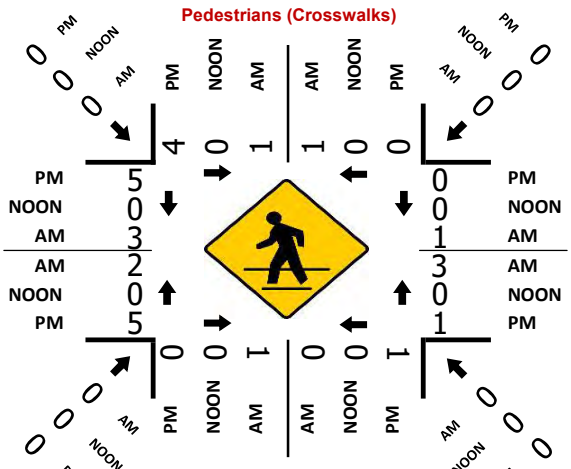
Totals (NOON)



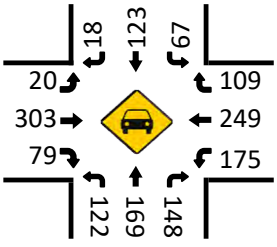
Total Bikes (NOON)



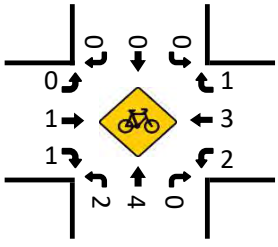
Pedestrians (Crosswalks)



Totals (PM)



Total Bikes (PM)



Attachment C:
Study Intersection Volumes
(Counts, Balanced Volumes, Development Assignment)

Existing AM

#	Intx	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
1	Lighthouse Drive & Fountain Drive/Watercolor Lane	3	122	58	3	205	2	3	0	2	169	3	6
2	Lighthouse Drive & Marina Way	0	155	0	1	358	0	0	0	0	1	0	0
3	Lighthouse Drive & Watercolor Lane	0	155	0	0	362	0	0	0	16	0	0	0
4	5th Street & A Street	41	162	1	0	355	4	2	0	49	0	0	1
5	5th Street & B Street	25	170	4	11	420	2	3	2	35	8	0	4
6	5th Street & C Street	59	109	106	122	218	9	5	197	105	108	118	55

Existing PM

#	Intx	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
1	Lighthouse Drive & Fountain Drive/Watercolor Lane	13	146	115	9	96	7	3	0	1	76	0	12
2	Lighthouse Drive & Marina Way	0	275	1	2	162	0	0	0	0	2	0	1
3	Lighthouse Drive & Watercolor Lane	0	276	0	0	169	2	0	0	6	0	0	0
4	5th Street & A Street	51	320	0	0	157	3	4	0	22	1	0	0
5	5th Street & B Street	34	315	5	5	183	0	2	5	15	9	2	7
6	5th Street & C Street	122	169	148	67	123	18	20	303	79	175	249	109

Balanced AM Existing

#	Intx	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
1	Lighthouse Drive & Fountain Drive/Watercolor Lane	3	0	2	169	3	6	3	205	2	3	122	58
2	Lighthouse Drive & Marina Way	0	183	0	1	375	0	0	0	0	1	0	0
3	Lighthouse Drive & Watercolor Lane	0	183	0	0	376	0	0	0	16	0	0	0
4	5th Street & A Street	41	180	1	0	388	4	2	0	49	0	0	1
5	5th Street & B Street	25	213	4	11	424	2	4	2	35	8	0	5
6	5th Street & C Street	59	156	106	163	292	12	7	197	105	108	118	79

Balanced PM Existing

#	Intx	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
1	Lighthouse Drive & Fountain Drive/Watercolor Lane	3	0	1	76	0	12	9	96	7	15	173	136
2	Lighthouse Drive & Marina Way	0	323	1	2	171	0	0	0	0	2	0	1
3	Lighthouse Drive & Watercolor Lane	0	324	0	0	171	2	0	0	6	0	0	0
4	5th Street & A Street	51	320	0	0	174	3	4	0	22	1	0	0
5	5th Street & B Street	34	361	5	5	192	0	2	5	15	9	2	8
6	5th Street & C Street	122	227	148	70	128	18	27	303	79	175	249	146

Trailside at the Rivers

AM Project Volms Only (Assignment)

#	Intx	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
1	Lighthouse Drive & Fountain Drive/Watercolor Lane	0	0	0	16	0	1	0	0	0	0	0	6
2	Lighthouse Drive & Marina Way	0	6	0	0	16	0	0	0	0	0	0	0
3	Lighthouse Drive & Watercolor Lane	0	6	0	0	16	0	0	0	0	0	0	0
4	5th Street & A Street	0	6	0	0	16	0	0	0	0	0	0	0
5	5th Street & B Street	0	6	0	0	16	0	0	0	0	0	0	0
6	5th Street & C Street	0	3	0	6	9	1	2	0	0	0	0	1

Trailside at the Rivers

PM Project Volms Only (Assignment)

#	Intx	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
1	Lighthouse Drive & Fountain Drive/Watercolor Lane	0	0	0	11	0	1	1	0	0	0	0	18
2	Lighthouse Drive & Marina Way	0	18	0	0	11	0	0	0	0	0	0	0
3	Lighthouse Drive & Watercolor Lane	0	18	0	0	11	0	0	0	0	0	0	0
4	5th Street & A Street	0	18	0	0	11	0	0	0	0	0	0	0
5	5th Street & B Street	0	18	0	0	11	0	0	0	0	0	0	0
6	5th Street & C Street	0	10	0	4	6	1	2	0	0	0	0	6

Attachment D
SimTraffic LOS Reports

1: Watercolor Lane/Fountain Drive & Lighthouse Drive Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBR	SBL	SBT	SBR	All
Denied Del/Veh (s)	0.7	0.1	0.1	0.0	0.0	0.0	0.1	0.1	0.2	0.1	0.1	0.1
Total Del/Veh (s)	13.6	5.1	3.0	13.9	5.0	1.3	17.8	3.5	6.7	5.7	2.7	5.3

2: Lighthouse Drive & Marina Way Performance by movement

Movement	WBL	NBT	SBL	SBT	All
Denied Del/Veh (s)	0.1	0.0		0.0	0.0
Total Del/Veh (s)	5.7	0.2		0.9	0.7

3: Lighthouse Drive & Watercolor Lane Performance by movement

Movement	EBR	NBT	SBT	All
Denied Del/Veh (s)	0.1	0.0	0.0	0.0
Total Del/Veh (s)	2.8	0.3	0.2	0.3

4: 5th Street/Lighthouse Drive & A Street Performance by movement

Movement	EBL	EBR	WBR	NBL	NBT	NBR	SBT	SBR	All
Denied Del/Veh (s)	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0
Total Del/Veh (s)	10.1	3.6	3.4	3.2	0.2	0.2	0.5	0.1	0.8

5: 5th Street & B Street Performance by movement

Movement	EBL	EBT	EBR	WBL	WBR	NBL	NBT	NBR	SBL	SBT	SBR	All
Denied Del/Veh (s)	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Del/Veh (s)	10.9	8.4	3.9	7.6	3.2	4.4	1.8	1.7	2.3	0.4	0.1	1.4

6: 5th Street & C Street /C Street Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Del/Veh (s)	0.0	0.0	0.0	3.1	0.3	2.9	1.4	0.1	0.1	0.0	0.0	0.0
Total Del/Veh (s)	32.9	21.6	7.4	30.1	15.2	3.5	31.5	20.2	8.0	28.8	16.1	8.2

6: 5th Street & C Street /C Street Performance by movement

Movement	All
Denied Del/Veh (s)	0.5
Total Del/Veh (s)	18.5

Total Network Performance

Denied Del/Veh (s)	0.6
Total Del/Veh (s)	23.1

1: Watercolor Lane/Fountain Drive & Lighthouse Drive Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBR	SBL	SBR	All
Denied Del/Veh (s)	0.8	0.1	0.1	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1
Total Del/Veh (s)	10.2	3.4	1.5	10.5	4.0	1.7	16.8	3.4	6.5	4.0	3.9

2: Lighthouse Drive & Marina Way Performance by movement

Movement	WBL	WBR	NBT	NBR	SBL	SBT	All
Denied Del/Veh (s)	0.1	0.1	0.0	0.0	0.0	0.0	0.0
Total Del/Veh (s)	9.6	4.2	0.4	0.5	5.5	0.7	0.5

3: Lighthouse Drive & Watercolor Lane Performance by movement

Movement	EBR	NBT	SBT	SBR	All
Denied Del/Veh (s)	0.1	0.0	0.0	0.0	0.0
Total Del/Veh (s)	2.6	0.4	0.1	0.0	0.3

4: 5th Street/Lighthouse Drive & A Street Performance by movement

Movement	EBL	EBR	WBL	NBL	NBT	SBT	SBR	All
Denied Del/Veh (s)	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0
Total Del/Veh (s)	7.2	3.0	12.5	2.5	0.3	0.3	0.0	0.6

5: 5th Street & B Street Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	All
Denied Del/Veh (s)	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0
Total Del/Veh (s)	8.3	9.7	3.0	6.4	9.0	3.5	4.0	1.7	1.5	2.7	0.3	1.6

6: 5th Street & C Street /C Street Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Del/Veh (s)	0.0	0.0	0.0	2.6	0.4	2.6	1.4	0.2	0.2	0.0	0.0	0.0
Total Del/Veh (s)	40.7	23.7	10.2	34.5	18.3	4.6	37.7	22.7	12.0	36.7	22.3	8.2

6: 5th Street & C Street /C Street Performance by movement

Movement	All
Denied Del/Veh (s)	0.7
Total Del/Veh (s)	22.0

Total Network Performance

Denied Del/Veh (s)	0.7
Total Del/Veh (s)	25.1

1: Watercolor Lane/Fountain Drive & Lighthouse Drive Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBR	SBL	SBT	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.2	0.1	0.1	0.1
Total Del/Veh (s)	18.6	5.5	1.4	13.5	4.9	1.3	26.4	6.6	6.7	6.3	2.7	5.4

2: Lighthouse Drive & Marina Way Performance by movement

Movement	WBL	NBT	SBL	SBT	All
Denied Del/Veh (s)	0.1	0.0		0.0	0.0
Total Del/Veh (s)	7.2	0.4		1.1	0.9

3: Lighthouse Drive & Watercolor Lane Performance by movement

Movement	EBR	NBT	SBT	All
Denied Del/Veh (s)	0.1	0.0	0.0	0.0
Total Del/Veh (s)	3.4	0.5	0.5	0.6

4: 5th Street/Lighthouse Drive & A Street Performance by movement

Movement	EBL	EBR	WBR	NBL	NBT	NBR	SBT	SBR	All
Denied Del/Veh (s)	0.1	0.1		0.0	0.0	0.0	0.0	0.0	0.0
Total Del/Veh (s)	8.0	4.3		3.6	0.5	0.8	1.0	0.6	1.3

5: 5th Street & B Street Performance by movement

Movement	EBL	EBT	EBR	WBL	WBR	NBL	NBT	NBR	SBL	SBT	SBR	All
Denied Del/Veh (s)	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Del/Veh (s)	7.6	11.4	4.3	8.5	3.6	5.0	2.0	1.3	2.7	0.8	0.4	1.7

6: 5th Street & C Street /C Street Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Del/Veh (s)	0.0	0.0	0.0	3.0	0.3	3.0	1.6	0.2	0.1	0.0	0.0	0.0
Total Del/Veh (s)	36.2	22.2	9.4	31.5	15.3	3.8	34.4	20.9	3.8	31.1	18.3	12.5

6: 5th Street & C Street /C Street Performance by movement

Movement	All
Denied Del/Veh (s)	0.5
Total Del/Veh (s)	19.4

Total Network Performance

Denied Del/Veh (s)	0.6
Total Del/Veh (s)	25.0

1: Watercolor Lane/Fountain Drive & Lighthouse Drive Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBR	SBL	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.1	0.0	0.0	0.1	0.1	0.1	0.1	0.0
Total Del/Veh (s)	11.5	3.4	1.1	13.0	3.5	1.7	19.2	3.1	6.9	3.8	3.9

2: Lighthouse Drive & Marina Way Performance by movement

Movement	WBL	WBR	NBT	NBR	SBL	SBT	All
Denied Del/Veh (s)	0.1	0.1	0.0	0.0	0.0	0.0	0.0
Total Del/Veh (s)	4.2	3.5	0.7	0.4	3.9	0.7	0.7

3: Lighthouse Drive & Watercolor Lane Performance by movement

Movement	EBR	NBT	SBT	SBR	All
Denied Del/Veh (s)	0.1	0.0	0.0	0.0	0.0
Total Del/Veh (s)	2.8	0.7	0.3	0.1	0.6

4: 5th Street/Lighthouse Drive & A Street Performance by movement

Movement	EBL	EBR	WBL	NBL	NBT	SBT	SBR	All
Denied Del/Veh (s)	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0
Total Del/Veh (s)	7.1	3.0	11.3	2.4	0.5	0.5	0.4	0.8

5: 5th Street & B Street Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	All
Denied Del/Veh (s)	0.1	0.2	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0
Total Del/Veh (s)	5.5	8.5	3.5	8.6	6.0	4.6	3.9	2.1	1.4	4.0	0.4	1.9

6: 5th Street & C Street /C Street Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Del/Veh (s)	0.0	0.0	0.0	2.6	0.4	2.7	1.4	0.2	0.2	0.0	0.0	0.0
Total Del/Veh (s)	36.3	23.7	10.3	35.9	18.7	5.5	37.2	25.2	4.7	37.3	23.9	13.8

6: 5th Street & C Street /C Street Performance by movement

Movement	All
Denied Del/Veh (s)	0.7
Total Del/Veh (s)	22.1

Total Network Performance

Denied Del/Veh (s)	0.7
Total Del/Veh (s)	25.7

Attachment E:
SimTraffic Queueing Reports

Intersection: 1: Watercolor Lane/Fountain Drive & Lighthouse Drive

Movement	EB	EB	EB	WB	WB	NB	SB	SB
Directions Served	L	T	TR	L	T	LTR	LT	R
Maximum Queue (ft)	28	58	65	30	101	25	112	31
Average Queue (ft)	2	23	22	2	28	4	51	4
95th Queue (ft)	15	53	55	15	71	18	89	22
Link Distance (ft)		3323	3323		328	742	1370	1370
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (ft)	175			100				
Storage Blk Time (%)					0			
Queuing Penalty (veh)					0			

Intersection: 2: Lighthouse Drive & Marina Way

Movement	WB	SB
Directions Served	LR	L
Maximum Queue (ft)	14	3
Average Queue (ft)	1	0
95th Queue (ft)	7	3
Link Distance (ft)	408	
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		75
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 3: Lighthouse Drive & Watercolor Lane

Movement	EB	NB
Directions Served	R	T
Maximum Queue (ft)	24	2
Average Queue (ft)	9	0
95th Queue (ft)	28	2
Link Distance (ft)	783	789
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 4: 5th Street/Lighthouse Drive & A Street

Movement	EB	WB	NB	NB	NB	SB
Directions Served	LTR	LTR	L	T	TR	TR
Maximum Queue (ft)	54	20	46	3	6	13
Average Queue (ft)	24	1	13	0	0	1
95th Queue (ft)	47	10	39	3	4	9
Link Distance (ft)	360	276		428	428	789
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)			75			
Storage Blk Time (%)			0			
Queuing Penalty (veh)			0			

Intersection: 5: 5th Street & B Street

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	L	L
Maximum Queue (ft)	65	36	39	21
Average Queue (ft)	26	13	8	2
95th Queue (ft)	52	38	30	13
Link Distance (ft)	367	1008		
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)			75	75
Storage Blk Time (%)			0	
Queuing Penalty (veh)			0	

Intersection: 6: 5th Street & C Street /C Street

Movement	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB	SB	SB
Directions Served	L	T	TR	L	T	T	R	L	T	TR	L	T
Maximum Queue (ft)	46	145	140	134	114	54	71	87	112	123	172	110
Average Queue (ft)	8	72	58	64	46	5	29	39	46	51	82	42
95th Queue (ft)	29	121	108	113	91	29	60	73	89	99	144	85
Link Distance (ft)		251	251		1104	1104			2414	2414		373
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	110			160			130	135			180	
Storage Blk Time (%)		2		0				0	0		0	0
Queuing Penalty (veh)		0		0				0	0		0	0

Intersection: 6: 5th Street & C Street /C Street

Movement	SB
Directions Served	TR
Maximum Queue (ft)	117
Average Queue (ft)	52
95th Queue (ft)	98
Link Distance (ft)	373
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Network Summary

Network wide Queuing Penalty: 1

Intersection: 1: Watercolor Lane/Fountain Drive & Lighthouse Drive

Movement	EB	EB	EB	WB	WB	NB	SB	SB
Directions Served	L	T	TR	L	T	LTR	LT	R
Maximum Queue (ft)	35	47	49	42	114	26	91	33
Average Queue (ft)	8	11	10	12	31	3	34	10
95th Queue (ft)	29	35	35	35	81	15	67	33
Link Distance (ft)		3323	3323		328	742	1370	1370
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (ft)	175			100				
Storage Blk Time (%)					0			
Queuing Penalty (veh)					0			

Intersection: 2: Lighthouse Drive & Marina Way

Movement	WB	NB	SB	SB
Directions Served	LR	TR	L	T
Maximum Queue (ft)	23	5	9	3
Average Queue (ft)	2	0	0	0
95th Queue (ft)	13	6	6	3
Link Distance (ft)	408	540		328
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)			75	
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 3: Lighthouse Drive & Watercolor Lane

Movement	EB	NB
Directions Served	R	T
Maximum Queue (ft)	26	2
Average Queue (ft)	5	0
95th Queue (ft)	20	2
Link Distance (ft)	783	789
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 4: 5th Street/Lighthouse Drive & A Street

Movement	EB	WB	NB	NB	NB	SB	SB
Directions Served	LTR	LTR	L	T	TR	LT	TR
Maximum Queue (ft)	29	20	42	6	6	5	9
Average Queue (ft)	15	1	8	0	0	0	0
95th Queue (ft)	36	11	31	4	4	4	5
Link Distance (ft)	360	276		428	428	789	789
Upstream Blk Time (%)							
Queuing Penalty (veh)							
Storage Bay Dist (ft)			75				
Storage Blk Time (%)							
Queuing Penalty (veh)							

Intersection: 5: 5th Street & B Street

Movement	EB	WB	NB	NB	NB	SB	SB	SB
Directions Served	LTR	LTR	L	T	TR	L	T	TR
Maximum Queue (ft)	43	45	42	16	12	24	14	3
Average Queue (ft)	18	15	6	1	1	2	1	0
95th Queue (ft)	44	41	28	9	6	12	8	0
Link Distance (ft)	367	1008		373	373		428	428
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (ft)			75			75		
Storage Blk Time (%)			0					
Queuing Penalty (veh)			0					

Intersection: 6: 5th Street & C Street /C Street

Movement	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB	SB	SB
Directions Served	L	T	TR	L	T	T	R	L	T	TR	L	T
Maximum Queue (ft)	67	189	167	193	221	134	104	142	149	180	122	74
Average Queue (ft)	22	104	80	101	98	19	45	75	66	83	45	25
95th Queue (ft)	53	167	145	168	177	81	81	127	121	155	94	55
Link Distance (ft)		251	251		1104	1104			2414	2414		373
Upstream Blk Time (%)		0										
Queuing Penalty (veh)		0										
Storage Bay Dist (ft)	110			160			130	135			180	
Storage Blk Time (%)		7		2	1	0		1	0		0	
Queuing Penalty (veh)		2		3	2	0		1	0		0	

Intersection: 6: 5th Street & C Street /C Street

Movement	SB
Directions Served	TR
Maximum Queue (ft)	85
Average Queue (ft)	30
95th Queue (ft)	65
Link Distance (ft)	373
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 19: Bend

Movement	WB
Directions Served	T
Maximum Queue (ft)	36
Average Queue (ft)	1
95th Queue (ft)	37
Link Distance (ft)	251
Upstream Blk Time (%)	0
Queuing Penalty (veh)	0
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Network Summary

Network wide Queuing Penalty: 9

Intersection: 1: Watercolor Lane/Fountain Drive & Lighthouse Drive

Movement	EB	EB	EB	WB	WB	NB	SB	SB
Directions Served	L	T	R	L	T	LTR	LT	R
Maximum Queue (ft)	29	111	16	28	87	26	112	28
Average Queue (ft)	3	39	1	2	27	4	47	3
95th Queue (ft)	17	85	8	14	65	17	87	19
Link Distance (ft)		1279	1279		328	741	1368	1368
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (ft)	175			100				
Storage Blk Time (%)					0			
Queuing Penalty (veh)					0			

Intersection: 2: Lighthouse Drive & Marina Way

Movement	WB
Directions Served	LR
Maximum Queue (ft)	21
Average Queue (ft)	1
95th Queue (ft)	11
Link Distance (ft)	417
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 3: Lighthouse Drive & Watercolor Lane

Movement	EB
Directions Served	R
Maximum Queue (ft)	26
Average Queue (ft)	10
95th Queue (ft)	29
Link Distance (ft)	788
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 4: 5th Street/Lighthouse Drive & A Street

Movement	EB	WB	NB	NB	SB
Directions Served	LTR	LTR	L	TR	LTR
Maximum Queue (ft)	47	14	48	5	8
Average Queue (ft)	22	1	13	0	0
95th Queue (ft)	43	7	40	6	6
Link Distance (ft)	372	287		429	790
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)			75		
Storage Blk Time (%)			0		
Queuing Penalty (veh)			0		

Intersection: 5: 5th Street & B Street

Movement	EB	WB	NB	NB	SB	SB
Directions Served	LTR	LTR	L	TR	L	TR
Maximum Queue (ft)	55	35	36	7	27	11
Average Queue (ft)	25	10	8	0	2	0
95th Queue (ft)	49	34	30	6	15	7
Link Distance (ft)	378	1020		374		429
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)			75		75	
Storage Blk Time (%)						
Queuing Penalty (veh)						

Intersection: 6: 5th Street & C Street /C Street

Movement	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB	SB	SB
Directions Served	L	T	TR	L	T	T	R	L	T	R	L	TR
Maximum Queue (ft)	34	141	137	137	118	46	64	89	159	61	189	235
Average Queue (ft)	7	72	59	60	43	4	22	39	67	29	86	104
95th Queue (ft)	26	120	110	112	88	24	48	78	130	53	152	185
Link Distance (ft)		262	262		1104	1104			2416	2416		374
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	110			160			130	135			180	
Storage Blk Time (%)		2		0	0			0	1		0	1
Queuing Penalty (veh)		0		0	0			0	1		1	2

Network Summary

Network wide Queuing Penalty: 3

Intersection: 1: Watercolor Lane/Fountain Drive & Lighthouse Drive

Movement	EB	EB	EB	WB	WB	NB	SB	SB
Directions Served	L	T	R	L	T	LTR	LT	R
Maximum Queue (ft)	31	62	25	43	96	24	84	38
Average Queue (ft)	6	15	3	12	26	3	30	9
95th Queue (ft)	26	47	16	36	67	14	65	33
Link Distance (ft)		1279	1279		328	741	1368	1368
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (ft)	175			100				
Storage Blk Time (%)					0			
Queuing Penalty (veh)					0			

Intersection: 2: Lighthouse Drive & Marina Way

Movement	WB	NB	SB	SB
Directions Served	LR	TR	L	T
Maximum Queue (ft)	29	3	12	9
Average Queue (ft)	4	0	1	0
95th Queue (ft)	20	3	7	6
Link Distance (ft)	417	546		328
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)			75	
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 3: Lighthouse Drive & Watercolor Lane

Movement	EB
Directions Served	R
Maximum Queue (ft)	26
Average Queue (ft)	4
95th Queue (ft)	19
Link Distance (ft)	788
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 4: 5th Street/Lighthouse Drive & A Street

Movement	EB	WB	NB	NB	SB
Directions Served	LTR	LTR	L	TR	LTR
Maximum Queue (ft)	37	20	37	6	5
Average Queue (ft)	16	1	8	0	0
95th Queue (ft)	38	11	30	4	3
Link Distance (ft)	372	287		429	790
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)			75		
Storage Blk Time (%)			0		
Queuing Penalty (veh)			0		

Intersection: 5: 5th Street & B Street

Movement	EB	WB	NB	NB	SB	SB
Directions Served	LTR	LTR	L	TR	L	TR
Maximum Queue (ft)	45	38	42	16	27	12
Average Queue (ft)	16	15	6	1	1	0
95th Queue (ft)	43	41	26	8	11	6
Link Distance (ft)	378	1020		374		429
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)			75		75	
Storage Blk Time (%)						
Queuing Penalty (veh)						

Intersection: 6: 5th Street & C Street /C Street

Movement	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB	SB	SB
Directions Served	L	T	TR	L	T	T	R	L	T	R	L	TR
Maximum Queue (ft)	68	178	160	180	203	135	91	174	212	95	104	164
Average Queue (ft)	22	98	77	101	88	23	36	77	108	36	43	61
95th Queue (ft)	54	155	134	164	162	87	69	138	184	70	83	121
Link Distance (ft)		262	262		1104	1104			2416	2416		374
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	110			160			130	135			180	
Storage Blk Time (%)	0	7		1	1	0	0	1	5			0
Queuing Penalty (veh)	0	2		2	2	0	0	2	6			0

Network Summary

Network wide Queuing Penalty: 14

Attachment F:
Collision Data

Upload Date Window: 1/1/2024 to 12/31/2024
Police Department

From 1/1/2019 to 12/31/2024

Total Collisions: 20

Injury Collisions: 4

Fatal Collisions: 0

Collision Summary Report

2/13/25

5TH ST from C ST to A ST

19-06696 **11/10/2019** **11:51** Sunday C ST - 5TH ST 0' Direction: Not Stated Daylight Clear Pty at Fault:1

Sideswipe Other Motor Vehicle Traffic Signals and Signs 21453b Hit & Run: No Property Damage Only # Inj: 0 # Killed: 0

Party 1 Driver South Making Right Turn Male Age: 52 2014 VOLVO S SERIES Passenger Car, Station Wagon, Jeep No Injury
Veh Type: Sobriety: HNBD Assoc Factor: None Apparent Lap/Shoulder Harness Used Cell Phone Not In Use

Party 2 Driver North Making Left Turn Female Age: 40 2016 MERCEDES-BENZ G-CLASS Passenger Car, Station Wagon, Jeep No Injury
Veh Type: Sobriety: HNBD Assoc Factor: None Apparent Lap/Shoulder Harness Used Cell Phone Not In Use

19-06798 **11/12/2019** **16:00** Tuesday 5TH ST - B ST 0' Direction: Not Stated Pty at Fault:

Unknown Hit & Run: No Property Damage Only # Inj: 0 # Killed: 0

Party 1 Driver Male Age: 52 2005 VOLVO S SERIES No Injury
Veh Type: Sobriety: Assoc Factor:

19-07064 **11/27/2019** **18:55** Wednesday C ST - 5TH ST 0' Direction: Not Stated Dark - Street Lig Clear Pty at Fault:1

Vehicle - Pedestrian Bicycle Traffic Signals and Signs 21453(a) Hit & Run: No Property Damage Only # Inj: 0 # Killed: 0

Party 1 Bicyclist North Traveling Wrong Way Female Age: 30 Bicycle No Injury
Veh Type: Sobriety: HNBD Assoc Factor: None Apparent Not Stated

Party 2 Driver East Proceeding Straight Female Age: 30 2008 HYUNDAI SANTA FE Sport Utility Vehicle No Injury
Veh Type: Sobriety: HNBD Assoc Factor: None Apparent Lap/Shoulder Harness Used

20-01763 **4/8/2020** **13:40** Wednesday 5TH ST - A ST 95' Direction: South Daylight Clear Pty at Fault:1

Sideswipe Other Motor Vehicle Improper Turning 22100A Hit & Run: No Property Damage Only # Inj: 0 # Killed: 0

Party 1 Driver North Making Right Turn Male Age: 54 2015 HYUNDAI ELANTRA Passenger Car, Station Wagon, Jeep No Injury
Veh Type: Sobriety: Not Applicable Assoc Factor: None Apparent Lap/Shoulder Harness Used Cell Phone Not In Use

Party 2 Driver North Proceeding Straight Male Age: 51 2004 MERCEDES-BENZ E-CLASS Passenger Car, Station Wagon, Jeep No Injury
Veh Type: Sobriety: Not Applicable Assoc Factor: None Apparent Lap/Shoulder Harness Used Cell Phone Not In Use

20-03616 **8/4/2020** **21:59** Tuesday 5TH ST - C ST 0' Direction: Not Stated Dark - Street Lig Clear Pty at Fault:1

Broadside Other Motor Vehicle Traffic Signals and Signs 21453a Hit & Run: No Property Damage Only # Inj: 0 # Killed: 0

Party 1 Driver North Proceeding Straight Male Age: 73 2013 TOYOTA PRIUS Passenger Car, Station Wagon, Jeep No Injury
Veh Type: Sobriety: HNBD Assoc Factor: None Apparent Lap/Shoulder Harness Used Cell Phone Not In Use

Party 2 Driver West Proceeding Straight Male Age: 33 2012 TOYOTA CAMRY Passenger Car, Station Wagon, Jeep No Injury
Veh Type: Sobriety: HNBD Assoc Factor: None Apparent Lap/Shoulder Harness Used Cell Phone Not In Use

20-04722 **10/1/2020** **13:54** Thursday 5TH ST - B ST 100' Direction: South Daylight Clear Pty at Fault:1

Rear-End Parked Motor Vehicle Improper Turning 22107 Hit & Run: Misde Property Damage Only # Inj: 0 # Killed: 0

Party 1 Driver South Proceeding Straight Male Age: 2003 FORD EXPLORER Passenger Car, Station Wagon, Jeep No Injury
Veh Type: Sobriety: Impairment Not Kno Assoc Factor: None Apparent Unknown

Party 2 Parked Vehicle South Parked Age: 1995 HONDA ACCORD Passenger Car, Station Wagon, Jeep No Injury
Veh Type: Sobriety: Not Applicable Assoc Factor: None Apparent Not Stated

20-04829 **10/6/2020** **17:50** Tuesday 5TH ST - B ST 0' Direction: Not Stated Daylight Clear Pty at Fault:1
Broadside Other Motor Vehicle Auto R/W Violation 21802A Hit & Run: No Property Damage Only # Inj: 0 # Killed: 0

Party 1 Driver West Proceeding Straight Female Age: 20 2012 CHEVROLET MALIBU Passenger Car, Station Wagon, Jeep No Injury
Veh Type: Sobriety: HNBD Assoc Factor: None Apparent Lap/Shoulder Harness Used
Party 2 Driver South Proceeding Straight Male Age: 56 2006 LEXUS RX Sport Utility Vehicle No Injury
Veh Type: Sobriety: HNBD Assoc Factor: None Apparent Lap/Shoulder Harness Used

20-05732 **11/23/2020** **19:57** Monday 5TH ST - B ST 0' Direction: Not Stated Dark - Street Lig Clear Pty at Fault:1
Sideswipe Parked Motor Vehicle Improper Turning 22107 Hit & Run: Misde Property Damage Only # Inj: 0 # Killed: 0

Party 1 Driver East Making Left Turn Female Age: 2006 TOYOTA AVALON Passenger Car, Station Wagon, Jeep No Injury
Veh Type: Sobriety: HBD Under Influenc Assoc Factor: Unknown
Party 2 Parked Vehicle North Parked Age: 2015 TOYOTA PRIUS Passenger Car, Station Wagon, Jeep No Injury
Veh Type: Sobriety: Not Applicable Assoc Factor: None Apparent Not Stated Cell Phone Not In Use
Party 3 Parked Vehicle North Parked Age: 2016 FORD EDGE Passenger Car, Station Wagon, Jeep No Injury
Veh Type: Sobriety: Not Applicable Assoc Factor: None Apparent Not Stated Cell Phone Not In Use

20-05830 **11/30/2020** **09:30** Monday 5TH ST - C ST 0' Direction: Not Stated Daylight Clear Pty at Fault:1
Broadside Other Motor Vehicle Traffic Signals and Signs 21453a Hit & Run: No Property Damage Only # Inj: 0 # Killed: 0

Party 1 Driver South Proceeding Straight Male Age: 38 2005 CHEVROLET TAHOE Sport Utility Vehicle No Injury
Veh Type: Sobriety: HNBD Assoc Factor: None Apparent Lap/Shoulder Harness Used
Party 2 Driver West Proceeding Straight Male Age: 56 1999 CHEVROLET 1500 Pickups & Panels No Injury
Veh Type: Sobriety: HNBD Assoc Factor: None Apparent Lap/Shoulder Harness Used
Party 3 Driver West Proceeding Straight Male Age: 37 2015 JEEP RENEGADE Sport Utility Vehicle No Injury
Veh Type: Sobriety: HNBD Assoc Factor: None Apparent Lap/Shoulder Harness Used

21-00907 **2/18/2021** **11:55** Thursday C ST - 5TH ST 0' Direction: Not Stated Daylight Clear Pty at Fault:1
Head-On Other Motor Vehicle Traffic Signals and Signs 21453(a) Hit & Run: No Property Damage Only # Inj: 0 # Killed: 0

Party 1 Driver West Proceeding Straight Male Age: 29 2006 VOLVO XC Sport Utility Vehicle No Injury
Veh Type: Sobriety: HNBD Assoc Factor: None Apparent Lap/Shoulder Harness Used
Party 2 Driver East Making Left Turn Male Age: 29 2011 LEXUS CT Passenger Car, Station Wagon, Jeep No Injury
Veh Type: Sobriety: HNBD Assoc Factor: None Apparent Lap/Shoulder Harness Used

21-01951 **4/16/2021** **11:43** Friday 5TH ST - C ST 40' Direction: North Daylight Clear Pty at Fault:1
Broadside Other Motor Vehicle Auto R/W Violation 21804A Hit & Run: No Complaint of Pain # Inj: 1 # Killed: 0

Party 1 Driver East Entering Traffic Female Age: 51 2020 JEEP COMPASS Sport Utility Vehicle No Injury
Veh Type: Sobriety: HNBD Assoc Factor: None Apparent Lap/Shoulder Harness Used Cell Phone Not In Use
Party 2 Driver South Proceeding Straight Male Age: 52 2013 MERCEDES-BENZ M- CLASS Sport Utility Vehicle Complaint of Pain
Veh Type: Sobriety: HNBD Assoc Factor: None Apparent Lap/Shoulder Harness Used Cell Phone Not In Use

21-04812 **9/22/2021** **17:35** Wednesday C ST - 5TH ST 0' Direction: Not Stated Daylight Clear Pty at Fault:1
Sideswipe Other Motor Vehicle Improper Turning 22100(a) Hit & Run: No Property Damage Only # Inj: 0 # Killed: 0

Party 1 Driver East Making Right Turn Male Age: 29 2010 SUBARU WRX Passenger Car, Station Wagon, Jeep No Injury
Veh Type: Sobriety: HNBD Assoc Factor: Inattention Lap/Shoulder Harness Used Cell Phone Not In Use
Party 2 Driver East Stopped In Road Female Age: 22 2010 HONDA INSIGHT Passenger Car, Station Wagon, Jeep No Injury
Veh Type: Sobriety: HNBD Assoc Factor: None Apparent Lap/Shoulder Harness Used Cell Phone Not In Use

21-80196 **10/16/2021** **02:15** Saturday C ST - 5TH ST 0' Direction: Not Stated Dark - Street Lig Pty at Fault:2
Sideswipe Parked Motor Vehicle Unsafe Speed Hit & Run: No Property Damage Only # Inj: 0 # Killed: 0

Party 1 Parked Vehicle Male Age: 32 2009 CHEVROLET OTHER No Injury
Veh Type: Sobriety: Assoc Factor:
Party 2 Driver Age: 32 No Injury
Veh Type: Sobriety: Assoc Factor:

21-05344 **10/22/2021** **08:09** Friday 5TH ST - MIDSTREAM LN 0' Direction: Not Stated Daylight Raining Pty at Fault:1
Hit Object Fixed Object Wrong Side of Road 21651A Hit & Run: Misde Property Damage Only # Inj: 0 # Killed: 0

Party 1 Driver South Ran Off Road Male Age: NISSAN FRONTIER Pickups & Panels No Injury
Veh Type: Sobriety: Impairment Not Kno Assoc Factor: None Apparent Unknown

21-05790 **11/16/2021** **19:23** Tuesday 5TH ST - C ST 0' Direction: Not Stated Dark - Street Lig Clear Pty at Fault:1
Broadside Other Motor Vehicle Traffic Signals and Signs 21453a Hit & Run: No Property Damage Only # Inj: 0 # Killed: 0

Party 1 Driver South Proceeding Straight Female Age: 49 2021 SUBARU OUTBACK Sport Utility Vehicle No Injury
Veh Type: Sobriety: HNBD Assoc Factor: Inattention Lap/Shoulder Harness Used Cell Phone Not In Use
Party 2 Driver East Proceeding Straight Male Age: 37 2003 CHEVROLET TRAILBLAZER Sport Utility Vehicle No Injury
Veh Type: Sobriety: HNBD Assoc Factor: None Apparent Lap/Shoulder Harness Used Cell Phone Not In Use

21-80295 **12/13/2021** **10:12** Monday C ST - 5TH ST 0' Direction: Not Stated Dark - No Street Raining Pty at Fault:2
Head-On Other Other Than Driver Hit & Run: No Property Damage Only # Inj: 0 # Killed: 0

Party 1 Driver Age: 2012 CADILLAC SRX No Injury
Veh Type: Sobriety: Assoc Factor:
Party 2 Other Age: UNKNOWN No Injury
Veh Type: Sobriety: Assoc Factor:

WSP-24-02267 **5/29/2024** **17:00** Wednesday 5TH ST - B ST 0' Direction: Not Stated Daylight Clear Pty at Fault:1
Broadside Other Motor Vehicle Auto R/W Violation 21802(a) Hit & Run: No Complaint of Pain # Inj: 1 # Killed: 0

Party 1 Driver EAST Proceeding Straight F Age: 53 2004 HONDA ACCORD Passenger Car, Station Wagon, Jeep
Veh Type: Sobriety: HNBD Assoc Factor: None Apparent Lap/Shoulder Harness Used Cell Phone Not In Use
Party 2 Driver NORT Proceeding Straight M Age: 41 2008 BMW 3 SERIES Passenger Car, Station Wagon, Jeep
Veh Type: Sobriety: HNBD Assoc Factor: None Apparent Lap/Shoulder Harness Used Cell Phone Not In Use

WSP-24-80135 **6/17/2024** **16:51** Monday 5TH ST - C ST 0' Direction: Not Stated Daylight Clear Pty at Fault:2
Rear-End Other Motor Vehicle Unsafe Speed 22350 Hit & Run: No Property Damage Only # Inj: 0 # Killed: 0

Party 1 Driver Not S Stopped In Road F Age: 30 2023 SUBARU CROSSTREK Passenger Car, Station Wagon, Jeep
Veh Type: Sobriety: HNBD Assoc Factor: None Apparent Not Stated
Party 2 Driver Not S Proceeding Straight M Age: 83 2017 GENESIS G SERIES Passenger Car, Station Wagon, Jeep
Veh Type: Sobriety: HNBD Assoc Factor: None Apparent Not Stated

WSP-24-04497 **10/18/2024** **18:21** Friday C ST - 5TH ST 0' Direction: Not Stated Daylight Clear Pty at Fault:1
Broadside Bicycle Traffic Signals and Signs 21453(a) Hit & Run: No Other Visible Injury # Inj: 1 # Killed: 0

Party 1 Bicyclist NORT Proceeding Straight F Age: 31 Bicycle
Veh Type: Sobriety: HNBD Assoc Factor: None Apparent M/C Bicycle Helmet Driver - Cell Phone Handsfree In Use
Party 2 Driver WEST Proceeding Straight M Age: 26 2021 MAZDA CX Sport Utility Vehicle
Veh Type: Sobriety: HNBD Assoc Factor: None Apparent Lap/Shoulder Harness Used Cell Phone Handsfree In Use

WSP-24-04633	**10/28/2024**	**17:15**	Monday	C ST - 5TH ST		0'	Direction: Not Stated	Daylight	Clear	Pty at Fault:2	
	Broadside		Other Motor Vehicle	Traffic Signals and Signs		21453(a)	Hit & Run: Felony	Severe Injury		# Inj: 1	# Killed: 0
Party 1 Driver		SOUT	Proceeding Straight		F	Age:			Passenger Car, Station Wagon, Jeep		
Veh Type:			Sobriety: Impairment Not Kno		Assoc Factor: None Apparent		Unknown		Cell Phone Not In Use		
Party 2 Driver		EAST	Proceeding Straight		M	Age: 49			Go-ped, ZIP Electric Scooter, Motoboar		
Veh Type:			Sobriety: Impairment Not Kno		Assoc Factor: None Apparent		M/C Bicycle Helmet Driver -		Cell Phone Not In Use		

Segment Length: 0.18 miles (939')

Collisions per mile: 112.46

Settings for Query:

Segment: 5TH ST between C ST and A ST
Include Intersection Related at Limit 1 (C ST): True
Include Intersection Related at Limit 2 (A ST): True
Include Intersection Related at Intermediate Intersections: True
Sorted By: Date and Time

Upload Date Window: 1/1/2024 to 12/31/2024
Police Department

From 1/1/2019 to 12/31/2024

Total Collisions: 5
Injury Collisions: 1
Fatal Collisions: 0

Collision Summary Report

2/13/25

LIGHTHOUSE DR from FOUNTAIN DR to 5TH ST

19-02539 **5/3/2019** **04:34** Friday LIGHTHOUSE DR - MARINA WAY 26' Direction: West Dark - Street Ligh Clear Pty at Fault:1
Hit Object Fixed Object Auto R/W Violation 21804A Hit & Run: No Property Damage Only # Inj: 0 # Killed: 0

Party 1 Driver Making Right Turn Age: 57 UNK No Injury
Veh Type: Sobriety: Impairment Not Kno Assoc Factor: Not Stated
Party 2 Driver West Proceeding Straight Male Age: 55 1998 ACURA CL Passenger Car, Station Wagon, Jeep No Injury
Veh Type: Sobriety: HNBD Assoc Factor: None Apparent Lap/Shoulder Harness Used Cell Phone Not In Use

20-03975 **8/23/2020** **20:36** Sunday LIGHTHOUSE DR - MARINA WAY 403' Direction: South Dark - Street Ligh Clear Pty at Fault:1
Hit Object Fixed Object Wrong Side of Road 21650 Hit & Run: Misde Property Damage Only # Inj: 0 # Killed: 0

Party 1 Driver North Other Unsafe Turning Age: 2006 SCION TC Passenger Car, Station Wagon, Jeep No Injury
Veh Type: Sobriety: Impairment Not Kno Assoc Factor: None Apparent Unknown Cell Phone Not In Use

21-01828 **4/10/2021** **13:37** Saturday LIGHTHOUSE DR - FOUNTAIN DR 0' Direction: Not Stated Daylight Clear Pty at Fault:1
Hit Object Fixed Object Wrong Side of Road 21650 Hit & Run: No Other Visible Injury # Inj: 1 # Killed: 0

Party 1 Driver North Ran Off Road Male Age: 31 2019 CHEVROLET CAMARO Passenger Car, Station Wagon, Jeep Other Visible Injury
Veh Type: Sobriety: HNBD Assoc Factor: None Apparent Lap/Shoulder Harness Used Cell Phone Not In Use

WSP-23-01815 **4/26/2023** **19:17** Wednesday LIGHTHOUSE DR - WATERCOLOR LN (W) 0' Direction: Not Stated Daylight Clear Pty at Fault:1
Hit Object Fixed Object Driving Under Influence 23152(a) Hit & Run: No Property Damage Only # Inj: 0 # Killed: 0

Party 1 Driver WEST Making Left Turn M Age: 50 2018 HYUNDAI SONATA Passenger Car, Station Wagon, Jeep
Veh Type: Sobriety: HBD Under Influence Assoc Factor: Violation Lap/Shoulder Harness Used Cell Phone Not In Use

WSP-23-05216 **12/5/2023** **12:00** Tuesday LIGHTHOUSE DR - WATERCOLOR LN (W) 0' Direction: Not Stated Daylight Clear Pty at Fault:2
Sideswipe Parked Motor Vehicle Unknown 20002(a) Hit & Run: Misde Property Damage Only # Inj: 0 # Killed: 0

Party 1 Parked Vehicle Not S Parked Not Sta Age: 2010 TOYOTA COROLLA Passenger Car, Station Wagon, Jeep
Veh Type: Sobriety: Not Applicable Assoc Factor: None Apparent Not Stated
Party 2 Driver Not S Other Unsafe Turning Not Sta Age:
Veh Type: Sobriety: Impairment Not Kno Assoc Factor: None Apparent Not Stated

Segment Length: 0.31 miles (1,645')

Collisions per mile: 16.05

Settings for Query:

Segment: LIGHTHOUSE DR between FOUNTAIN DR and 5TH ST
Include Intersection Related at Limit 1 (FOUNTAIN DR): True
Include Intersection Related at Limit 2 (5TH ST): True
Include Intersection Related at Intermediate Intersections: True
Sorted By: Date and Time

Attachment G:

Near Term Plus Project With I Street Bridge Improvements SimTraffic Reports

1: Watercolor Lane/Fountain Drive & Lighthouse Drive Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBR	SBL	SBT	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.2	0.1	0.1	0.0
Total Del/Veh (s)	15.1	5.5	0.9	12.7	4.3	1.3	19.5	4.1	6.9	6.7	3.3	5.3

2: Lighthouse Drive & Marina Way Performance by movement

Movement	WBL	NBT	SBL	SBT	All
Denied Del/Veh (s)	0.1	0.0		0.0	0.0
Total Del/Veh (s)	5.1	0.5		1.1	0.9

3: Lighthouse Drive & Watercolor Lane Performance by movement

Movement	EBR	NBT	SBT	All
Denied Del/Veh (s)	0.1	0.0	0.0	0.0
Total Del/Veh (s)	3.7	0.5	0.5	0.6

4: 5th Street/Lighthouse Drive & A Street Performance by movement

Movement	EBL	EBR	WBR	NBL	NBT	NBR	SBT	SBR	All
Denied Del/Veh (s)	0.1	0.1	0.1	0.0	0.0		0.0	0.0	0.0
Total Del/Veh (s)	7.4	4.2	1.5	3.6	0.5		1.1	0.8	1.3

5: 5th Street & B Street Performance by movement

Movement	EBL	EBT	EBR	WBL	WBR	NBL	NBT	NBR	SBL	SBT	SBR	All
Denied Del/Veh (s)	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Del/Veh (s)	7.0	13.7	4.5	8.2	4.2	5.1	2.1	1.4	2.9	0.8	0.2	1.7

6: 5th Street & C Street /C Street Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Del/Veh (s)	0.0	0.0	0.0	3.1	0.5	3.0	1.5	0.2	0.1	0.0	0.0	0.0
Total Del/Veh (s)	33.1	23.0	7.1	30.8	15.5	4.1	32.5	21.7	5.3	29.4	18.6	12.1

6: 5th Street & C Street /C Street Performance by movement

Movement	All
Denied Del/Veh (s)	0.5
Total Del/Veh (s)	19.4

Total Network Performance

Denied Del/Veh (s)	0.6
Total Del/Veh (s)	25.3

Intersection: 1: Watercolor Lane/Fountain Drive & Lighthouse Drive

Movement	EB	EB	EB	WB	WB	NB	SB	SB
Directions Served	L	T	R	L	T	LTR	LT	R
Maximum Queue (ft)	26	116	19	25	88	22	112	28
Average Queue (ft)	2	40	1	2	24	3	49	4
95th Queue (ft)	13	90	8	14	66	16	89	20
Link Distance (ft)		1279	1279		328	741	1368	1368
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (ft)	175			100				
Storage Blk Time (%)		0			0			
Queuing Penalty (veh)		0			0			

Intersection: 2: Lighthouse Drive & Marina Way

Movement	WB
Directions Served	LR
Maximum Queue (ft)	15
Average Queue (ft)	1
95th Queue (ft)	9
Link Distance (ft)	417
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 3: Lighthouse Drive & Watercolor Lane

Movement	EB
Directions Served	R
Maximum Queue (ft)	29
Average Queue (ft)	10
95th Queue (ft)	30
Link Distance (ft)	788
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 4: 5th Street/Lighthouse Drive & A Street

Movement	EB	WB	NB	NB	SB
Directions Served	LTR	LTR	L	TR	LTR
Maximum Queue (ft)	52	14	57	6	5
Average Queue (ft)	23	1	12	0	0
95th Queue (ft)	45	7	39	5	4
Link Distance (ft)	372	287		429	790
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)			75		
Storage Blk Time (%)			0		
Queuing Penalty (veh)			0		

Intersection: 5: 5th Street & B Street

Movement	EB	WB	NB	NB	SB
Directions Served	LTR	LTR	L	TR	L
Maximum Queue (ft)	54	33	40	3	26
Average Queue (ft)	24	11	8	0	2
95th Queue (ft)	49	35	31	3	15
Link Distance (ft)	378	1020		386	
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)			75		75
Storage Blk Time (%)			0		
Queuing Penalty (veh)			0		

Intersection: 6: 5th Street & C Street /C Street

Movement	EB	EB	EB	B19	WB	WB	WB	NB	NB	NB	SB	SB
Directions Served	L	T	R	T	L	T	R	L	T	R	L	TR
Maximum Queue (ft)	36	206	134	8	118	122	62	120	168	65	168	238
Average Queue (ft)	6	92	41	0	59	44	21	39	66	26	80	103
95th Queue (ft)	24	164	91	9	106	92	47	86	131	55	142	193
Link Distance (ft)		262		450		1104			2416	2416		386
Upstream Blk Time (%)		0										
Queuing Penalty (veh)		0										
Storage Bay Dist (ft)	120		120		150		150	135			180	
Storage Blk Time (%)		4	0		0	0		0	1		0	1
Queuing Penalty (veh)		5	0		0	0		0	1		0	2

Network Summary

Network wide Queuing Penalty: 9

1: Watercolor Lane/Fountain Drive & Lighthouse Drive Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBR	SBL	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.0
Total Del/Veh (s)	11.9	3.5	0.9	11.5	3.4	1.8	20.2	5.8	7.4	3.6	4.0

2: Lighthouse Drive & Marina Way Performance by movement

Movement	WBL	WBR	NBT	NBR	SBL	SBT	All
Denied Del/Veh (s)	0.1	0.1	0.0	0.0	0.0	0.0	0.0
Total Del/Veh (s)	7.9	3.4	0.7	0.2	4.2	0.7	0.8

3: Lighthouse Drive & Watercolor Lane Performance by movement

Movement	EBR	NBT	SBT	SBR	All
Denied Del/Veh (s)	0.1	0.0	0.0	0.0	0.0
Total Del/Veh (s)	2.8	0.7	0.3	0.0	0.6

4: 5th Street/Lighthouse Drive & A Street Performance by movement

Movement	EBL	EBR	WBL	NBL	NBT	SBT	SBR	All
Denied Del/Veh (s)	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0
Total Del/Veh (s)	8.2	2.9	6.3	2.4	0.6	0.5	0.3	0.8

5: 5th Street & B Street Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	All
Denied Del/Veh (s)	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0
Total Del/Veh (s)	4.7	8.9	3.4	8.1	11.1	5.1	4.0	2.1	1.6	4.4	0.4	1.9

6: 5th Street & C Street /C Street Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Del/Veh (s)	0.0	0.0	0.0	0.8	0.5	0.8	1.4	0.2	0.2	0.0	0.0	0.0
Total Del/Veh (s)	41.1	25.9	6.1	39.8	21.6	8.4	38.8	26.9	7.9	39.8	25.8	13.4

6: 5th Street & C Street /C Street Performance by movement

Movement	All
Denied Del/Veh (s)	0.4
Total Del/Veh (s)	24.4

Total Network Performance

Denied Del/Veh (s)	0.4
Total Del/Veh (s)	29.3

Intersection: 1: Watercolor Lane/Fountain Drive & Lighthouse Drive

Movement	EB	EB	EB	WB	WB	NB	SB	SB
Directions Served	L	T	R	L	T	LTR	LT	R
Maximum Queue (ft)	34	62	22	39	95	26	76	33
Average Queue (ft)	7	17	2	12	28	3	32	10
95th Queue (ft)	28	50	13	35	74	16	64	33
Link Distance (ft)		1279	1279		328	741	1368	1368
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (ft)	175			100				
Storage Blk Time (%)					0			
Queuing Penalty (veh)					0			

Intersection: 2: Lighthouse Drive & Marina Way

Movement	WB	NB	SB	SB
Directions Served	LR	TR	L	T
Maximum Queue (ft)	32	15	16	5
Average Queue (ft)	3	1	1	0
95th Queue (ft)	18	12	7	5
Link Distance (ft)	417	546		328
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)			75	
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 3: Lighthouse Drive & Watercolor Lane

Movement	EB
Directions Served	R
Maximum Queue (ft)	24
Average Queue (ft)	5
95th Queue (ft)	20
Link Distance (ft)	788
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 4: 5th Street/Lighthouse Drive & A Street

Movement	EB	WB	NB	NB
Directions Served	LTR	LTR	L	TR
Maximum Queue (ft)	29	17	33	3
Average Queue (ft)	16	1	8	0
95th Queue (ft)	37	8	30	3
Link Distance (ft)	372	287		429
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)			75	
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 5: 5th Street & B Street

Movement	EB	WB	NB	NB	SB	SB
Directions Served	LTR	LTR	L	TR	L	TR
Maximum Queue (ft)	38	40	35	34	21	6
Average Queue (ft)	15	15	6	1	2	0
95th Queue (ft)	40	41	25	16	13	4
Link Distance (ft)	378	1020		386		429
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)			75		75	
Storage Blk Time (%)			0	0		
Queuing Penalty (veh)			0	0		

Intersection: 6: 5th Street & C Street /C Street

Movement	EB	EB	EB	B19	WB	WB	WB	NB	NB	NB	SB	SB
Directions Served	L	T	R	T	L	T	R	L	T	R	L	TR
Maximum Queue (ft)	125	283	207	18	211	268	142	181	234	104	117	158
Average Queue (ft)	26	145	42	1	105	102	37	75	110	39	46	66
95th Queue (ft)	78	243	122	11	179	212	91	138	196	79	93	126
Link Distance (ft)		262		450		2442			2416	2416		386
Upstream Blk Time (%)		1										
Queuing Penalty (veh)		0										
Storage Bay Dist (ft)	120		120		150		150	135			180	
Storage Blk Time (%)	0	15	0		3	3		1	6			0
Queuing Penalty (veh)	0	16	0		10	9		2	7			0

Network Summary

Network wide Queuing Penalty: 45

Attachment H:

Near Term Plus Project With I Street Bridge Improvements and CIHC Traffic SimTraffic Reports

1: Watercolor Lane/Fountain Drive & Lighthouse Drive Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBR	SBL	SBT	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.2	0.1	0.1	0.1
Total Del/Veh (s)	13.7	5.4	0.9	18.0	4.8	1.4	24.9	6.2	7.2	10.5	3.5	5.5

2: Lighthouse Drive & Marina Way Performance by movement

Movement	WBL	NBT	NBR	SBL	SBT	All
Denied Del/Veh (s)	0.1	0.0	0.0	0.0	0.0	0.0
Total Del/Veh (s)	8.3	1.1	0.4	2.7	1.1	1.1

3: Lighthouse Drive & Watercolor Lane Performance by movement

Movement	EBR	NBT	SBT	All
Denied Del/Veh (s)	0.1	0.0	0.0	0.0
Total Del/Veh (s)	3.7	0.6	0.5	0.6

4: 5th Street/Lighthouse Drive & A Street Performance by movement

Movement	EBL	EBR	WBR	NBL	NBT	NBR	SBT	SBR	All
Denied Del/Veh (s)	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0
Total Del/Veh (s)	9.6	4.3	2.0	3.6	0.5	0.2	1.0	0.5	1.2

5: 5th Street & B Street Performance by movement

Movement	EBL	EBT	EBR	WBL	WBR	NBL	NBT	NBR	SBL	SBT	SBR	All
Denied Del/Veh (s)	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Del/Veh (s)	9.4	8.1	5.0	8.8	3.4	5.2	2.0	1.7	3.1	0.8	0.2	1.7

6: 5th Street & C Street /C Street Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Del/Veh (s)	0.0	0.0	0.0	3.0	0.6	3.0	1.6	0.2	0.1	0.0	0.0	0.0
Total Del/Veh (s)	38.2	23.7	6.7	31.4	17.0	4.5	34.5	21.9	6.0	31.6	18.8	13.6

6: 5th Street & C Street /C Street Performance by movement

Movement	All
Denied Del/Veh (s)	0.6
Total Del/Veh (s)	20.1

Total Network Performance

Denied Del/Veh (s)	0.6
Total Del/Veh (s)	26.1

Intersection: 1: Watercolor Lane/Fountain Drive & Lighthouse Drive

Movement	EB	EB	EB	WB	WB	NB	SB	SB
Directions Served	L	T	R	L	T	LTR	LT	R
Maximum Queue (ft)	23	97	19	26	100	22	118	39
Average Queue (ft)	2	38	1	2	25	4	51	6
95th Queue (ft)	14	81	11	13	67	17	94	27
Link Distance (ft)		1279	1279		328	741	1368	1368
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (ft)	175			100				
Storage Blk Time (%)					0			
Queuing Penalty (veh)					0			

Intersection: 2: Lighthouse Drive & Marina Way

Movement	WB	SB
Directions Served	LR	L
Maximum Queue (ft)	31	12
Average Queue (ft)	5	0
95th Queue (ft)	23	6
Link Distance (ft)	417	
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		75
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 3: Lighthouse Drive & Watercolor Lane

Movement	EB
Directions Served	R
Maximum Queue (ft)	31
Average Queue (ft)	11
95th Queue (ft)	31
Link Distance (ft)	788
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 4: 5th Street/Lighthouse Drive & A Street

Movement	EB	WB	NB	NB
Directions Served	LTR	LTR	L	TR
Maximum Queue (ft)	51	20	51	20
Average Queue (ft)	24	2	14	1
95th Queue (ft)	45	12	42	11
Link Distance (ft)	372	287		429
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)			75	
Storage Blk Time (%)			0	
Queuing Penalty (veh)			0	

Intersection: 5: 5th Street & B Street

Movement	EB	WB	NB	NB	SB
Directions Served	LTR	LTR	L	TR	L
Maximum Queue (ft)	61	31	40	3	30
Average Queue (ft)	25	10	9	0	3
95th Queue (ft)	53	34	32	3	18
Link Distance (ft)	378	1020		386	
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)			75		75
Storage Blk Time (%)			0		
Queuing Penalty (veh)			0		

Intersection: 6: 5th Street & C Street /C Street

Movement	EB	EB	EB	B19	WB	WB	WB	NB	NB	NB	SB	SB
Directions Served	L	T	R	T	L	T	R	L	T	R	L	TR
Maximum Queue (ft)	44	181	123	2	148	122	66	92	163	92	211	245
Average Queue (ft)	9	91	41	0	62	46	24	39	76	28	92	107
95th Queue (ft)	31	158	87	2	116	97	51	78	134	64	165	195
Link Distance (ft)		262		450		1104			2416	2416		386
Upstream Blk Time (%)		0										
Queuing Penalty (veh)		0										
Storage Bay Dist (ft)	120		120		150		150	135			180	
Storage Blk Time (%)		4			0	0			1		1	1
Queuing Penalty (veh)		5			1	0			1		2	3

Network Summary

Network wide Queuing Penalty: 11

1: Watercolor Lane/Fountain Drive & Lighthouse Drive Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBR	SBL	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.1	0.0	0.0	0.1	0.1	0.1	0.1	0.0
Total Del/Veh (s)	13.2	3.8	1.5	11.2	3.5	1.8	19.8	5.3	6.6	3.5	4.0

2: Lighthouse Drive & Marina Way Performance by movement

Movement	WBL	WBR	NBT	NBR	SBL	SBT	All
Denied Del/Veh (s)	0.1	0.1	0.0	0.0	0.0	0.0	0.0
Total Del/Veh (s)	7.7	4.3	0.8	0.4	3.2	0.8	1.0

3: Lighthouse Drive & Watercolor Lane Performance by movement

Movement	EBR	NBT	SBT	SBR	All
Denied Del/Veh (s)	0.1	0.0	0.0	0.0	0.0
Total Del/Veh (s)	3.2	0.8	0.3	0.1	0.6

4: 5th Street/Lighthouse Drive & A Street Performance by movement

Movement	EBL	EBR	WBL	NBL	NBT	SBT	SBR	All
Denied Del/Veh (s)	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0
Total Del/Veh (s)	6.5	3.0	6.0	2.5	0.6	0.5	0.3	0.8

5: 5th Street & B Street Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	All
Denied Del/Veh (s)	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0
Total Del/Veh (s)	6.3	8.7	3.3	7.5	9.5	4.3	3.9	2.1	1.5	3.1	0.4	1.9

6: 5th Street & C Street /C Street Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Del/Veh (s)	0.0	0.0	0.0	0.8	0.5	0.8	1.5	0.2	0.2	0.0	0.0	0.0
Total Del/Veh (s)	44.1	26.4	6.1	40.7	20.4	9.3	39.6	25.5	7.4	37.8	24.4	13.5

6: 5th Street & C Street /C Street Performance by movement

Movement	All
Denied Del/Veh (s)	0.4
Total Del/Veh (s)	24.3

Total Network Performance

Denied Del/Veh (s)	0.5
Total Del/Veh (s)	29.1

Intersection: 1: Watercolor Lane/Fountain Drive & Lighthouse Drive

Movement	EB	EB	EB	WB	WB	NB	SB	SB
Directions Served	L	T	R	L	T	LTR	LT	R
Maximum Queue (ft)	31	81	28	35	96	22	77	35
Average Queue (ft)	8	18	3	12	26	2	31	9
95th Queue (ft)	30	54	18	34	69	13	63	32
Link Distance (ft)		1279	1279		328	741	1368	1368
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (ft)	175			100				
Storage Blk Time (%)					0			
Queuing Penalty (veh)					0			

Intersection: 2: Lighthouse Drive & Marina Way

Movement	WB	NB	SB
Directions Served	LR	TR	L
Maximum Queue (ft)	40	8	12
Average Queue (ft)	16	0	0
95th Queue (ft)	43	6	6
Link Distance (ft)	417	546	
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			75
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 3: Lighthouse Drive & Watercolor Lane

Movement	EB
Directions Served	R
Maximum Queue (ft)	24
Average Queue (ft)	5
95th Queue (ft)	20
Link Distance (ft)	788
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 4: 5th Street/Lighthouse Drive & A Street

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	L	LTR
Maximum Queue (ft)	29	11	35	11
Average Queue (ft)	15	1	9	0
95th Queue (ft)	36	7	32	6
Link Distance (ft)	372	287		790
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)			75	
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 5: 5th Street & B Street

Movement	EB	WB	NB	NB	SB	SB
Directions Served	LTR	LTR	L	TR	L	TR
Maximum Queue (ft)	40	42	36	19	26	6
Average Queue (ft)	18	15	6	1	2	0
95th Queue (ft)	44	42	26	9	14	4
Link Distance (ft)	378	1020		386		429
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)			75		75	
Storage Blk Time (%)						
Queuing Penalty (veh)						

Intersection: 6: 5th Street & C Street /C Street

Movement	EB	EB	EB	B19	WB	WB	WB	NB	NB	NB	SB	SB
Directions Served	L	T	R	T	L	T	R	L	T	R	L	TR
Maximum Queue (ft)	142	309	192	35	217	240	138	181	195	105	119	159
Average Queue (ft)	27	148	44	1	107	96	40	82	101	38	49	65
95th Queue (ft)	88	253	132	12	184	177	87	153	176	78	93	126
Link Distance (ft)		262		450		2442			2416	2416		386
Upstream Blk Time (%)		1										
Queuing Penalty (veh)		0										
Storage Bay Dist (ft)	120		120		150		150	135			180	
Storage Blk Time (%)	0	15			4	2	0	3	5			0
Queuing Penalty (veh)	0	16			15	5	0	6	6			0

Network Summary

Network wide Queuing Penalty: 49

Appendix D.
Treatment Protocol for Handling Human Remains and the Cultural Items Affiliated with the Yocha Dehe Wintun Nation

YOCHA DEHE
CULTURAL RESOURCES

Treatment Protocol for Handling Human Remains and Cultural Items Affiliated with the Yocha Dehe Wintun Nation

The purpose of this Protocol is to formalize procedures for the treatment of Native American human remains, grave goods, ceremonial items, and items of cultural patrimony, in the event that any are found in conjunction with development, including archaeological studies, excavation, geotechnical investigations, grading, and any ground disturbing activity. This Protocol also formalizes procedures for Tribal monitoring during archaeological studies, grading, and ground-disturbing activities.

I. Cultural Affiliation

The Yocha Dehe Wintun Nation ("Tribe") traditionally occupied lands in Yolo, Solano, Lake, Colusa and Napa Counties. The Tribe has designated its Cultural Resources Committee ("Committee") to act on the Tribe's behalf with respect to the provisions of this Protocol. Any human remains which are found in conjunction with Projects on lands culturally-affiliated with the Tribe shall be treated in accordance with Section III of this Protocol. Any other cultural resources shall be treated in accordance with Section IV of this Protocol.

II. Inadvertent Discovery of Native American Human Remains

Whenever Native American human remains are found during the course of a Project, the determination of Most Likely Descendant ("MLD") under California Public Resources Code Section 5097.98 will be made by the Native American Heritage Commission ("NAHC") upon notification to the NAHC of the discovery of said remains at a Project site. If the location of the site and the history and prehistory of the area is culturally-affiliated with the Tribe, the NAHC contacts the Tribe; a Tribal member will be designated by the Tribe to consult with the landowner and/or project proponents.

Should the NAHC determine that a member of an Indian tribe other than Yocha Dehe Wintun Nation is the MLD, and the Tribe is in agreement with this determination, the terms of this Protocol relating to the treatment of such Native American human remains shall not be applicable; however, that situation is very unlikely.

III. Treatment of Native American Remains

In the event that Native American human remains are found during development of a Project and the Tribe or a member of the Tribe is determined to be MLD pursuant to Section II of this Protocol, the following provisions shall apply. The Medical Examiner shall immediately be notified, ground disturbing activities in that location shall cease and the Tribe shall be allowed, pursuant to California Public Resources Code Section 5097.98(a), to (1) inspect the site

of the discovery and (2) make determinations as to how the human remains and grave goods should be treated and disposed of with appropriate dignity.

The Tribe shall complete its inspection and make its MLD recommendation within forty-eight (48) hours of getting access to the site. The Tribe shall have the final determination as to the disposition and treatment of human remains and grave goods. Said determination may include avoidance of the human remains, reburial on-site, or reburial on tribal or other lands that will not be disturbed in the future.

The Tribe may wish to rebury said human remains and grave goods or ceremonial and cultural items on or near the site of their discovery, in an area which will not be subject to future disturbances over a prolonged period of time. Reburial of human remains shall be accomplished in compliance with the California Public Resources Code Sections 5097.98(a) and (b).

The term "human remains" encompasses more than human bones because the Tribe's traditions call for the burial of associated cultural items with the deceased (funerary objects), and/or the ceremonial burning of Native American human remains, funerary objects, grave goods and animals. Ashes, soils and other remnants of these burning ceremonies, as well as associated funerary objects and unassociated funerary objects buried with or found near the Native American remains are to be treated in the same manner as bones or bone fragments that remain intact.

IV. Non-Disclosure of Location of Reburials

Unless otherwise required by law, the site of any reburial of Native American human remains shall not be disclosed and will not be governed by public disclosure requirements of the California Public Records Act, Cal. Govt. Code § 6250 et seq. The Medical Examiner shall withhold public disclosure of information related to such reburial pursuant to the specific exemption set forth in California Government Code Section 6254(r). The Tribe will require that the location for reburial is recorded with the California Historic Resources Inventory System ("CHRIS") on a form that is acceptable to the CHRIS center. The Tribe may also suggest that the landowner enter into an agreement regarding the confidentiality of site information that will run with title on the property.

V. Treatment of Cultural Resources

Treatment of all cultural items, including ceremonial items and archeological items will reflect the religious beliefs, customs, and practices of the Tribe. All cultural items, including ceremonial items and archeological items, which may be found at a Project site should be turned over to the Tribe for appropriate treatment, unless otherwise ordered by a court or agency of competent jurisdiction. The Project Proponent should waive any and all claims to ownership of

Tribal ceremonial and cultural items, including archeological items, which may be found on a Project site in favor of the Tribe. If any intermediary, (for example, an archaeologist retained by the Project Proponent) is necessary, said entity or individual shall not possess those items for longer than is reasonably necessary, as determined solely by the Tribe.

VI. Inadvertent Discoveries

If additional significant sites or sites not identified as significant in a Project environmental review process, but later determined to be significant, are located within a Project impact area, such sites will be subjected to further archeological and cultural significance evaluation by the Project Proponent, the Lead Agency, and the Tribe to determine if additional mitigation measures are necessary to treat sites in a culturally appropriate manner consistent with CEQA requirements for mitigation of impacts to cultural resources. If there are human remains present that have been identified as Native American, all work will cease for a period of up to 30 days in accordance with Federal Law.

VIII. Work Statement for Tribal Monitors

The description of work for Tribal monitors of the grading and ground disturbing operations at the development site is attached hereto as Addendum I and incorporated herein by reference.

YOCHA DEHE
CULTURAL RESOURCES

ADDENDUM I

Yocha Dehe Wintun Nation
Tribal Monitors
Description of Work and Treatment Protocol

I. Preferred Treatment

The preferred protocol upon the discovery of Native American human remains is to (1) secure the area, (2) cover any exposed human remains or other cultural items, and (3) avoid further disturbances in the area.

II. Comportment

All parties to the action are strongly advised to treat the remains with appropriate dignity, as provided in Public Resource Code Section 5097.98. We further recommend that all parties to the action treat tribal representatives and the event itself with appropriate respect. For example, jokes and antics pertaining to the remains or other inappropriate behavior are ill advised.

III. Excavation Methods

If, after the Yocha Dehe Tribal representative has been granted access to the site and it is determined that avoidance is not feasible, an examination of the human remains will be conducted to confirm they are human and to determine the position, posture, and orientation of the remains. At this point, we recommend the following procedures:

(A) Tools. All excavation in the vicinity of the human remains will be conducted using fine hand tools and fine brushes to sweep loose dirt free from the exposure.

(B) Extent of Exposure. In order to determine the nature and extent of the grave and its contents, controlled excavation should extend to a full buffer zone around the perimeter of the remains.

(C) Perimeter Balk. To initiate the exposure, a perimeter balk (especially, a shallow trench) should be excavated, representing a reasonable buffer a minimum of 10 cm around the maximum extent of the known skeletal remains, with attention to counter-intuitive discoveries or unanticipated finds relating to this or other remains. The dirt from the perimeter balk should be bucketed, distinctly labeled, and screened for cultural materials.

(D) Exposure Methods. Excavation should then proceed inward from the walls of the balk as well as downward from the surface of the exposure. Loose dirt should be scooped out and brushed off into a dustpan or other collective device. Considerable care should be

given to ensure that human remains are not further impacted by the process of excavation.

(E) Provenience. Buckets, collection bags, notes, and tags should be fully labeled per provenience, and a distinction should be made between samples collected from: (1) **Perimeter Balk** (described above), (2) **Exposure** (dirt removed in exposing the exterior/burial plan and associations, and (3) **Matrix** (dirt from the interstices between bones or associations). Thus, each burial may have three bags, "Burial 1 Perimeter Balk," "Burial 1 Exposure Balk," "Burial 1 Matrix."

Please note the provisions below with respect to handling and conveyance of records and samples.

(F) Records. The following records should be compiled in the field: (1) a detailed scale drawing of the burial, including the provenience of and full for all human remains, associated artifacts, and the configuration of all associated phenomena such as burial pits, evidence for preinterment grave pit burning, soil variability, and intrusive disturbance, (2) complete a formal burial record using the consultants proprietary form or other standard form providing information on site #, unit or other proveniences, level depth, depth and location of the burial from a fixed datum, workers, date(s), artifact list, skeletal inventory, and other pertinent observations, (3) crew chief and worker field notes that may supplement or supercede information contained in the burial recording form, and (4) photographs, including either or standard photography or high-quality (400-500 DPI or 10 MP recommended) digital imaging.

(G) Stipulations for Acquisition and Use of Imagery. Photographs and images may be used only for showing location or configuration of questionable formation or for the position of the skeleton. They are not to be duplicated for publication unless a written release is obtained from the Tribe.

(H) Association. Association between the remains and other cultural materials should be determined in the field in consultation with an authorized Tribal representative, and may be amended per laboratory findings. Records of provenience and sample labels should be adequate to determine association or degree of likelihood of association of human remains and other cultural materials.

(I) Samples. For each burial, all **Perimeter Balk** soil is to be 1/8"-screened. All **Exposure** soil is to be 1/8"-screened, and a minimum of one 5-gallon bucket of excavated but unscreened Exposure soil is to be collected, placed in a plastic garbage bag in the bucket. All **Matrix** soil is to be carefully excavated, screened as appropriate, and then collected in plastic bags placed in 5-gallon buckets.

(J) Human remains are not to be cleaned in the field.

(K) Blessings. Prior to any physical action related to human remains, a designated tribal representative will conduct prayers and blessings over the remains. The archaeological consultant will be responsible for insuring that individuals and tools involved in the action are available for traditional blessings and prayers, as necessary.

IV. Lab Procedures

No laboratory studies are permitted without consultation with the tribe. Lab methods are determined on a project-specific basis in consultation with Yocha Dehe Wintun Nation representatives. The following procedures are recommended:

(A) Responsibility. The primary archaeological consultant will be responsible for insuring that all lab procedures follow stipulations made by the Tribe.

(B) Blessings. Prior to any laboratory activities related to the remains, a designated tribal representative will conduct prayers and blessings over the remains. The archaeological consultant will be responsible for insuring that individuals and tools involved in the action are available for traditional blessings and prayers, as necessary.

(C) Physical Proximity of Associations. To the extent possible, all remains, associations, samples, and original records are to be kept together throughout the laboratory process. In particular, **Matrix** dirt is to be kept in buckets and will accompany the remains to the lab. The primary archaeological consultant will be responsible for copying all field records and images, and insuring that the original notes and records accompany the remains throughout the process.

(*E) Additional Lab Finds*. Laboratory study should be done making every effort to identify unanticipated finds or materials missed in the field, such as objects encased in dirt or human remains misidentified as faunal remains in the field. In the event of discovery of additional remains, materials, and other associations the tribal representatives are to be contacted immediately.

V. Re-internment without Further Disturbance

No laboratory studies are permitted on human remains and funerary objects. The preferred treatment preference for exhumed Native American human remains is reburial in an area not subject to further disturbance. Any objects associated with remains will be reinterred with the remains.

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VI. Curation of Recovered Materials

Should all, or a sample, of any archaeological materials collected during the data recovery activities – with the exception of Human Remains – need to be curated, an inventory and location information of the curation facility shall be given to tribe for our records.