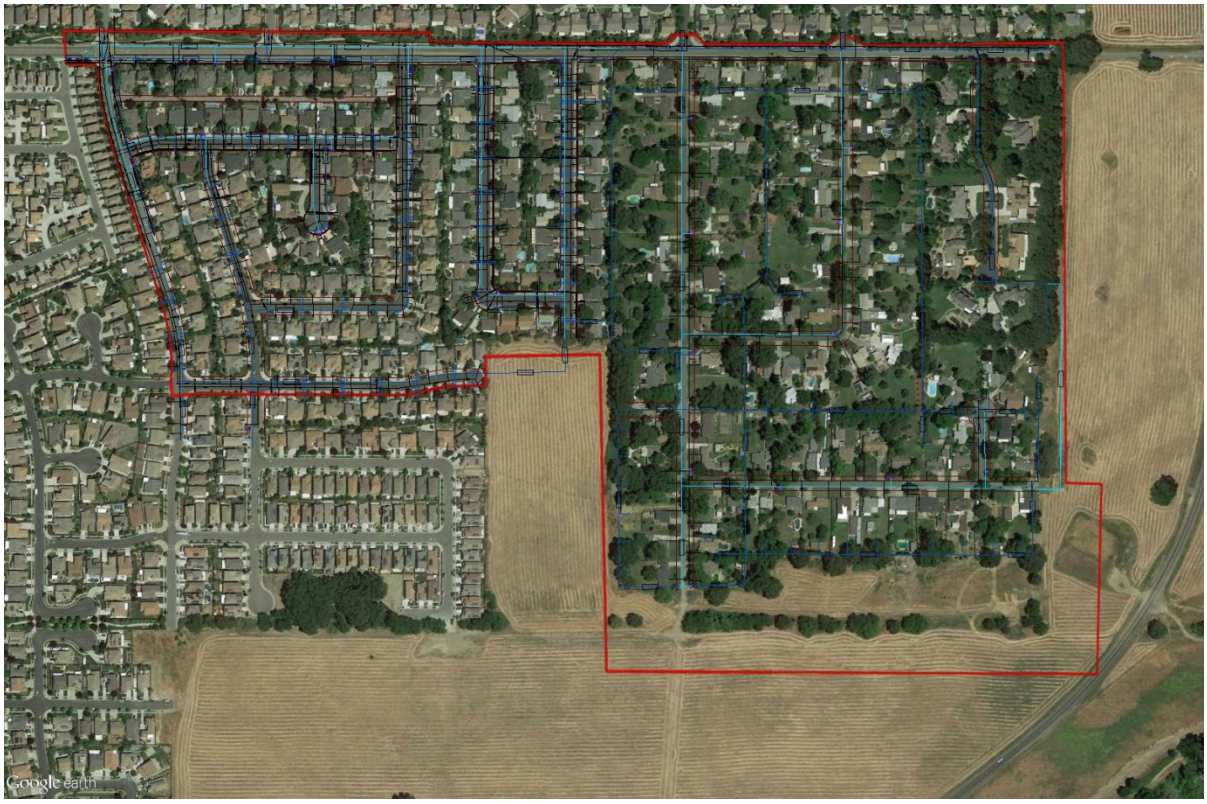
FINAL

CEQA INITIAL STUDY AND MITIGATED NEGATIVE DECLARATION

LINDEN ACRES WATER MAIN REPLACEMENT PROJECT

WEST SACRAMENTO, CALIFORNIA

STATE CLEARINGHOUSE NUMBER: 2018052001



LSA

July 2018

This page intentionally left blank

FINAL

CEQA INITIAL STUDY AND MITIGATED NEGATIVE DECLARATION

LINDEN ACRES WATER MAIN REPLACEMENT PROJECT

WEST SACRAMENTO, CALIFORNIA

STATE CLEARINGHOUSE NUMBER: 2018052001

Submitted to:

Mauricio Meza-Pedraza
City of West Sacramento
1110 West Capitol Avenue
West Sacramento, California 95691

Prepared by:

LSA
201 Creekside Ridge Court, Suite 250
Roseville, California 95678
(916) 772-7450

Project No. WSA1701

July 2018

This page intentionally left blank

TABLE OF CONTENTS

APPENDICES

FIGURES AND TABLES

FIGURES

TABLES

LIST OF ABBREVIATIONS AND ACRONYMS

AB	Assembly Bill
AFY	acre-feet per year
BMP	best management practices
CAA	Clean Air Act
CARB	California Air Resources Board
CCR	California Code of Regulations
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CGS	California Geological Survey
CH_4	Methane
CHMIRS	California Hazardous Material Incident Reporting Systems
City	City of West Sacramento
cm	centimeters
CNDDB	California Natural Diversity Database
CNEL	community noise equivalent level
CNPS	California Native Plant Society
CO	carbon monoxide
CO_2	carbon dioxide
CO_2e	CO2 equivalents
CVRWQCB	Central Valley Regional Water Quality Control Board
dB	decibel(s)
dBA	A-weighted decibels
DOGGR	Division of Oil, Gas, and Geothermal Resources
DTSC	California Department of Toxic Substances Control
DWR	Department of Water Resources
EDR	Environmental Data Resources
EIR	Environmental Impact Report
FEMA	Federal Emergency Management Agency
FMMP	Farmland Mapping and Monitoring Program
GHG	greenhouse gases
GWP	Global Warming Potential
HFC	Hydrofluorocarbons
IS/MND	Initial Study/Mitigated Negative Declaration
L_{dn}	day-night average level
L_{eq}	equivalent continuous sound level

L_{max}	maximum sound level
LOS	level of service
LRA	Local Responsibility Area
MMT	million metric tons
MMRP	Mitigation and Monitoring Reporting Program
MRZ	Mineral Resource Zone
N_2O	nitrous oxide
NAAQS	National Ambient Air Quality Standards
NAHC	Native American Heritage Commission
NHTSA	National Highway Traffic Safety Administration
NO_2	nitrogen dioxide
NO_X	nitrogen oxides
NPDES	National Pollutant Discharge Elimination System
O_3	ozone
PFC	Perfluorocarbons
PM_{10}	particulate matter less than or equal to 10 microns in diameter
$PM_{2.5}$	particulate matter less than or equal to 2.5 microns in diameter
PPV	Peak Particle Velocity
PRC	Public Resources Code
RoadMod	Road Construction Emissions Model
ROG	reactive organic gases
ROW	right-of-way
RR	rural residential
SF_6	Sulfur Hexafluoride
SIP	Sacramento Regional State Implementation Plan
SMAQMD	Sacramento Metropolitan Air Quality Management District
SMARA	Surface Mining and Reclamation Act of 1975
SO_2	Sulfur dioxide
SWPPP	Storm Water Pollution Prevention Plan
SWRCB	State Water Resources Control Board
TAC	toxic air contaminant
UAIC	United Auburn Indian Community
UCMP	University of California, Museum of Paleontology
USEPA	United States Environmental Protection Agency
USFWS	United States Fish and Wildlife Service
VdB	vibration velocity decibels
WSFD	West Sacramento Fire Department

WUSD	Washington Unified School District
YDWN	Yocha Dehe Wintun Nation
YSAQMD	Yolo-Solano Air Quality Management District

This page intentionally left blank

1.0 INTRODUCTION

The City of West Sacramento is proposing to install water mains and laterals in the Linden neighborhood of the Southport Planning Area. As part of the Linden Acres Water Main Replacement Project (herein referred to as "proposed Project" or "Project"), the new water mains will be installed in existing road right-of-way and will be replacing aging backyard water mains that currently exist within residential parcels. New laterals will also be installed as part of the proposed Project allowing a connection to the existing residential units and the new water mains that will be installed.

1.1 ENVIRONMENTAL REVIEW

The proposed Project constitutes a "Project" in accordance with California Environmental Quality Act (CEQA). Prior to approving the proposed Project, the City of West Sacramento must provide environmental review in accordance with CEQA to assess the potential impacts of the proposed Project, including mitigation where necessary.

The City of West Sacramento has prepared this Initial Study to provide agencies and the public with information about the potential impacts of the proposed Project on the local and regional environment. This document has been prepared in compliance with CEQA of 1970 as amended, and the State CEQA Guidelines, California Administrative Code, Title 14, Division 6, Chapter 3 (CEQA Guidelines). In anticipation of determining that all potentially significant impacts resulting from the proposed Project can be mitigated to less than significant levels, a Mitigated Negative Declaration is being considered to provide environmental clearance for the proposed Project.

1.2 CLARIFICATIONS AND CORRECTIONS

During the agency review period (between May 2, 2018 to May 31, 2018) the following three agency comment letters were received: one from the United Auburn Indian Community (UAIC); one from the Central Valley Regional Water Quality Control Board (CVRWQCB); and one from the State Clearinghouse (SCH). The comment letter from UAIC requested that standard mitigation measures, developed by UAIC, be incorporated into the environmental document. The CVRWQCB letter was a standard letter discussing regulatory information and permitting requirements. The SCH letter indicated that the IS/MND for the Project complied with the State Clearinghouse review requirements for draft environmental documents, pursuant to CEQA. Based on the comment letter received from UAIC, Mitigation Measure MM-CUL-1 in Section 3.5 of this environmental document was revised to add "and invite a geographically-affiliated Native American Representative" to respond to UAIC's comment. The text that was added was double underlined to indicate a revision/addition was made to this Final IS/MND based on comments received.

During the public review period (between May 23, 2018 to June 22, 2018), no comment letters from the public were received.

On the Cover and Title Pages of this document the word "Draft" has been deleted, the word "Final" has been added, and the State Clearinghouse number has been added. Sections 1.0 "Introduction"; 1.1 "Environmental Review"; 1.2 "Clarifications and Corrections"; 1.3 "Public Comments"; 1.4 "Responses to Comments Format"; and, 1.5 "Additional Documentation" have been added to this

Final IS/MND. Section 5.0 "Response to Comments" has been added to this Final IS/MND and provides response to comments that were receiving during the agency and public review periods. Section 6.0 "Mitigation and Monitoring Program" which provides a matrix of the mitigation measures that would be implemented, the mitigation milestones (timing of when the measure is to be implemented/completed) and agencies/entities responsible for implementing/overseeing the measures, has also been added to this Final IS/MND.

1.3 AGENCY AND PUBLIC REVIEW COMMENTS

The City of West Sacramento circulated the Draft IS/MND of the proposed Project for agency review and public review, for 30 days each. The agency review period commenced on May 2, 2018 and ended on May 31, 2018 while the public comment period commenced on May 23, 2018 and ended on June 22, 2018. The following comment letters were received on the Draft IS/MND (it should be noted that three agency letters and no public comment letters were received):

- United Auburn Indian Community Comment Letter (5/21/18)
- Central Valley Regional Water Quality Control Board (5/24/18)
- State Clearinghouse Review Requirement Completion Letter (6/1/18)

1.4 RESPONSE TO COMMENTS FORMAT

Section 5.0 Response to Comments is organized in the following way:

- The comment letters are included and labeled with a comment code that corresponds to the responses; and,
- A response to each relevant comment follows, organized by comment code.

1.5 ADDITIONAL DOCUMENTATION

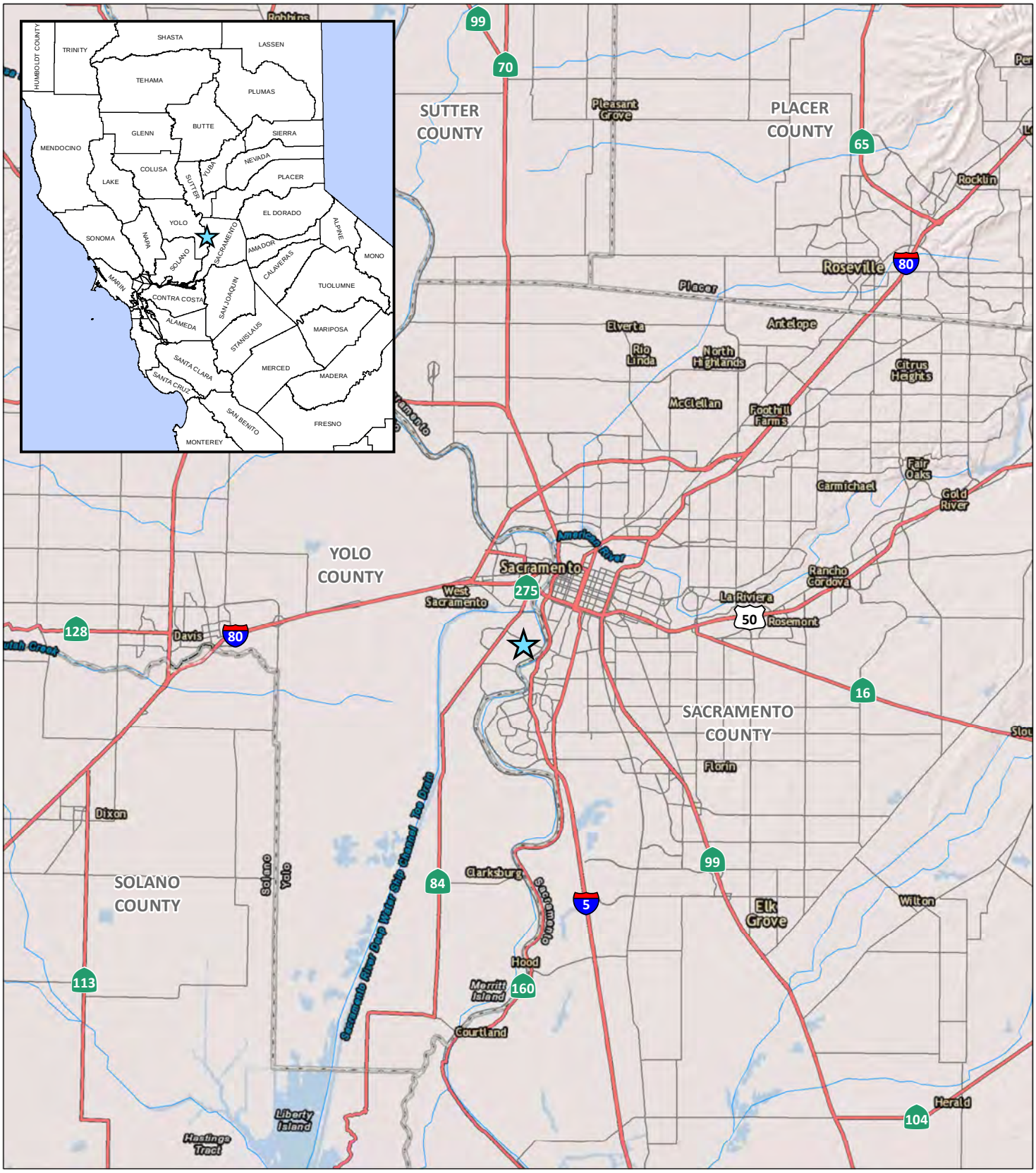
The Final IS/MND includes additional documentation for the public record, including:

- Notice of Completion **(Appendix A)**;
- Notice of Determination **(Appendix B)**;
- State Clearinghouse Compliance Letter Date June 1, 2018 **(Appendix C)**.

2.0 INITIAL STUDY

Project Title:	Linden Acres Water Main Replacement Project
Lead Agency Name and Address:	City of West Sacramento, 1110 West Capitol Avenue, West Sacramento, California 95691
Contact Person and Phone Number:	Mauricio Meza-Pedraza, City of West Sacramento, (916) 617-4645
Project Location:	The Linden Acres Water Main Replacement Project (herein referred to as the proposed Project) is located in West Sacramento, within the Southport Planning Area. The Southport Planning Area lies in the southern half of West Sacramento and is bounded by the Deep Water Ship Channel to the north and west, the Sacramento River to the east, and the city limits to the south. The Project site consists of right-of-way (ROW) (roadway) work and is bounded by Linden Road to the north, Mojave Drive to the west, Trinity Way, and the proposed Liberty Specific Plan to the south, and the proposed Liberty Specific Plan to the east. **Figure 2-1: Regional Location** and **Figure 2-2: Project Location** shows the location of the Project site on a regional and local scale. **Figure 2-2** also shows the location of the proposed Project in comparison to the Liberty Specific Plan area.
Project Sponsor's Name and Address:	City of West Sacramento 1110 West Capitol Avenue West Sacramento, CA 95691
General Plan and Zoning Designation:	Roadway (City Right-of-Way)
Description of Project (Described the whole action involved, including but not limited to later phases of the project, and any secondary support, or off-site features necessary for its implementation):	The purpose of the Project is to replace the existing backyard water mains with new mains in the City of West Sacramento (City) owned roadway within ROW and dedicated easements. The existing water mains (16 inches, 12 inches, 8 inches, and 6 inches in diameter) will be abandoned in place at average depths ranging from 4 to 8 feet deep. The Project anticipates extending a water main to the south of Redwood Avenue, then east to reconnect at the east end of Tamarack Road to complete the water distribution system. It should be noted that this Project would extend into the boundaries of the privately owned Liberty Specific Plan to the east. The Liberty Specific Plan will eventually connect to the proposed Project at Tamarack Road and at the north water line coming east from Bastone Court in order to maintain the water distribution loop system. The water main associated with the proposed Project that extends into the Liberty Specific Plan area will be temporary and abandoned once development of the Liberty Specific Plan commences. The new water main will be placed in the existing roadway sections and will be accessible for future City maintenance. The replacement of water mains will include approximately 11,000 linear feet of 16- and 8-inch pipe with the addition of fire hydrants and service lines (laterals) that will include new water meters. The service laterals consist of 111 pipes that are 0.75 inch in size and 94 pipes that are 1 inch in size. Most of the pipe excavations will be approximately 4 feet deep, with a small section that will be as deep as 10 feet to connect to the existing system. **Figure 2-3: Project Design** shows the design of the proposed Project. The Project will be implemented on the following roads: Linden Road, Mojave Drive, Merced Way, Shasta Way, Carmel Court, Rubicon Way, Ironwood Way, Spruce Street, Redwood Avenue, Alder Way, Tamarack Road, and Cedar Street. Construction of the proposed Project is anticipated to commence in spring 2019 and will last 8 months (170 working days). During construction, affected roadways may be closed to through traffic; however, access by residents will still be permitted. The City of West Sacramento would direct the construction

	contractor to locate construction equipment at staging areas as far from residential units as possible. The construction equipment anticipated to be used includes: Hydrovac vacuum trucks, tractors, a backhoe, a trencher, a loader, a haul truck, an excavator, a compressor, a concrete saw, a concrete mixer truck, jack hammers, an asphalt planer, a trench paver, compactors, rollers, heavy-duty trucks, dump trucks, a street sweeper, a heavy equipment transport truck, a forklift, pickups, and chipping guns.
Surrounding Land Uses and Setting; Briefly Describe the Project's Surroundings:	The Project site is located in a portion of West Sacramento that is urbanized and consists of mostly residential units. The Project area is located approximately 0.42 mile to the east of the Sacramento River and 0.97 mile south of the Deep Water Ship Channel. There is existing agricultural and vacant land to the south and east of the Project site, respectively; however, this area is currently entitled and is part of the proposed Liberty Specific Plan that has currently undergone environmental review.
Other Public Agencies Whose Approval Is Required (i.e., permits, financial approval, or participation agreements):	The City of West Sacramento is the Lead Agency under CEQA and has the primary authority for Project approval. At this time, no regulatory permits are anticipated for the proposed Project.
Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resource Code section 21080.3.1? If so, has consultation begun?	Tribal consultation commenced on June 12, 2017.



LSA

LEGEND

Project Area

FIGURE 2-1

Linden Acres Water Main Replacement Project
West Sacramento, Yolo County, California
LSA Project No. WSA1701

Regional Location

0 2.5 5
MILES

SOURCE: ESRI World Street Map (2016)

I:\WSA1701\GIS\Reports\Cultural Study\WSA1701_Figure1.mxd (6/6/2017)

This page intentionally left blank

LSA

LEGEND

Project Area (109.7 acres)

Liberty Specific Plan Area

N

0 500 1000

FEET

SOURCE: NAIP (2016); City of West Sacramento (2017)

I:\WSA1701\GIS\Reports\PD\Figure2.mxd (3/16/2018)

FIGURE 2-2

Linden Acres Water Main Replacement Project
West Sacramento, Yolo County, California
LSA Project No. WSA1701

Project Location

This page intentionally left blank

LSA

LEGEND

Project Area (109.7 acres)

Parcels

Design

Existing Water Accessory

Right-of-Way

Existing Water Main

Water Fittings

Proposed Water Main

N

0 250 500

FEET

FIGURE 2-3

Linden Acres Water Main Replacement Project
West Sacramento, Yolo County, California
LSA Project No. WSA1701

Project Design

SOURCE: Esri World Imagery (2014); Design - City of West Sacramento (07/2017); Mapping - LSA (07/2017)

I:\WSA1701\GIS\Figure3_design.mxd (7/25/2017)

This page intentionally left blank

2.1 ENVIRONMENTAL FACTORS AFFECTED

The environmental factors checked below would be potentially affected by this Project, involving at least one impact that could be lessened to a level of significance through implementation of mitigation measures.

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

2.2 DETERMINATION

On the basis of this initial evaluation:

☐	I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
☒	I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
☐	I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
☐	I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
☐	I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required

Signature: Mauricio Meza **Date:** 4/23/2018

Printed Name: MAURICIO MEZA-PEDRAZA **For:**

This page intentionally left blank

3.0 EVALUATION OF ENVIRONMENTAL IMPACTS

The following sections of this document provide discussions of the possible environmental impacts of the proposed Project for specific issue areas that have been identified in the *CEQA Statute and Guidelines Appendix G Environmental Checklist Form*. For each issue area, potential impacts are discussed and analyzed in order to determine a level of significance.

As defined by Section 15382 of the *CEQA Guidelines*, a "significant effect" is a "substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by a project, including land, air, water, minerals, flora, fauna, ambient noise, and objects of historic or aesthetic significance." According to the *CEQA Guidelines,* "an economic or social change by itself shall not be considered a significant effect on the environment, but may be considered in determining whether the physical change is significant".

For resource topics that are determined to be potentially significant, a list of mitigation measures is provided at the conclusion of each evaluation. Residual impacts or levels of significance remaining after implementation of the mitigation measures are also provided.

This page intentionally left blank

3.1 AESTHETICS

	Potentially Significant Impact	Less Than Significant Impact with Mitigation	Less Than Significant Impact	No Impact
Would the project:				
a. Have a substantial adverse effect on a scenic vista?	☐	☐	☐	☒
b. Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☐	☒
c. Substantially degrade the existing visual character or quality of the site and its surroundings?	☐	☐	☒	☐
d. Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☐	☐	☒

3.1.1 Environmental Setting

West Sacramento is composed mostly of suburban and rural development and agricultural open space, with some light commercial and industrial development, educational facilities, and riparian corridors. The natural topography of West Sacramento is mostly flat with raised levees and is composed of vegetation in the form of residential landscaping, agricultural crops and hedgerows, and riparian vegetation along the Sacramento River and in swales and drainages throughout rural residential (RR) lands. Residential landscaping and riparian vegetation, when combined with development in West Sacramento, act to restrict views largely to the foreground.

The proposed Project is located in West Sacramento's Northeast Village neighborhood, a well-established urbanized area consisting of single-family residential units, City-owned neighborhood streets, and residential landscaping. The Project site is bounded by Linden Road to the north, Mojave Drive to the west, Trinity Way and the proposed Liberty Specific Plan area to the south, and the proposed Liberty Specific Plan area to the east. Specifically, the Project will be implemented within City-owned right-of-way (ROW) and within dedicated easements along the following roads: Merced Way, Rubicon Way, Shasta Way, Trinity Way, Ironwood Way, Spruce Street, Linden Road, Redwood Avenue, Alder Way, Bastone Court, Tamarack Road, and Cedar Court. The Project site is topographically flat and the only nearby scenic feature is the Sacramento River to the east; however, views of the river are blocked by a levee.

The Project site is not located near a scenic roadway, freeway, or highway as designated by local or State jurisdictions.

3.1.2 Discussion

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

No Impact. West Sacramento, in which the Project is located, is topographically flat and is not located near a scenic vista. Implementation of the proposed Project would not block views of scenic

vistas, as there are none in the area. As such, **no impact** would occur under this threshold. No mitigation would be required.

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 is located in an urbanized portion of West Sacramento and is not located within, adjacent to, or near a State scenic highway. There are no federal, State, or locally designated scenic roadways within West Sacramento; therefore, implementation of the proposed Project would not have an impact on scenic resources within a designated scenic highway. **No impact** would occur, and no mitigation would be required.

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

Less than Significant Impact. The proposed Project consists of abandonment of the existing water mains along Merced Way, Rubicon Way, Shasta Way, Trinity Way, Ironwood Way, Spruce Street, and Linden Road and installation of new water mains and service laterals. During construction, the visual character or quality of the Project site may temporarily change compared to existing conditions due to trenching in the roadway ROW to install the new water mains and laterals. Implementation of the proposed Project would not require the removal of existing trees or natural vegetation as work would be completed in the street ROWs. The portion of the Project that is located within the Liberty Specific Plan would not require the removal of existing trees (as none exist) where the new water main would be placed. Once completed, the Project site will resemble the existing visual character and quality of the site. The area where the Project site is located is urbanized and does not have outstanding visual character or quality from an aesthetic viewpoint. As such, implementation of the Project would not substantially degrade the existing visual character or quality of the site and surroundings, and impacts would be **less than significant**. No mitigation would be required.

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

No Impact. The proposed Project includes the abandonment of deteriorating water mains and installation of a new water mains, service laterals, and meters to serve existing residential units. During construction and operation, the Project would not generate increased light or glare in the area above what is currently experienced under existing conditions. Neither the materials used for implementation of the Project nor the new lighting fixtures associated with the Project would be reflective. The Project would not create a new source of substantial light or glare that would adversely affect daytime or nighttime views in the area; as such, **no impact** would occur. No mitigation would be required.

3.1.3 Mitigation Measures

No mitigation is required.

3.2 AGRICULTURAL AND FORESTRY RESOURCES

	Potentially Significant Impact	Less Than Significant Impact 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. Would the project:				
a. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☐	☒
b. Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☒
c. Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	☐	☐	☐	☒
d. Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒
e. Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	☐	☐	☐	☒

3.2.1 Environmental Setting

The proposed Project would be implemented within an urbanized area of West Sacramento. The California Department of Conservation Farmland Mapping and Monitoring Program (FMMP) website was accessed for Yolo County (California Department of Conservation 2016) to determine if Important Farmland (defined by the FMMP as Prime Farmland, Farmland of Statewide Importance, Unique Farmland, or Farmland of Local Importance) existed within the Project site. The California Department of Conservation defines these Important Farmland categories as follows:

- **Prime Farmland:** Farmland with the best combination of physical and chemical features able to sustain long-term agricultural production. This land has the soil quality, growing season, and moisture supply needed to produce sustained high yields. The land must have been used for irrigated agricultural production at some time during the 4 years prior to the mapping date.

- **Farmland of Statewide Importance:** Farmland similar to Prime Farmland but with minor shortcomings, such as greater slopes or less ability to store soil moisture. The land must have

been used for irrigated agricultural production at some time during the 4 years prior to the mapping date.

- **Unique Farmland:** Farmland of lesser-quality soils used for the production of the State's leading agricultural crops. This land is usually irrigated, but it may include non-irrigated orchards or vineyards as found in some climatic zones in California. The land must have been cropped at some time during the 4 years prior to the mapping date.

- **Farmland of Local Importance:** Land of importance to the local agricultural economy as determined by each county's board of supervisors and a local advisory committee. The County of Yolo defines this category as cultivated farmland with soils that meet the criteria for Prime Farmland or Farmland of Statewide Importance, except that the land is not presently irrigated, and other non-irrigated farmland.

The FMMP also defines the following categories that are not considered Important Farmland:

- **Grazing Land**: Land on which the existing vegetation is suited to the grazing of livestock. This category was developed in cooperation with the California Cattlemen's Association, the University of California Cooperative Extension, and other groups interested in the extent of grazing activities.

- **Urban and Built-Up Land:** Land occupied by structures with a building density of at least one unit to 1.5 acres, or approximately six structures to a 10-acre parcel. This land is used for residential, industrial, commercial, construction, institutional, public administration, railroad and other transportation yards, cemeteries, airports, golf courses, sanitary landfills, sewage treatment, water control structures, and other developed purposes.

- **Other Land:** 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 40 acres. Vacant and nonagricultural land surrounded on all sides by urban development and greater than 40 acres is mapped as Other Land.

The FMMP designates the Project site as Urban and Built-Up Land. Farmland of Local Importance is located to the east of the Project site; however, the eastern extent of the Project (the water main extending into the Liberty Specific Plan) would not be located in land designated as Farmland of Local Importance by the FMMP.

There is currently no active agricultural production within the Project site. The Liberty Specific Plan area located to the east and south of the Project site is currently under agricultural production with alfalfa/hay crops. Additionally, none of the land within or near the Project site is zoned for agricultural use.

The California Land Conservation Act of 1965, commonly referred to as the Williamson Act, allows local governments to enter into contracts with private landowners for the purpose of restricting specific parcels of land to agricultural, or related open space use. In return, landowners receive

property tax assessments that are much lower than normal because they are based on farming and open space uses as opposed to full market value. Review of the Williamson Act land within Yolo County and West Sacramento indicates there are no parcels within the Project site under a Williamson Act contract.

The City of West Sacramento and specifically the Project site do not have land designated as forest land resources.

3.2.2 Discussion

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 would be implemented in an urbanized portion of West Sacramento that is developed with a long-established neighborhood. The California Department of Conservation Farmland Mapping and Monitoring Program designated the land on the Project site as Urban and Built-Up Land. Farmland of Local Importance (defined as Prime or Statewide soils which are presently not irrigated or cultivated) are located to the south and east of the Project site where the Liberty Specific Plan will be developed; however, the proposed Project would not extend into areas that are designated as Farmland of Local Importance. As such, **no impacts** to Important Farmland would occur with implementation of the proposed Project. No mitigation measures would be required.

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

No Impact. The proposed Project will be developed within the roadway ROWs not zoned for agricultural use. The Project site is currently zoned Residential One Family (R-1-B) and the portion where the Project extends into the Liberty Specific Plan area is zoned as RR. There is no land within the Project site that is designated as Williamson Act Land. **No impacts** to existing zoning for agricultural use or Williamson Act Contracted land would occur with implementation of the proposed Project. As such, no mitigation measures would be required.

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

No Impact. The Project site is currently zoned as Residential One Family (R-1-B), and the portion where the Project extends into the Liberty Specific Plan area is zoned as RR. As such, the proposed Project would not conflict with or cause rezoning of forest land, timberland, or timberland zoned Timberland Production. **No impacts** would occur and mitigation measures would not be required.

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

No Impact. The proposed Project is in an urbanized area of West Sacramento. Forest land does not exist within or near the Project site; therefore, implementation of the Project would not result in the loss of forest land or conversion of forest land to nonforest use. **No impacts** would occur and mitigation measures would not be required.

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

No Impact. The proposed Project is located in an urbanized portion of West Sacramento and would not result in the conversion of forest land to nonforest use. The portion of the Project site that extends into the Liberty Specific Plan area is currently under agricultural production and occupied by an alfalfa/hay field. Implementation of the proposed Project would require temporary disruption to this area during trench digging and water main installation, but the area would be returned to pre-construction conditions after construction activities are complete. Additionally, the loss of this land has already been analyzed in the Liberty Specific Plan Environmental Impact Report (EIR), and the land is slated to become zoned for development. As such, the proposed Project would not change the zoning or land use status of agricultural land and **no impacts** would occur. Mitigation measures would not be required.

3.2.3 Mitigation Measures

No mitigation is required.

3.3 AIR QUALITY

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

3.3.1 Environmental Setting

Both State and federal governments have established health-based ambient air quality standards for six criteria air pollutants:[1] carbon monoxide (CO), ozone (O_3), nitrogen dioxide (NO_2), sulfur dioxide (SO_2), lead, and suspended particulate matter. In addition, the State has set standards for sulfates, hydrogen sulfide, vinyl chloride, and visibility-reducing particles. These standards are designed to protect the health and welfare of the populace with a reasonable margin of safety. Two criteria pollutants, O_3 and NO_2, are considered regional pollutants because they (or their precursors) affect air quality on a regional scale. Pollutants such as CO, SO_2, and lead are considered local pollutants that tend to accumulate in the air locally.

The primary pollutants of concern in the Project area are O_3, CO, and particulate matter. Significance thresholds established by an air district are used to manage total regional and local emissions within an air basin based on the air basin's attainment status for criteria pollutants. These emission thresholds were established for individual development projects that would contribute to regional and local emissions and could adversely affect or delay the air basin's projected attainment target goals for non-attainment criteria pollutants.

Because of the conservative nature of the significance thresholds and the basin-wide context of individual development project emissions, there is no direct correlation between a single project and localized air quality-related health effects. One individual project that generates emissions

[1] Criteria pollutants are defined as those pollutants for which the federal and State governments have established ambient air quality standards, or criteria, for outdoor concentrations in order to protect public health.

exceeding a threshold does not necessarily result in adverse health effects for residents in the project vicinity. This condition is especially true when the criteria pollutants exceeding thresholds are those with regional effects, such as O_3 precursors like nitrogen oxides (NO_X) and reactive organic gases (ROG).

Occupants of facilities such as schools, day-care centers, parks and playgrounds, hospitals, and nursing and convalescent homes are considered to be more sensitive than the general public to air pollutants because these population groups have increased susceptibility to respiratory disease. Persons engaged in strenuous work or exercise also have increased sensitivity to poor air quality. Residential areas are considered more sensitive to air quality conditions than commercial and industrial areas because people generally spend longer periods of time at their residences, with greater associated exposure to ambient air quality conditions. Recreational uses are also considered sensitive compared to commercial and industrial uses due to greater exposure to ambient air quality conditions associated with exercise.

3.3.2 Regulatory Setting

The Project is located in West Sacramento and is within the jurisdiction of the Yolo-Solano Air Quality Management District (YSAQMD), which regulates air quality throughout Yolo County and the northeast portion of Solano County. As shown in **Table 3.3-1: Yolo-Solano Air Quality Management District Air Quality Attainment Status**, the YSAQMD is under State nonattainment status for the O_3 and particulate matter less than or equal to 10 microns in diameter (PM_{10}) standards. The YSAQMD is classified as nonattainment for the federal O_3 8-hour and 1-hour standards and nonattainment for the federal particulate matter less than or equal to 2.5 microns in diameter ($PM_{2.5}$) standard.

Table 3.3-1: Yolo-Solano Air Quality Management District Air Quality Attainment Status

Pollutant	Federal	State
Carbon Monoxide	Attainment	Attainment
Lead	Attainment	Attainment
Nitrogen Dioxide	Attainment	Attainment
Particulate Matter (PM_{10})	Attainment	Non-attainment
Particulate Matter ($PM_{2.5}$)	Non-attainment	Non-attainment
Ozone (8-hour)	Non-attainment	Non-attainment
Ozone (1-hour)	Non-attainment	Non-attainment
Sulfur Dioxide	Attainment	Attainment

Source: Yolo-Solano Air Quality Management District (2016).

Air quality standards for the proposed Project are regulated by the YSAQMD's *Handbook for Assessing and Mitigating Air Quality Impacts* (YSAQMD 2007). **Table 3.3-2**: **Thresholds of Significance for Criteria Pollutants of Concern** shows the project-level thresholds of significance as established by the YSAQMD for PM_{10}, CO, ROG, and NO_X. The thresholds apply to both construction and operational impacts.

Table 3.3-2: Thresholds of Significance for Criteria Pollutants of Concern

Pollutant	Thresholds of Significance
ROG	10 tons per year
NO_X	10 tons per year
PM_{10}	80 pounds per day
CO	Violation of a state ambient air quality standard for CO

Source: Yolo-Solano Air Quality Management District (2007).
CO = carbon monoxide
NO_X = nitrogen oxides
PM_{10} = particulate matter less than or equal to 10 microns in diameter
ROG =reactive organic gases

3.3.3 Discussion

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

Less than Significant Impact. The Project is located within the jurisdiction of the YSAQMD, which is part of the Sacramento Federal Non-Attainment Area as designated by the United States Environmental Protection Agency (USEPA). Accordingly, the City of West Sacramento is included in the Sacramento Regional State Implementation Plan (SIP), which was prepared by the Sacramento Metropolitan Air Quality Management District (SMAQMD) in conjunction with the YSAQMD. The Air Quality Attainment Plans applicable to the Project site are the SMAQMD's 8-Hour Ozone Plan (SMAQMD 2013a) and $PM_{2.5}$ Implementation/Maintenance Plan (SMAQMD 2013b).

The 8-Hour Ozone Plan demonstrates how existing and new control strategies will provide the necessary future emission reductions to meet the federal Clean Air Act requirements for reasonable further progress and attainment of the 1997–1998 O_3 National Ambient Air Quality Standards (NAAQS) for the Sacramento region. The $PM_{2.5}$ Plan shows that the region has met the redesignation requirements and requests that the USEPA redesignate the area to attainment. The plan also analyzes measures that were implemented to achieve attainment and that will provide for maintenance of the $PM_{2.5}$ NAAQS.

As indicated in the analysis that follows, the proposed Project would result in less than significant operational and construction-period emissions. Therefore, the proposed Project supports the goals of the applicable AQAPs and SIP and would not conflict with any measures identified in the plans or designed to bring the region into attainment. The proposed Project would not hinder the region from attaining the goals outlined in the AQAPs or SIP. The proposed Project would not hinder or disrupt implementation of the applicable AQAPs or SIP; as such, impacts would be **less than significant.**

b. Would the Project violate any air quality standard or contribute substantially to an existing or projected air quality violation?

Less than Significant Impact with Mitigation. The following provides a discussion on potential construction and operational impacts to air quality due to implementation of the proposed Project.

Construction Impacts. The proposed Project could result in temporary air quality impacts as ground disturbance occurs from installation of the new water main, laterals, and water meters. Given the nature of the proposed Project and anticipated activities, daily emissions from construction equipment operation, vehicles transporting equipment and workers, and hauling materials would be minimal. These emissions would be temporary and limited to the immediate area around the Project site, and would not be anticipated to result in an exceedance of construction-level thresholds established by the YSAQMD. Off-road equipment used at the Project site would be required to adhere to the statewide In-Use Off-Road Diesel-Fueled Fleets Regulation, including limits on idling of all construction equipment to 5 minutes or less. Additionally, all portable equipment with internal combustion engines over 50 horsepower would obtain a YSAQMD Permit to Operate or a valid statewide Portable Equipment Registration Program issued by the California Air Resources Board (CARB).

A quantitative analysis of construction emissions for the proposed Project using the Road Construction Emissions Model (RoadMod), Version 8.1.0, has been conducted. Emissions are compared to the YSAQMD's ROG, NO_X, and PM10 thresholds. **Table 3.3-3: Project Construction Emissions** shows that emissions of ROG, NO_X, and PM_{10} would not be exceeded due to contribution of construction emissions associated with the proposed Project.

Table 3.3-3: Project Construction Emissions

	ROG (tons/year)	NO_X (tons/year)	PM_{10} (maximum lbs/day)	$PM_{2.5}$ (maximum lbs/day
Projected Construction Emissions	0.45	4.68	24.29	8.05
YSAQMD Thresholds of Significance	10.0	10.0	80.0	NA
Exceeds Threshold?	**No**	**No**	**No**	**No**

Source: LSA June 2017.
lbs/day = pounds per day
NO_X = nitrogen oxides
$PM_{2.5}$ = particulate matter less than or equal to 2.5 microns in diameter
PM_{10} = particulate matter less than or equal to 10 microns in diameter
ROG =reactive organic gases
YSAQMD = Yolo-Solano Air Quality Management District

In addition to exhaust emissions, the effects of construction activities would include increased dust and locally elevated levels of particulate matter downwind of construction areas. According to the YSAQMD's *CEQA Handbook* (YSAQMD 2007), even projects not exceeding district thresholds should implement best management practices (BMP) to reduce fugitive dust emissions and avoid localized health impacts. Common measures include watering, chemical stabilization of soils or stockpiles, and reducing surface wind speeds with windbreaks. Implementation of **Mitigation Measure MM AQ-1**, as identified below, would ensure compliance with YSAQMD-recommended BMPs for fugitive dust control and would reduce impacts. As such, with implementation of **Mitigation Measure MM AQ-1**, impacts would be **less than significant**.

Operational Impacts. Long-term air emission impacts are associated with stationary and mobile sources. Stationary source emissions typically result from the consumption of natural gas and

electricity. Mobile source emissions typically result from vehicle trips and result in air pollutant emissions affecting the entire air basin. As discussed above, the proposed Project includes the installation of new water mains, laterals, and water meters. Once operational, the Project would not result in an increase in the generation of vehicle trips that would increase air pollutant emissions. The Project would not be a source of stationary source emissions. Therefore, operation of the proposed Project would not result in any long-term operational emissions. Impacts related to operation of the proposed Project would therefore be **less than significant**.

Localized CO Impacts. According to the YSAQMD's *CEQA Handbook,* a screening-level approach originally developed by the San Joaquin Valley Air Pollution Control District can be used to estimate whether or not a project's traffic impact would cause a potential CO hotspot at any given intersection. If either of the following criteria is true of any intersection affected by project traffic, the project can be said to have the potential to create a violation of the CO standard:If a traffic study prepared for a project indicates that the peak-hour level of service (LOS) on one or more streets or at one or more intersections in the vicinity of said project would be reduced to an unacceptable LOS (typically LOS E or F).

- A traffic study prepared for a project indicates that the project would substantially worsen an existing peak-hour LOS F on one or more streets or at one or more intersections in the project vicinity. "Substantially worsen" includes situations where delay would increase by 10 seconds or more when project-generated traffic is included.

As discussed above, the proposed Project would include the installation of water mains, laterals, and water meters. Once operational, the proposed Project would not result in an increase in vehicle trips and therefore would not exceed the YSAQMD's CO hotspot screening criteria. The proposed Project would not result in localized impacts, including localized CO impacts, and impacts would therefore be **less than significant**.

c. Would the Project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non- attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?

Less Than Significant Impact. CEQA defines a cumulative impact as two or more individual effects that, when considered together, are considerable or compound or increase other environmental impacts. According to the YSAQMD, project emissions that are not consistent with the AQAPs or SIP, or that exceed YSAQMD thresholds of significance will have a significant cumulative impact unless offset.

As described above in Thresholds a) and b), construction and operation of the proposed Project would not conflict with the applicable AQAPs or SIP, or result in significant levels of criteria pollutants or pollutant precursors. Therefore, the Project would not result in a cumulatively considerable contribution to regional air quality impacts, and this impact would be **less than significant**.

d. Would the Project expose sensitive receptors to substantial pollutant concentrations?

Less Than Significant Impact. According to the YSAQMD's *CEQA Handbook* (YSAQMD 2007), a sensitive receptor is generically defined as a location where human populations (especially children, seniors, or sick persons) are found, and where there is a reasonable expectation of continuous human exposure according to the averaging period for the NAAQS (e.g., 24-hour, 8-hour, 1-hour). Examples of sensitive receptors include residences, hospitals, and schools.

In 1998, the CARB identified particulate matter from diesel-fueled engines as a toxic air contaminant (TAC). The CARB has completed a risk management process that identifies potential cancer risks for a range of activities using diesel-fueled engines (CARB 2000). High-volume freeways, stationary diesel engines, and facilities attracting heavy and constant diesel vehicle traffic (e.g., distribution centers and truck stops) were identified as having the highest associated risk.

Health risks from TACs are a function of both concentration and duration of exposure. Exposure of receptors to substantial concentrations of TACs and $PM_{2.5}$ could occur from the following situations:

- Siting a new TAC and/or $PM_{2.5}$ source (e.g., diesel generator, truck distribution center, or freeway) near existing or planned receptors; and
- Siting a new receptor near an existing source of TAC and/or $PM_{2.5}$ emissions.

Construction Impacts. During construction, various diesel-powered vehicles and equipment would be in use. Unlike freeways and stationary sources, construction diesel emissions are temporary, affecting an area for a period of days or perhaps weeks, whereas health risks are based on a 70-year risk duration. Additionally, construction-related emissions sources are mobile and transient in nature, and the emissions occur within the Project site. Utility replacement projects are also typically linear in nature, with construction only occurring at one location for a few days before moving on to another location, thereby exposing each receptor to a fraction of the construction duration.

The proposed Project is located in a developed neighborhood of West Sacramento with single-family residential units located directly adjacent to the roads where Project implementation will occur. Construction activities occurring on the road ROW within the Project site may expose these residents to airborne particulates and fugitive dust, as well as a small quantity of pollutants associated with the use of construction equipment (e.g., diesel-fueled vehicles and equipment). However, given the short duration of construction activities relative to the 70-year health risk exposure analysis period and the minimal nature of construction activities for the proposed Project, these sensitive receptors would not be exposed to substantial pollutant concentrations. In addition, construction contractors would be required to implement the BMPs required in **Mitigation Measure MM AQ-1**, which would reduce construction emissions. Therefore, health risks associated with construction of the proposed Project would be **less than significant** with implementation of mitigation.

Operational Impacts. The proposed Project includes the installation of new water mains, laterals, and water meters (the existing water infrastructure will be abandoned in place). Once operational,

the Project would not increase emissions of TACs or expose new sensitive receptors to TAC or $PM_{2.5}$ emissions. Therefore, health risks associated with operation of the proposed Project would be **less than significant**.

e) Would the Project create objectionable odors affecting a substantial number of people?

Less Than Significant Impact. Some objectionable odors may be generated from the operation of diesel-powered construction equipment and/or vehicles during the Project construction period. Additionally, during the short-term construction period, odors may occur related to decaying organic material disturbed during the excavation process to install the new water mains, laterals, and meters. However, these odors would be short-term in duration, would disperse quickly, and would not result in long-term impacts to the nearby sensitive receptors. Long-term operation of the proposed Project would not generate any new vehicle trips or be a permanent source of odors; therefore, increases in permanent odors would not result from Project operation. Impacts would be **less than significant**.

3.3.4 Mitigation Measures

The following mitigation measure would be implemented to reduce impacts under Threshold b), above:

MM AQ-1: The City of West Sacramento (City) or construction contractor shall implement the following measures at the Project site:

- Water all active construction sites at least twice daily. The frequency shall be based on the type of operation, soil, and wind exposure.
- Haul trucks shall maintain at least 2 feet of freeboard.
- Cover all trucks hauling dirt, sand, or loose materials.
- Apply nontoxic binders (e.g., latex acrylic copolymer) to exposed areas after cut and fill operations and hydroseed the area as applicable.
- Apply chemical soil stabilizers on inactive construction areas (disturbed lands within construction projects that are unused for at least 4 consecutive days).
- Plant tree windbreaks on the windward perimeter of construction projects if adjacent to open land.
- Plant vegetative ground cover in disturbed areas as soon as possible.
- Cover inactive storage piles.
- Sweep streets if visible soil material is carried out from the construction site.
- Treat accesses to a distance of 100 feet from the paved road with a 6- to 12-inch layer of wood chips or mulch or with a 6-inch layer of gravel.

This page intentionally left blank

3.4 BIOLOGICAL RESOURCES

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

3.4.1 Environmental Setting

The Project site is located in an established neighborhood (Northeast Village) of West Sacramento. A portion of the proposed Project extends into the Liberty Specific Plan area, which has already been environmentally cleared through approval of an EIR in August 2017. As such, the Biological Resources section of the Liberty Specific Plan EIR was used to evaluate the portion of the Project that would extend into the site.

3.4.1.1 Habitat/Land Cover

The Project site is located in California's Central Valley, which is characterized by large flat areas of agricultural farmland and development. The proposed Project site consists primarily of an existing urban neighborhood but also includes a narrow sliver of adjacent agricultural land.

The Project site is located in an existing neighborhood and is mainly developed, including established roadways (Linden Road and all neighborhood roads), sidewalks, parking areas, and one

park. There is an abundance of trees within the Project site. The narrow area of agricultural land within the Project site consists of row crops.

3.4.1.2 Sensitive Species

A list of sensitive wildlife and plant species potentially occurring within the Project site was compiled to evaluate the potential impacts resulting from Project construction. Sources used to compile the list include the California Natural Diversity Database (CNDDB), the United States Fish and Wildlife Service (USFWS) online special-status species list, and the California Native Plant Society (CNPS) Online Edition. The species lists obtained from the CNDDB, CNPS, and USFWS, as well as the Biological Resources section of the Liberty Specific Plan EIR, were reviewed to determine which species could potentially occur on the Project site.

No special-status plants are expected to occur on the Project site, and the Project site has no suitable habitat for special-status fish species.

The following 13 special-status wildlife species were identified as having a moderate to high potential to occur within the Liberty Specific Plan study area and were thus reviewed for their potential to occur within the Project site as a whole: valley elderberry longhorn beetle (*Desmocerus californicus dimorphus*), western pond turtle (*Actinemys marmorata*), giant garter snake (*Thamnophis gigas*), tricolored blackbird (*Agelaius tricolor*), western burrowing owl (*Athene cunicularia hypugaea*), Swainson's hawk (*Buteo swainsoni*), northern harrier (*Circus cyaneus*), white-tailed kite (*Elanus leucurus*), loggerhead shrike (*Lanius ludovicianus*), song sparrow (Modesto population) (*Melospiza melodia*), purple martin (*Progne subis*), pallid bat (*Antrozous pallidus*), and western red bat (*Lasiurus blossevillii*).

There is no suitable habitat on the Project site for three of the species listed above:

- valley elderberry longhorn beetle (there are no elderberry shrubs present within the site)
- western pond turtle (there are no aquatic features present within the site)
- giant garter snake (there are no aquatic features present within the site)

For four of the bird species listed above, suitable foraging habitat is located on the Project site, but there is no suitable nesting habitat present.

- tricolored blackbird (there are no emergent wetlands or thorny brambles near water within the site)
- northern harrier (there are no emergent wetlands or tall grasslands within the site)
- song sparrow (Modesto population) (there are no emergent wetlands or thorny brambles near water within the site)
- purple martin (there are no old-growth trees or freeway overpasses within the site)

The remaining six special-status wildlife species could potentially nest or roost on the Project site:

- western burrowing owl (agricultural fields and ruderal areas with small mammal burrows provide suitable nesting and foraging habitat within the Project site)
- Swainson's hawk (agricultural fields with scattered trees provide suitable nesting and foraging habitat within the Project site)
- white-tailed kite (agricultural fields with scattered trees provide suitable nesting and foraging habitat within the Project site)
- loggerhead shrike (agricultural fields with scattered trees provide suitable nesting and foraging habitat within the Project site)
- pallid bat (trees throughout the Project site provide potential roosting habitat)
- western red bat (trees throughout the Project site provide potential roosting habitat)

3.4.1.3 Wildlife Movement Corridors

Wildlife movement corridors are linear habitats that function to connect two or more areas of significant wildlife habitat. These corridors may function on a local level as links between small habitat patches (e.g., streams in urban settings) or may provide critical connections between regionally significant habitats (e.g., deer movement corridors). No evidence of a substantial wildlife movement corridor was identified within the Project site.

3.4.1.4 Aquatic Resources

There are no aquatic resources within the Project site. The Sacramento River is within 0.25 mile of the Project site, but there are no aquatic features connecting the river to the site. The Project will not encroach into the Sacramento River corridor.

3.4.2 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 identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?

Less than Significant Impact with Mitigation. The Project activities would occur primarily within existing roadways located in the Northeast Village subdivision, except for an approximately 700-foot section of water main located in the adjacent agricultural field at the southeast corner of the subdivision. Per the Liberty Specific Plan EIR (City of West Sacramento Community Development Department 2017), suitable burrows for burrowing owl were identified in the agricultural field adjacent to Northeast Village; however, it is unknown whether suitable burrows occur at or near the location of the 700-foot section of water main associated with the proposed Project. Consequently, it cannot be concluded that this species could not occur within the Project site; therefore, this

species could potentially be affected by the Project if present. Implementation of **Mitigation Measure MM-BIO-1** would reduce potential impacts to burrowing owl to **less than significant.**

Installation of the approximately 700-foot water line in the agricultural field would result in a temporary loss of potential foraging habitat for several bird species; however, since the impact would be temporary, no mitigation is proposed. No trees would be removed during construction; therefore, nesting birds and roosting bats would not be affected.

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

No Impact. There are no sensitive natural communities within the Project site. The Sacramento River, located to the east of the Project site, provides both sensitive terrestrial and aquatic habitats; however, the Project would not encroach into the Sacramento River corridor. The primary habitats in the Project area, not including paved surfaces or structures, consist of urban residential landscaping, agricultural, and ruderal/disturbed areas. **No impact** would occur.

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

No Impact. There are no aquatic features within the Project site. As such, **no impact** would occur with implementation of the proposed Project.

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. No evidence of substantial wildlife movement corridors was identified in the Project site. The Project area is heavily impacted by human activity (existing urban development, agriculture, traffic, etc.) and provides no connectivity with natural habitat in the vicinity. As such, **no impact** would occur with implementation of the proposed Project.

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

No Impact. The only local policy that may be applicable to the proposed Project is the West Sacramento Tree Preservation Ordinance described in Chapter 8.24 of the West Sacramento Municipal Code. The Project would not remove any trees during construction of the Project; as such, **no impact** would occur.

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

No Impact. There are no Habitat Conservation Plans or Natural Community Conservation Plans applicable to the Project. As such, implementation of the proposed Project would not conflict with any Habitat Conservation Plans, Natural Community Conservation Plans, or local/regional/State Habitat Conservation Plans. No impacts would occur.

3.4.3 Mitigation Measures

The following mitigation measure shall be implemented to reduce potential impacts to burrowing owls during Project construction.

MM-BIO-1: The measures listed below shall be implemented to mitigate potential impacts to western burrowing owl:

- Preconstruction surveys for western burrowing owl shall be conducted by a qualified biologist in accordance with the California Department of Fish and Wildlife's (CDFW) 2012 Staff Report on Burrowing Owl Mitigation.
- If burrowing owls are identified during the preconstruction survey, passive exclusion shall be implemented per CDFW's 2012 Staff Report on Burrowing Owl Mitigation (including avoidance of occupied burrows during the breeding season [February 1 to August 31]).
- Following construction, all areas temporarily impacted during Project construction shall be restored to pre-construction contours (if necessary) and revegetated with native species as specified in the table below:

Native Species Mix

Scientific Name	Common Name	Rate (lbs/acre)	Minimum Percent Germination
Artemisia douglasiana	Mugwort	2.0	50
Bromus carinatus carinatus	California brome	5.0	85
Elymus trachycaulus	Slender wheatgrass	2.0	60
Elymus X triticum	Regreen	10.0	80
Eschscholzia californica	California poppy	2.0	70
Hordeum brachyantherum	California barley	2.0	80
Lupinus bicolor	Bicolored lupine	4.0	80

lbs/acre = pounds per acre

This page intentionally left blank

3.5 CULTURAL RESOURCES

	Potentially Significant Impact	Less Than Significant Impact with Mitigation	Less Than Significant Impact	No Impact
Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?	☐	☒	☐	☐
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	☐	☒	☐	☐
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☒	☐	☐
d) Disturb any human remains, including those interred outside of formal cemeteries?	☐	☒	☐	☐

3.5.1 Environmental Setting

CEQA applies to all discretionary projects undertaken or subject to approval by the State's public agencies. CEQA states that it is the policy of the State of California to "take all action necessary to provide the people of this state with… historic environmental qualities… and preserve for future generations examples of the major periods of California history". Under the provisions of CEQA, "A project with an effect that may cause a substantial adverse change in the significance of an historical resource is a project that may have a significant effect on the environment."

CEQA requires that historical resources and unique archaeological resources be taken into consideration during the CEQA planning process. If feasible, adverse effects to the significance of historical resources must be avoided or mitigated. CEQA requires that all feasible mitigation be undertaken even if it does not mitigate impacts to a less than significant level.

3.5.1.1 Literature Review

Publications, maps, and aerial photographs were reviewed for archaeological, ethnographic, historical, and environmental information about the Project site and vicinity. The purpose of this review was to: (1) identify cultural resources within the Project site, and (2) identify the potential for the Project site to contain such resources.

Paleontological and geological literature relevant to the Project site and vicinity were also reviewed. The Project site is situated on a Late Holocene Basin (2,000 to 150 years old). Holocene Basin deposits are made up of thick deposits of mixed alluvium put in place during seasonal flooding episodes and stream deposition from the Sacramento River. These deposits include terrace, valley, and floodplain deposits and are made up of mixed sediments including sand, silt, and clay derived from sedimentary, igneous, and metamorphic sources. Holocene-aged deposits are considered to have very high sensitivity for buried archaeological sites. The Project site is further underlain by Pliocene Orinda Formation deposits (2.6 to 5.3 million years old) and Pleistocene to Late Pliocene Santa Clara Formation deposits (10,000 to 5.3 million years old). The Orinda Formation and Santa Clara Formation are known to contain fossils.

Literature and archival review identified two previously recorded cultural resources within the Project site: one prehistoric archaeological site (CA-YOL-18) and one historic-period built environment cultural resource (P-57-001144). See below for a description of these resources.

Field Review. A field review of the Project site was conducted on February 1, 2018, to identify any cultural resources in the Project site and also to ensure that the most current baseline conditions of the one built-environment historical resource within the Project site was considered.

LSA archaeologists conducted a presence/absence excavation to support this study on February 1, and 8, 2018. The purpose of the excavation was to determine whether the site, CA-YOL-18, extended into the Project's Area of Direct Impact. Excavation included six trenches and six hand augers. Trenches were excavated by backhoe equipment with a 0.6-meter (24-inch) bucket. The trenches were distributed within the Area of Direct Impact closest to the estimated location of CA-YOL-18. All trenching activity was monitored by two archaeologists and one to two tribal cultural monitors. Soil was removed 10 to 20 centimeters (cm) at a time, dispersed on the ground surface for inspection by the archaeologists and tribal monitor(s), and portion-sampled through 0.6 cm (0.25-inch) mesh screens. LSA also conducted hand auger excavations within the City-owned road ROW within the Project site. A total of six hand auger excavations were distributed along the proposed water main and laterals in those areas most likely to contain deposits associated with CA-YOL-18. Each auger bore measured 10 cm (3.9 inches) in width and was excavated to a depth of 140 cm below surface. From 140 to 157 cm below surface, auger bores measured 5 cm (1.9 inches) in width. Soil was removed 10 to 20 cm at a time and was screened and inspected by tribal cultural monitors. One trench identified a butchered cow bone and a basalt flake within mixed fill. One auger identified a butchered pig bone fragment that may be modern or historic. No intact cultural resource deposits or archaeological features were identified during the archaeological testing.

3.5.1.2 Consultation and Outreach

Native American Heritage Commission. On June 6, 2017, LSA emailed a letter describing the Project and a map depicting the Project site to the Native American Heritage Commission (NAHC) in Sacramento requesting a review of its Sacred Lands File for any Native American cultural resources that might be affected by the proposed Project. The NAHC is the official State repository of Native American sacred site location records in California. On June 12, 2017, NAHC Staff Services Analyst Sharaya Souza responded via email, saying that "Archaeological sites and Tribal Cultural Resources were identified in the project areas provided" and suggesting that LSA contact the Native American tribes listed in the attached response letter for more information about the resources.

Native American Tribal Organizations. The City conducted initial tribal outreach for the Project on June 12, 2017. The purpose of this outreach was to identify sites of Native American interest or concern that may be impacted by the proposed Project and to solicit opinions for avoiding or mitigating potential impacts to such sites. The City maintains a notification list for the Project area of all tribes that have requested to be consulted pursuant to Public Resources Code (PRC) 21080.3.1(b)(1) and Chapter 532 Statutes of 2014 (i.e., Assembly Bill [AB] 52). Two Native American tribal groups are currently on the City's Notice List. LSA, on behalf of the City, mailed a letter describing the Project, the Project location, known cultural and/or historic records, City contact information, and a map indicating the approximate location of the Project site.

On June 27, 2017, LSA made follow-up telephone calls to those tribes since no response was received. The following is a summary of the Native American coordination conducted to date:

- **Gene Whitehouse, Chairperson, United Auburn Indian Community of the Auburn Rancheria (UAIC):** LSA called Chairperson Whitehouse on June 27, 2017. The UAIC receptionist, Pam, took a message and said she would provide the information to his assistant, who would then relay the information to Chairperson Whitehouse. On July 6, 2017, Cherilyn Neider called LSA, saying that UAIC's records did not show receipt of the original letter and requesting a Project schedule and geographic information system shapefile of the Project area. LSA emailed her the original letter sent on June 12, 2017, to Chairperson Whitehouse and relayed Ms. Neider's requests to the City. UAIC, the City, and LSA met on August 23, 2017, to conduct a formal consultation meeting. UAIC provided a sensitivity map of the area and requested the Archaeological Work Plan, which LSA emailed to Melodi McAdams the next day. Ms. McAdams provided comments on the work plan on September 21, 2017. LSA continued to coordinate with UAIC regarding the archaeological excavation. UAIC provided a monitor during the excavation conducted on February 1 and 8, 2018.

- **Leland Kinter, Chairperson, Yocha Dehe Wintun Nation (YDWN):** LSA called Mr. Kinter on June 27, 2017. The YDWN receptionist, Susan, answered the phone and patched LSA to the voicemail of Deb Jones, where LSA left a message for Chairperson Kinter. On September 5, 2017, LSA coordinated with YDWN's Cultural Resources Manager, James Sarmento, via email and telephone, and confirmed a date for a consultation meeting. YDWN, the City, and LSA met on September 21, 2017, to conduct a formal consultation meeting. LSA continued to coordinate with YDWN regarding the archaeological test excavation conducted on February 1 and 8, 2018, for which YDWN provided a monitor.

West Sacramento Historical Society. On June 21, 2017, LSA sent a letter describing the Project and maps depicting the Project site to the West Sacramento Historical Society (Historical Society) to solicit information or concerns about cultural resources in the Project site. LSA conducted a follow-up telephone call with the Historical Society on June 27, 2017, and left a voicemail message, again asking for any information or concerns it may have regarding the Project. Tom Lewis returned LSA's telephone call on June 30, 2017. Mr. Lewis said the Historical Society had received the letter and maps from LSA and indicated that it was being kept abreast of the Project through one of its members who is now working for UAIC. Mr. Lewis thanked LSA for keeping the Historical Society "in the loop" during this process.

City of West Sacramento. LSA coordinated with the City to determine the extent of investigations conducted for the Liberty Specific Plan, which is adjacent to the Project site. A small portion of the Project site was previously investigated by Peak and Associates (Peak and Associates 2016). This firm's study included a field survey and extensive trenching efforts to identify whether CA-YOL-18 extended into its project site. Its findings were negative.

Paleontological Resources. Project plans, geologic maps of the project site, and relevant geological and paleontological literature were reviewed to determine which geologic units are present within the project site and whether fossils have been recovered within the project site or from those or similar geologic units elsewhere in the region. A search for known fossil localities was also

conducted through the online collections database of the University of California, Museum of Paleontology (UCMP) at the University of California, Berkeley, in order to determine the status and extent of previously recorded paleontological resources within and surrounding the project site (UCMP 2017).

Paleontological Sensitivity. Geologic mapping by Gutierrez (2011) indicates the project site contains Holocene (less than 11,700 years ago) Alluvium and late Holocene (Basin Deposits. The Holocene Alluvium consists of poorly to moderately sorted gravel, sand, and silt deposited on fans, on terraces, or in basins (Gutierrez 2011). The Holocene Basin Deposits consist of fine-grained material (e.g., fine-grained sand, silt, and clay) that was deposited by standing or slow moving water (Gutierrez 2011). Although Holocene deposits can contain remains of plants and animals, only those from the middle to early Holocene (4,200 to 11,700 years ago; Walker et al. 2012) are considered scientifically important (Society of Vertebrate Paleontology 2010). Scientifically important fossils from middle to early Holocene deposits are not very common, and the UCMP has no records of vertebrate fossil localities from Holocene deposits within or surrounding the project site. However, Pleistocene (11,700–2.588 million years ago) sediments, which may be encountered beneath the Holocene Alluvium and the Holocene Basin Deposits at depths of approximately 20 feet or more, have produced a variety of scientifically important fossils elsewhere in the County and the region. These fossils include large and small mammals, reptiles, fish, invertebrates, and plants (Jefferson 1991a, 1991b). According to the locality search through the UCMP online collections database, there are five known localities from Pleistocene deposits within the County. These localities have produced 126 fossil specimens, including large and small mammals, such as mammoth (*Mammuthus columbi*), bison (*Bison*), horse (*Equus*), giant ground sloth (*Glossotherium harlani*), camel (*Camelops hesternus*), dire wolf (*Canis dirus*), coyote (*Canis latrans*), rabbits (*Sylvilagus*), and various rodents (*Thomomys, Neotoma, Microtus, Spermophilus, Reithrodontomys, Scapanus latimus*), as well as snakes (*Thamnophis*), amphibians (*Rana*, *Scaphiopus*), and birds (Neornithes). Because there is a potential to find these types of fossils in the older sediments beneath the Holocene Alluvium and Holocene Basin Deposits at depths of approximately 20 feet or more, the deposits within the project site are considered to have low paleontological sensitivity from the surface to a depth of 20 feet and a high sensitivity below that mark.

The project is located in a previously disturbed area, and ground disturbance is not expected to extend below a depth of 10 feet. Therefore, the project is unlikely to impact scientifically important paleontological resources. In the unlikely event that fossil remains are encountered, paleontological mitigation will need to be developed. This mitigation would include paleontological monitoring; collection of observed resources; preservation, stabilization, and identification of collected resources; curation of resources into a museum repository; and preparation of a monitoring report of findings.

3.5.2 Regulatory Setting

CEQA, relevant sections of the PRC and Section 7050.5 of the California Health and Safety Code make up the regulatory framework for cultural resources on the Project site.

3.5.2.1 California Environmental Quality Act

CEQA applies to all discretionary projects undertaken or subject to approval by the State's public agencies (California Code of Regulations [CCR] Title 14, §15022(i)). CEQA states that it is the policy of the State of California to "take all action necessary to provide the people of this state with… historic environmental qualities… and preserve for future generations examples of the major period of California history" (PRC §21001(b),(c)). Under the provisions of CEQA, "A project with an effect that may cause a substantial adverse change in the significance of an historical resource is a project that may have a significant effect on the environment" (14 CCR §15126.4 (a)(1)).

CEQA requires that historical resources and unique archaeological resources be taken into consideration during the CEQA planning process (14 CCR §15064.5; PRC §21083.2). If feasible, adverse effects to the significance of historical resources must be avoided or mitigated (14 CCR §15064.5(b)(4)). CEQA requires that all feasible mitigation be undertaken even if it does not mitigate impacts to a less than significant level (14 CCR §15126.4 (a)(1)).

Historical Resources. The term CEQA uses for significant cultural resources is "historical resource," which is defined as any resource that meets one or more of the following criteria:

- Listed in, or eligible for listing in, the California Register of Historical Resources (California Register);
- Listed in a local register of historical resources (as defined at PRC §5020.1(k));
- Identified as significant in a historical resource survey meeting the requirements of PRC §5024.1(g); or
- Determined to be a historical resource by a project's Lead Agency (14 CCR §15064.5(a)).

A historical resource consists of "Any object, building, structure, site, area, place, record or manuscript which a Lead Agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California."

Unique Archeological Resources. As defined in PRC §21083.2(g), a unique archaeological resource is defined as "an archaeological artifact, object, or site about which it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that it meets any of the following criteria:

1. Contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information.
2. Has a special and particular quality such as being the oldest of its type or the best available example of its type.
3. Is directly associated with a scientifically recognized important prehistoric or historic event or person."

3.5.2.2 Tribal Cultural Resources

AB 52, which became law on January 1, 2015, provides for consultation with California Native American tribes during the CEQA process and equates significant impacts to "tribal cultural resources" with significant environmental impacts. PRC §21074 states that "tribal cultural resources" are:

- Sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe and are one of the following:

    A. Included or determined to be eligible for inclusion in the California Register of Historical Resource.

    B. Included in a local register of historical resources as defined in subdivision (k) of PRC §5020.1.

    C. 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 PRC §5024.1. In applying the criteria set forth in subdivision (c) of PRC §5024.1 for the purposes of this paragraph, the Lead Agency shall consider the significance of the resource to a California Native American tribe.

    D. The consultation provisions of the law require that within 14 days of determining that a project application is complete, or a decision by a public agency to undertake a project, the Lead Agency must notify tribes of the opportunity to consult on the project. California Native American tribes must be recognized by the Native American Heritage Commission as traditionally and culturally affiliated with the project site, and must have previously requested that the Lead Agency notify them of projects. Tribes have 30 days following notification of a project to request consolation with the Lead Agency.

The purpose of consultation is to inform the Lead Agency in its identification and determination of the significance of tribal cultural resources. Consultation may also include a discussion of project alternatives, significant effects, and mitigation measures, and should be undertaken in good faith by both the tribe and Lead Agency. If a project is determined to result in a significant impact to an identified tribal cultural resource, the consultation process must occur and conclude prior to adoption of a Negative Declaration or MND, or the certification of an EIR (PRC §21080.3.1, §21080.3.2, and §21082.3).

3.5.2.3 Public Resources Code 5024.1: California Register of Historical Resources

Section 5024.1 of the PRC established the California Register. Generally, a resource is considered by the Lead Agency to be "historically significant" if the resource meets the criteria for listing on the California Register (14 CCR §15064.5(a)(3)). For a cultural resource to qualify for listing in the California Register, it must be significant under one or more of the following criteria:

Criterion 1: Associated with events that has made a significant contribution to the broad patterns of California's history and cultural heritage;

Criterion 2: Associated with the lives of persons important in our past;

Criterion 3: Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or

Criterion 4: Has yielded, or may be likely to yield, information important in prehistory or history.

In addition to being significant under one or more criteria, a resource must retain enough of its historic character and appearance to be recognizable as a historical resource and also be able to convey the reasons for its significance (14 CCR §4852(c)). Generally, a cultural resource must be 50 years old or older to qualify for the California Register.

3.5.2.4 California Health and Safety Code 7050.5

Section 7050.5 of the California Health and Safety Code states that in the event of discovery or recognition of any human remains in any location other than a dedicated cemetery, there shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains until the coroner of the county in which the remains are discovered has determined whether or not the remains are subject to the coroner's authority. If the human remains are of Native American origin, the coroner must notify the NAHC within 24 hours of this identification.

3.5.3 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 with Mitigation. One eligible historical resource was identified through field surveys, background research, tribal consultation, and excavation:

- P-57-000021/CA-YOL-18 is a pre-contact period burial mound site.

For purposes of this Project, the City as the Lead CEQA Agency considers the CA-YOL-18 site to be eligible for listing in the California Register under Criterion 4 due to its ability to yield information important in prehistory. This assessment is based on previous archaeological surveys conducted at this site that have identified flaked stone, stone tools, shell beads, and human remains. These materials and human remains have the potential to provide information on ancestral Patwin lifeways. This information can address questions related to ancestral Patwin chronology and cultural history; subsistence and settlement behaviors; technology; and social interaction and exchange. The location of CA-YOL-18 was delineated based on information compiled from the original site record, archival research, a review of historic aerials and maps, and communications with local residents.

Although no intact archaeological features or deposits associated with CA-YOL-18 were identified in the Area of Direct Impact during the archaeological testing completed by LSA, due to the archaeological sensitivity of the area, previously unidentified archaeological resources and human remains may be encountered during Project construction. Implementation of **Mitigation Measure MM-CUL-1** would reduce potential impacts to CA-YOL-18 to **less than significant**.

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. As discussed above, the City as the Lead CEQA Agency considers the CA-YOL-18 site to be eligible for listing in the California Register under Criterion 4 for the purposes of this Project. Although no intact archaeological features or deposits associated with CA-YOL-18 were identified during the archaeological testing completed by LSA, due to the archaeological sensitivity of the area, previously unidentified archaeological resources and human remains may be encountered during Project construction. Implementation of Mitigation Measure **MM-CUL-1** would reduce potential impacts to CA-YOL-18 to **less than significant**.

c. Would the Project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

Less Than Significant with Mitigation Incorporated. No paleontological resources or unique geologic features are known to exist within or near the project site. The site is underlain by Holocene Alluvium and Holocene Basin Deposits, both of which are considered to have low paleontological sensitivity from the surface to a depth of 20 feet and high sensitivity below that mark. However, the project site is located in a previously disturbed area and will have ground disturbance that extends to a maximum depth of 10 feet. Therefore, the project is unlikely to impact scientifically important paleontological resources. Should undiscovered paleontological resources be found during project construction, **Mitigation Measure PALEO-1** shall be implemented to reduce potential impacts to paleontological resources.

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

Less Than Significant Impact with Mitigation. Native American skeletal remains have been identified in portions of the Project site, and it is possible that human remains could be encountered during Project construction. In the event that human remains are encountered during construction activities, the proper authorities would be notified and standard procedures for the respectful handling of human remains during the earthmoving activities would be implemented, as specified in **Mitigation Measure MM-CUL-1.** Implementation of **Mitigation Measure MM-CUL-1** would reduce the potential for impacts on unknown buried human remains to **less than significant**.

3.5.4 Mitigation Measures

The following mitigation measure shall be implemented to reduce impacts to cultural and paleontological resources:

MM-CUL-1: **Construction Monitoring.** Prior to construction, the City shall retain a professional archaeologist and invite a geographically-affiliated Native American Representative to provide a pre-construction briefing to supervisory personnel of any excavation contractor to alert them to the possibility of exposing significant historic or prehistoric archaeological resources within the project area. The briefing shall discuss any resources that could be exposed, the need to stop excavation at the discovery site, and the procedures to follow regarding discovery protection and notification. The City will notify geographically-affiliated tribal groups 7 days prior to excavation, grading, and other earthmoving activities within 100 feet of the current site boundary of CA-YOL-18. During construction, a qualified archaeologist and a tribal representative from a geographically-affiliated tribe shall be present to monitor Project excavation, grading, and other earthmoving activities within 100 feet of the current site boundary of CA-YOL-18. Monitoring shall continue until excavation, grading, and other earthmoving activities within 100 feet of the current site boundary have been completed.

Discovery of Unidentified Archaeological Resources. If deposits of prehistoric or historical archaeological materials are encountered during Project construction activities, all work within 50 feet of the discovery shall be redirected and a qualified archaeologist should be contacted (if one is not already on site) to assess the situation and make recommendations regarding the treatment of the discovery, and to develop proper mitigation measures required for the discovery (California Code of Regulations [CCR] Title 14, § 15064.5(f)). The City of West Sacramento shall also be notified. The archaeologist should prepare a report documenting the methods and results of the investigation, and provide recommendations for the treatment of the archaeological materials discovered. The report should be submitted to the City of West Sacramento and the Northwest Information Center.

Discovery of Human Remains. During construction, consistent with the requirements outlined by CEQA Guidelines, Section 15064.5(e)(1), and in accordance with Section 7050.5 of the Health and Safety Code, Section 5097.98 of the PRC (Chapter 1492, Statutes of 1982, Senate Bill 297), as relevant, should be followed and no further disturbance shall occur until the Yolo County Coroner can evaluate them. If the human remains are of Native American origin, the coroner must notify the NAHC within 24 hours of identification. Pursuant to Section 5097.9 and 5097.993 of the PRC, the NAHC shall identify a "Native American Most Likely Descendent" to inspect the site and provide recommendations for the proper treatment of the remains and any associated grave goods.

MM-PALEO-1: If paleontological resources are encountered during project excavation and no monitor is present, all ground-disturbing activities within 50 feet of the find shall be redirected to other areas until a qualified paleontologist can be retained to evaluate the find and make recommendations for additional paleontological mitigation, which may include paleontological monitoring; collection of observed resources; preservation, stabilization, and identification of collected resources; curation of

resources into a museum repository; and preparation of a final report documenting the monitoring methods and results to be submitted to the museum repository and the City.

3.6 GEOLOGY AND SOILS

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

3.6.1 Environmental Setting

The Project is located in the western portion of the Great Valley geomorphic province of California. The Central Valley of California is generally considered to be an elongated sedimentary trough, approximately 450 miles long and 50 miles wide. Rock units within the Great Valley geomorphic province consist of Mesozoic to Cenozoic marine and nonmarine sedimentary rocks. The site is underlain by Holocene basin deposits, which consist of Holocene-aged (less than 11,700 years old) fine-grained sediments derived from the same sources as modern alluvium (City of West Sacramento 2016c).

The Natural Resources Conservation Service (NRCS) Soil Survey for Yolo County describes surface soils across the Project site as sandy or silty loams (NRCS 2018). **Table 3.6-1: Soils in the Project Area** lists the soils found in the Project area as well as common building-related soil issues.

Table 3.6-1: Soils in the Project Area

Soil Series	K Factor[1]	Linear Extensibility[2]	Corrosiveness[3]		Hydrologic Soil Group[4]
			Concrete	Steel	
Lang silt loam	0.24 (Low)	1.5 (Low)	Moderate	High	B (Moderate)
Lang sandy loam, deep	0.24 (Low)	1.5 (Low)	Moderate	High	C (Slow)
Merritt silty clay loam	0.37 (Moderate)	4.5 (Moderate)	Low	High	C/D (Slow/Very slow)
Sacramento silty clay loam	0.28 (Low)	4.5 (Moderate)	Low	High	C/D (Slow/Very slow)
Sycamore silt loam	0.43 (High)	4.5 (Moderate)	Low	High	C (Slow)
Tyndall very fine sandy loam, deep	0.43 (High)	1.5 (Low)	Moderate	High	B (Moderate)
Valdez silt loam	0.49 (High)	1.5 (Low)	Low	High	C (Slow)

Source: Natural Resources Conservation Service (2018); City of West Sacramento (2016c)

[1] K factor is a measure of the susceptibility of a soil to erosion by water. Values of K in Yolo County range from 0.02 to 0.69, where the higher the K value, the more susceptible the soil is to erosion by water. K factor values ranging from 0.02 to 0.2 are considered low, from 0.25 to 0.4 are considered moderate, and greater than 0.4 are considered high.

[2] Linear extensibility is a measure of how much a soil expands and contracts with changes in moisture content. Soils with a moderate to high linear extensibility, also known as expansive soils, do not provide a suitable substrate for construction without modification. Expansive soils generally have high clay content. Values of linear extensibility range from 0 to 30, where 0–3 is low, 3–6 is moderate, 6–9 is high, and 9–30 is very high.

[3] Risk of corrosion is a measure of the potential soil-induced electrochemical or chemical action that corrodes or weakens concrete or uncoated steel. This measure is based mainly on the sulfate and sodium content, texture, moisture content, and acidity of the soil for concrete and the soil moisture, particle-size distribution, acidity, and electrical conductivity for steel. Concrete or steel that is installed across soil boundaries or soil layers is more susceptible to corrosion than concrete or steel installed in one kind of soil.

[4] Hydrologic soil class is a measure of infiltration rates. Soils in hydrologic group A have a high rate of infiltration when thoroughly wet and low runoff potential. Hydrologic group B soils have a moderate rate of infiltration when wet. Hydrologic group C soils have a slow rate of infiltration. Hydrologic group D soils have a very slow infiltration rate and high runoff potential. For dual hydrologic soil groups such as C/D, the first letter applies to the drained condition and the second to the undrained condition.

The topography across the Project site is relatively flat, with elevations ranging from about 13 to 20 feet above mean sea level. Based on the relatively flat topography of the site and the lack of slopes in the vicinity of the site, the potential for landslides is nonexistent.

Land subsidence as a result of compaction and oxidation of peat soils or hydrocompaction as a result of groundwater overdraft are not significant concerns in the Project vicinity (City of West Sacramento 2016c).

The Project site is not located within or adjacent to an Alquist-Priolo Earthquake Fault Zone; consequently, ground rupture resulting from seismic activity is unlikely. The site is located in proximity to several surface faults that are presently zoned as active or potentially active by the California Geological Survey (CGS), pursuant to the guidelines of the Alquist-Priolo Earthquake Fault Zoning Act (CGS 2018). Therefore, the Project could potentially be susceptible to ground shaking during a maximum momentum magnitude earthquake on faults in proximity to the Project area. The probabilistic peak horizontal ground acceleration values for the Project site have been estimated between 0.21 to 0.23g (where g equals the acceleration speed of gravity), which is considered relatively low for California. The composition of the soils in the Project vicinity—primarily unconsolidated alluvium sediments with minimal clay—indicates that there is some potential for liquefaction (City of West Sacramento 2016c).

3.6.2 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?

Less Than Significant Impact. Surface rupture occurs when the ground surface is broken due to fault movement during an earthquake. The location of surface rupture generally can be assumed to be along an active or potentially active major fault trace. The Alquist-Priolo Earthquake Fault Zoning Act requires the State Geologist to delineate "Earthquake Fault Zones" along faults that are "sufficiently active" and "well defined". The proposed Project is not located within a designated Alquist-Priolo Earthquake Fault Zone (CGS 2018). No active or potentially active faults have been mapped on the Project site; therefore, the potential for fault rupture at the Project site is low. This impact would be **less than significant**. No mitigation is required.

ii. Strong seismic ground shaking?

Less Than Significant Impact. Although the probability is low, there is a potential for the Project to be subject to ground shaking during a maximum momentum magnitude earthquake on one of the active faults in the Project vicinity. Although the proposed Project could be exposed to ground shaking, it would be designed and constructed consistent with City standards that are required to adhere to the State seismic design parameters identified in the California Building Standards Code, which minimize risks by requiring new structures (and utilities) to be designed to withstand seismic activity. Therefore, this impact would be **less than significant**. No mitigation is required.

iii. Seismic-related ground failure, including liquefaction?

Less Than Significant Impact. Soil liquefaction is a phenomenon primarily associated with the saturated soil layers located close to the ground surface. These soils lose strength during ground shaking. Due to the loss of strength, the soil acquires "mobility" sufficient to permit both horizontal and vertical movements. Soils that are most susceptible to liquefaction are clean, loose, uniformly graded, saturated, fine-grained sands that lie relatively close to the ground surface. However, loose sands or sediment that contains a significant amount of fines (minute silt and clay fraction) may also liquefy.

While the potential is low, alluvial soils at the Project site could be susceptible to liquefaction as a result of seismic shaking. As described in (ii) above, the proposed Project would be designed and constructed in accordance with applicable standards addressing the potential risk of liquefaction as a result of seismic activity. Therefore, this impact would be **less than significant**. No mitigation is required.

iv. Landslides?

No Impact. The Project is not located in an area of known landslides or on steep terrain that would be prone to landslide activity. Consequently, implementation of the proposed Project would not impact persons or structures because of landslides. **No impact** would occur.

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

Less Than Significant Impact. As shown in **Table 3.6-1**, some soils at the Project site have high potential for runoff and erosion. Other soils at the Project site exhibit a low potential for runoff and erosion. Ground-disturbing activities during Project construction could result in soil erosion as associated topsoil loss, particularly during strong rain events. However, construction contractors would be required to comply with federal, State, and local regulations and guidelines to minimize the potential for soil erosion, including the National Pollutant Discharge Elimination System (NPDES) General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities, 2009-0009-DWQ, as amended by 2010-0014-DWQ (General Construction Permit), during construction.

Erosion control measures and BMPs would also be identified in required grading plans, and a Storm Water Pollution Prevention Plan (SWPPP) would be prepared in accordance with the NPDES General Construction Permit. Therefore, as part of Project construction, erosion control measures and BMPs would be implemented to manage sediment and prevent discharge of sediment from the Project site to storm drains and surface waterways, and to prevent wind and water erosion from the beginning through conclusion of construction activities. Implementation of required erosion control measures and BMPs would minimize the potential for soil erosion and the loss of topsoil to a less than significant level. The impact would be **less than significant**. No mitigation is required.

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

Less Than Significant Impact. As described above, the potential for hazard from landslide and liquefaction would be low or nonexistent. Therefore, the potential for liquefaction-induced lateral spreading also would be low. Subsidence is the sudden sinking or gradual downward settling of the earth's surface with little or no horizontal motion. Subsidence is caused by a variety of activities, including microbial oxidation of soil organic carbon, withdrawal of groundwater, extraction of oil and natural gas resources, liquefaction, and hydrocompaction. The Project site is not currently experiencing subsidence, and land subsidence in the vicinity of the proposed Project is not considered to be a significant concern (City of West Sacramento 2016c). Furthermore, the proposed Project would be designed and constructed to adhere to applicable building and related codes that include requirements related to minimizing potential for soil instability, settlement, liquefaction, and collapse. Therefore, this impact would be **less than significant**. No mitigation is required.

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?

Less Than Significant Impact. Expansion and contraction of volume can occur when expansive soils undergo alternating cycles of wetting (swelling) and drying (shrinking), and can cause damage to foundations and infrastructure unless properly treated during construction. As shown in **Table 3.6-1**, the expansive properties of soils at the Project site are considered to be low to moderate. Infrastructure designed and constructed as part of the proposed Project would comply with applicable building and related codes that include requirements related to expansive soils to minimize potential risks to life and property. The impact would be **less than significant**.

e. Would the Project site 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. No septic tanks or alternative wastewater disposal systems are proposed as part of the Project. Therefore, Project implementation would not result in impacts on soils associated with the use of such wastewater treatment systems. **No impact** would occur.

3.6.3 Mitigation Measures

No mitigation is required.

This page intentionally left blank

3.7 GREENHOUSE GAS EMISSIONS

	Potentially Significant Impact	Less Than Significant Impact with Mitigation	Less Than Significant Impact	No Impact
Would the project:				
a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	☒	☐
b. Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☒	☐

3.7.1 Environmental Setting

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

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

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

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

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

3.7.2 Regulatory Setting

The United States has historically had a voluntary approach to reducing GHG emissions. However, on April 2, 2007, the United States Supreme Court ruled that the USEPA has the authority to regulate CO_2 emissions under the federal Clean Air Act (CAA).

On April 1, 2010, the USEPA and the United States Department of Transportation's National Highway Traffic Safety Administration (NHTSA) announced a final joint rule to establish a national program consisting of new standards for model year 2012 through 2016 light-duty vehicles that will reduce GHG emissions and improve fuel economy. The USEPA GHG standards require these vehicles to meet an estimated combined average emissions level of 250 grams of CO_2 per mile in model year 2016, which is equivalent to 35.5 miles per gallon. These standards mark the first-ever national GHG emissions standards under the CAA. Additionally, the Heavy-Duty National Program was finalized in August 2011, by the USEPA and the NHTSA, and addresses medium- and heavy-duty vehicles.

In June 1, 2005, then-Governor Schwarzenegger established California's GHG emissions reduction targets in Executive Order S-3-05. This Executive Order established the following goals for the State of California: GHG emissions should be reduced to 2000 levels by 2010, to 1990 levels by 2020, and to 80 percent below 1990 levels by 2050.

California's major initiative for reducing GHG emissions is outlined in AB 32, the "Global Warming Solutions Act," passed by the State Legislature on August 31, 2006. This effort aims at reducing GHG emissions to 1990 levels by 2020. The CARB established the level of GHG emissions in 1990 at 427 million metric tons (MMT) of CO_2e. The emissions target of 427 MMT requires the reduction of 169 MMT from the State's projected business-as-usual 2020 emissions of 596 MMT. AB 32 requires the CARB to prepare a Scoping Plan that outlines the main State strategies for meeting the 2020 deadline and to reduce GHGs that contribute to global climate change. The Scoping Plan was approved by the CARB on December 11, 2008, and includes measures to address GHG emission reduction strategies related to energy efficiency, water use, and recycling and solid waste, among other measures. Emission reductions that are projected to result from the recommended measures in the Scoping Plan are expected to total 174 MMT of CO_2e, which would allow California to attain its emissions goal of 427 MMT of CO_2e by 2020. The Scoping Plan includes a range of GHG reduction actions that may include direct regulations, alternative compliance mechanisms, monetary and nonmonetary incentives, voluntary actions, and market-based mechanisms such as a cap-and-trade system. The measures in the Scoping Plan will not be binding until after they are adopted through the normal rulemaking process and are therefore only recommendations at this time. The CARB rulemaking process includes preparation and release of each of the draft measures, and public input through workshops and a public comment period, followed by a CARB Board hearing and rule adoption.

The City of West Sacramento completed a Draft Climate Action Plan in August 2010. While the plan has not been finalized, it outlines the program the community will follow to reduce GHG emissions. None of the proposed measures in the Draft Climate Action Plan apply to the proposed Project, as they include either actions the City will take to reduce GHG emissions community-wide or actions to be taken by new development projects.

The proposed Project would generate direct and indirect GHG emissions that contribute to global warming and climate change impacts. Although the contribution from an individual project may be minor, the cumulative impact can be substantial. The YSAQMD has not established any specific thresholds of significance for GHG emissions, but it recommends that proposed projects include a qualitative discussion of GHGs in air quality analyses for sizable projects.

3.7.3 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 proposed Project includes the abandonment in place of an existing water main in an established West Sacramento neighborhood and the installation of a new water main, service laterals, and water meters. Emissions associated with implementation of the proposed Project would occur from construction activities.

> Short-Term Construction-Related Greenhouse Gas Emissions. Construction activities, such as site preparation, site grading, on-site heavy-duty construction vehicles, equipment hauling materials to and from the site, and motor vehicles transporting the construction crew would produce combustion emissions from various sources. During construction of the proposed Project, GHGs would be emitted through the transport of workers to the site and the use of backhoes during the construction period, both of which use fossil-based fuels to operate. The combustion of fossil-based fuels creates GHGs such as CO_2, CH_4, and N_2O. Furthermore, CH_4 is emitted during the fueling of heavy equipment.

The YSAQMD does not have an adopted threshold of significance for construction-related GHG emissions. However, Lead Agencies are encouraged to quantify and disclose GHG emissions that would occur during construction. Using RoadMod, it is estimated that construction of the proposed Project would generate approximately 553.6 metric tons of CO_2e. However, other air quality management districts, such as the South Coast Air Quality Management District and SMAQMD, recommend accounting for construction emissions by amortizing them over a 30-year project life. The total amortized construction emissions for the Project would be 18.5 metric tons of CO_2e per year. Potential impacts would be limited to the duration of construction activities and GHG generation would halt once the Project is completed. Therefore, Project construction impacts associated with GHG emissions would be considered **less than significant**.

Long-Term Operational GHG Emissions. As discussed above, the proposed Project includes the in-place abandonment of existing water mains and the installation of new water mains, laterals, and water meters. Once completed, the proposed Project would not generate any GHG emissions or result in any new vehicle trips that would contribute to an increase in GHG emissions. Therefore, GHG emissions generated by the proposed Project would be **less than significant**. No mitigation is required.

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 regulatory plans and policies discussed above are intended to reduce federal, State, and local GHG emissions by targeting the largest emitters of GHGs: the transportation and energy sectors. The proposed Project includes the in-place abandonment of existing water mains and the installation of new water mains, laterals, and water meters in an existing established neighborhood in West Sacramento. The proposed Project would not generate any new vehicle trips during operation and would not conflict with these transportation reduction measures. In addition, the proposed Project does not propose any development that would increase energy demand. The proposed Project would not conflict with the State goal of reducing GHG emissions and would not conflict with the AB 32 Scoping Plan or any other plan or policy. The proposed Project would be subject to all applicable permit and planning requirements in place or adopted by the County of Yolo and the City of West Sacramento. Therefore, the proposed Project would not conflict with any applicable plan, policy, or regulation of an agency adopted for the purpose of reducing emissions of GHGs. Impacts would be **less than significant**.

3.7.4 Mitigation Measures

No mitigation is required.

3.8 HAZARDS AND HAZARDOUS MATERIALS

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

3.8.1 Environmental Setting

The Project is bounded by Linden Road to the north, Mojave Drive to the west, Trinity Way and the proposed Liberty Specific Plan site to the south, and the proposed Liberty Specific Plan site to the east. Specifically, the Project will be implemented on City-owned ROW and within dedicated easements along the following roads: Merced Way, Rubicon Way, Shasta Way, Trinity Way, Ironwood Way, Spruce Street, Linden Road, Redwood Avenue, Alder Way, Bastone Court, Tamarack Road, and Cedar Court.

To evaluate the potential presence of hazardous materials within the Project or surrounding areas, a comprehensive search of environmental records and databases was performed and historical aerial photographs, topographic maps, and city directories were provided by Environmental Data Resources (EDR) to identify permitted hazardous materials facilities and potential sites that may be

contaminated with hazardous substances in the Project vicinity (EDR 2017a, 2017b, 2017c, and 2017d). The database search conforms to the ASTM International Standard Practice for Phase 1 Environmental Site Assessments (ESA) (E 1527-13). In March 2018, an updated supplemental search of the Hazardous Waste and Substances Sites List (Cortese List) (California Environmental Protection Agency 2018) and search for sites with reported hazardous materials spills, leaks, ongoing investigations, and/or remediation near the Project was performed using the California Department of Toxic Substances Control (DTSC) online EnviroStor and State Water Resources Control Board (SWRCB) GeoTracker databases (DTSC 2018; SWRCB 2018).

A reconnaissance-level site visit was also performed by AECOM in July 2017. The reconnaissance-level visual assessment of the Project site and its vicinity, with authorization from the Yolo County Division of Environmental Health (Gallagher 2017), did not reveal any businesses or companies that appear to generate, use, store, or dispose of large quantities of hazardous materials that may impact the Project.

Results of the EDR records search are discussed further below. Small-quantity users, generators, and user/generators of hazardous wastes with no violations or regulatory agency corrective actions pending were not considered to be a significant hazard to the public or the environment and are therefore excluded from further discussion.

3.8.1.1 Environmental Record Search Findings

Listed Sites. Seven sites within the Project area are listed on regulatory databases researched by EDR and are discussed in further detail:

- Two sites, Newport Estates Unit 5 and Linden West Construction, are listed on the NPDES or Waste Discharge System databases for permitted storm water discharge to public waterways. These discharges appear to be related to the initial residential development that the Project area encompasses.

- One site, David L. Woody, is listed on the Pesticide Licensing Registration database maintained by the California Department of Pesticide Regulation for the licensing of commercial pesticide users or sellers.

- One site, Lewis Cleaners, is listed on the EDR Historical Cleaner database for a home-based garment pressing business (dry cleaners).

- One site, Chris C. Vitanov, is listed on the Haznet database maintained by the DTSC for disposal of a small quantity of hazardous waste in 1998.

- Two sites, 3111 Alder Place and 3040 Bastone Court, are listed on the California Hazardous Material Incident Reporting Systems (CHMIRS) database for releases of small quantities of hazardous substances that did not appear to require subsequent regulatory enforcement.

None of these sites are either expected to impact the proposed Project as the sites are listed on databases of an administrative nature, or based on documentation resulting from releases of small

quantities of hazardous substances or wastes with no apparent subsequent enforcement. All of the sites are in areas potentially adjacent to, but not directly on, the City-owned ROW or within dedicated Project easements.

Off-Site Listings. Based on information obtained from the SWRCB GeoTracker database, local depth to groundwater is approximately 19 feet below ground surface and the groundwater flow direction is to the northwest (West Environmental Services [West] 2017). Therefore, sites southwest of the Project area are considered to be topographically hydrologically upgradient in general (SWRCB 2018).

The goal of reviewing the EDR database report was to identify facilities that have known environmental issues that may negatively impact the Project. The Project site listings are discussed below. Other facilities listed in the EDR database report as "open" or "active," are located hydrologically upgradient of the Project area, are within the ASTM International search distances, and are listed on a database indicating a release of hazardous materials (e.g., Leaking Underground Storage Tank Sites, Spill, Leaks, Investigations, and Clean-ups, CHMIRS); these sites are discussed below. Sites that are listed as receiving regulatory closure are not anticipated to pose an environmental concern for the Project and are therefore excluded from this discussion. Any other sites that are listed in the EDR database report but not on databases indicating a release are also excluded from this discussion as they are not expected to represent an environmental concern to the Project based on the aforementioned criteria.

The Project would include the installation of approximately 9,000 linear feet of 16-inch and 8-inch-diameter pipe with the addition of fire hydrants and service lines (laterals) to residents that will include new water meters. Most of the pipe excavations completed during Project implementation will be relatively shallow (approximately 4-feet deep, with a small section that will be as deep as 10 feet to connect to the existing system).

- **Database Listings Within 1 Mile of the Project Area:**
    - **EnviroStor:** Five sites are listed on the DTSC EnviroStor database (DTSC 2018). Four of these are school sites, which required robust environmental sampling under DTSC's Schools Investigation Program prior to development. All four sites received a No Further Action determination; thus, these sites are not expected to negatively impact the Project.

      The remaining site, Richfield Oil Company, located in Sacramento, is hydrologically separated from the Project area by the Sacramento River and is not expected to impact the Project area.

      No other database listings within 1 mile of the Project area were identified by EDR.
- **Database Listings Within 0.5 Mile of the Project Area:**
    - **Spills, Leaks, Investigation, and Cleanup:** One site, Former Time Oil West Sacramento, at 1155 Linden Road, is listed on the Spills, Leaks, Investigation, and Cleanup database for an unauthorized release of petroleum hydrocarbons into soil and groundwater. Based on the

site's Fourth Quarter 2016 Groundwater Monitoring Report (West 2017), the groundwater plume does not appear to extend off site. This site is also listed on the Clandestine Drug Lab database for operation of an illegal drug lab in 2004.

The Project would require most excavation to extend to 4 feet below grade but as deep as 10 feet in certain areas to connect to the existing water system. Given the relatively shallow depth of excavation, the Project is unlikely to intercept contaminated groundwater originating from the Former Time Oil site; thus, this site is not expected to impact the Project.

No other database listings within 0.5 mile of the Project area were identified by EDR.

3.8.1.2 California Department of Conservation, Division of Oil, Gas, and Geothermal Resources

The California Department of Conservation, Division of Oil, Gas, and Geothermal Resources (DOGGR) maps reviewed for this report do not indicate that oil, gas, or geothermal wells are present within the Project area (DOGGR 2017).

Radon is a colorless, odorless, naturally occurring, radioactive, inert, gaseous element formed by radioactive decay of radium atoms. The USEPA has prepared a map to assist federal, State, and local organizations in targeting their resources and implementing radon-resistant building codes. The USEPA recommends site-specific testing to determine radon levels at a specific location. However, the map does give a valuable indication of the propensity of radon gas accumulation in structures, especially below-grade structures and basements. Review of the USEPA Map of Radon Zones places the Project area in Zone 3 (USEPA 2017), where average predicted radon levels are less than 2.0 picocuries per liter. Based on the radon zone classification for the Project area (Zone 3), radon is not expected to be an environmental concern for the Project.

The nearest schools—Our Lady of Grace (1990 Linden Road) and River City High School (1 Raider Lane)—are located within 0.25 mile west of the proposed Project.

The nearest airport or private airstrip is the Sacramento Executive Airport, which is located approximately 2 miles southeast of the Project site. However, the proposed Project is not located within the airport's safety zones or land use plan (SACOG 1999).

According to the California Department of Forestry and Fire Protection (CAL FIRE) Hazard Severity Zone map for Yolo County, the Project site is in a Local Responsibility Area (LRA) unzoned fire hazard severity zone (CAL FIRE 2007).

The West Sacramento Fire Department (WSFD) responds to all calls for emergency services within city limits that include fires, emergency medical incidents, public assistance, traffic and vehicle accidents, and other emergency situations. The closest fire station to the Project area is Station 45, approximately 0.5 mile to the northwest.

The City's Emergency Operations Plan, approved in January 2017, addresses the City's planned response to extraordinary emergency situations associated with any type of natural, technological, or human-caused hazard (City of West Sacramento 2016b).

3.8.2 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. Project construction would involve the incidental transport and use of common hazardous materials, such as oils, lubricants, and fuels, as well as specific materials for building construction, such as concrete.

DTSC has primary regulatory authority for enforcing hazardous materials regulations. State hazardous waste regulations are contained primarily in Title 22 of the CCR. The California Occupational Health and Safety Administration has developed rules and regulations regarding worker safety around hazardous and toxic substances. If used and stored properly, these materials do not pose a substantial risk to the public or the environment.

The proposed Project would use only a limited amount of hazardous materials during construction, and potential impacts associated with the routine transport, use, or disposal of hazardous materials would be minimized with adherence to applicable regulations. Once operational, the proposed Project would not transport or generate hazardous materials. The impact would be **less than significant**. No mitigation is required.

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. The proposed Project would involve abandoning in place approximately 11,200 linear feet of asbestos concrete pipe and approximately 5,650 linear feet of welded steel pipe. Because the pipe would be abandoned in place without excavation or surface exposure, there would be no accidental upset or release of old asbestos or welded piping. As discussed under Threshold a), the proposed Project would involve the use of hazardous materials during construction. During Project construction, hazardous materials would be stored, labeled, and disposed of in accordance with applicable federal, State, and local regulations. Construction contractors would be responsible for reporting any accidental discharges of hazardous materials or other similar substances (where amounts are above the threshold for reportable quantities). As a condition of Project approval, if threshold limits are exceeded for fuel storage, a spill prevention control and countermeasures plan would be required for the storage of flammable fuel hydrocarbons at the Project site. The impact would be **less than significant**. No mitigation is required.

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 with Mitigation. The proposed Project site is located within 0.25 mile of Our Lady of Grace (1990 Linden Road) and River City High School (1 Raider Lane). As discussed in the response to Threshold a), the incidental use and handling of potentially hazardous materials would not pose a substantial risk to the public or the environment. The proposed Project would

involve abandoning in place approximately 11,200 linear feet of asbestos concrete pipe and approximately 5,650 linear feet of welded steel pipe. Because the pipe would be abandoned in place without excavation or surface exposure, there would be no hazardous waste generated by the Project or impacts associated with exposure to old asbestos or welded piping. The proposed Project has the potential to emit dust during excavation activities and construction emissions typical of heavy machinery, such as diesel exhaust. These emissions would be regulated in accordance with air quality standards (discussed further in Section 3.3, Air Quality) designed to reduce migratory dust and hazardous construction equipment emissions. Implementation of Mitigation Measure **MM AQ-1** would further reduce any potential impacts. The impact would be **less than significant with mitigation**.

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?

Less Than Significant Impact. The Cortese List is compiled by the DTSC in accordance with Section 65962.5 of the California Government Code. A comprehensive search of the Cortese List and other environmental databases was conducted. These searches did not identify any Cortese List sites with potential hazardous contamination within approximately 2 miles of the proposed Project.
The search did identify seven sites within the proposed Project; however, a detailed evaluation of these sites indicated that none of these sites are expected to impact the proposed Project. The sites are either listed on databases of an administrative nature or based on documentation resulting from minor releases of hazardous substances or wastes in areas located outside the ROW where Project construction disturbance would occur. Based on a review of available information, the proposed Project would not pose a hazard to the public or the environment during construction of the new water mains and laterals. The impact would be **less than significant**. No mitigation is required.

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

Less Than Significant Impact. The proposed Project is located approximately 2 miles from Sacramento Executive Airport; however, it is located outside the airport's safety zone and land use planning area. Consequently, the airport would not cause a safety hazard for people residing or working in the Project area. Therefore, the impact would be **less than significant**. No mitigation is required.

f. For a project within the vicinity of a private airstrip, would the Project result in a safety hazard for people residing or working in the project area?

No Impact. The Project site is not located within an existing airport land use plan area or within 2 miles of a private airstrip. The Project would not result in a safety hazard for people residing or working in the Project area. **No impact** would occur.

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

Less Than Significant Impact. The proposed Project would install new water mains within existing road ROWs. As part of the Project, an encroachment permit with a traffic control plan approved by the City of West Sacramento Community Development Division would be required. The traffic control plan would conform to the current edition of the California Department of Transportation (Caltrans) *Manual of Traffic Controls for Construction and Maintenance Work Zones.* The Project would also be required to comply with all local regulations, provide advanced notification to emergency services of planned construction within the Project area, and identify and publicly communicate an alternate route for emergency vehicles through the Project area if a road closure is planned; therefore, the impact would be **less than significant**. No mitigation is required.

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

Less Than Significant Impact. CAL FIRE classifies land in California based on fire hazard severity. An area that is not located within CAL FIRE jurisdiction is designed as an LRA responsibility. CAL FIRE has designated the Project area as "LRA Unzoned" (CAL FIRE 2007). This is considered an area of low fire risk. The WSFD would be responsible for responding to all fires in the Project area. All equipment would be located at staging areas that have been previously disturbed or have been cleared of vegetation, which minimizes any potential for increased risk of grassfires associated with Project construction. In the unlikely event of grassfires on undeveloped lands to the south of the proposed Project, adequate access would be maintained to accommodate firefighting crews and equipment as needed. Therefore, this impact would be **less than significant**. No mitigation is required.

3.8.3 Mitigation Measures

As discussed above under Threshold c), **Mitigation Measure MM-AQ-1** (provided in Section 3.3, Air Quality) shall be implemented to reduce impacts.

This page intentionally left blank

3.9 HYDROLOGY AND WATER QUALITY

	Potentially Significant Impact	Less Than Significant Impact with Mitigation	Less Than Significant Impact	No Impact
Would the project:				
a. Violate any water quality standards or waste discharge requirements?	☐	☐	☒	☐
b. Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	☐	☐	☒	☐
c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?	☐	☐	☒	☐
d. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?	☐	☐	☒	☐
e. 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?	☐	☐	☒	☐
f. Otherwise substantially degrade water quality?	☐	☐	☒	☐
g. Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	☐	☐	☐	☒
h. Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	☐	☐	☒	☐
i. Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	☐	☐	☒	☐
j. Inundation by seiche, tsunami, or mudflow?	☐	☐	☒	☐

3.9.1 Environmental Setting

The Project is located in an area that has a Mediterranean climate and typically experiences hot, dry summers and temperate rainy winters, averaging between 20 and 24 inches of rainfall per year (Central Valley Regional Water Quality Control Board [CVRWQCB] 2016a). Annual precipitation generally falls from October to April, with the majority falling between the months of November and March.

The Project is located within the Yolo Subbasin of the Sacramento hydrologic region. As discussed in Section 3.8, Hazards and Hazardous Materials, groundwater below the Project site is expected to be encountered at depths of approximately 19 feet above mean sea level. Groundwater levels at the site should be expected to fluctuate throughout the year based on variations in seasonal precipitation, time of year, and local groundwater pumping.

There are no natural drainages present on the Project site. Storm water runoff collects in a series of storm water collection system inlets and is redirected to an existing storm water detention basin located to the southwest of the Project site. The receiving water for storm water runoff in the vicinity of the Project site is the Sacramento River. The reach of the Sacramento River (Knights Landing to the Delta) in the vicinity of the Project site is listed as impaired for mercury, dieldrin, dichlorodiphenyltrichloroethane, chlordane, polychlorinated biphenyls (PCB), and toxicity (CVRWQCB 2016b).

According to the Federal Emergency Management Agency (FEMA) Flood Insurance Study Map for the City of West Sacramento, last updated in 1995, all areas within West Sacramento located outside of the main waterways are mapped as Zone X—areas protected from the 1 percent (1%) chance (100-year) flood by levee, dike, or other structures subject to possible failure of overlapping during longer floods. Extensive studies have been conducted since 1995 that identify deficiencies in the City of West Sacramento's levee system and likely inability to truly provide 100-year or 200-year flood protection. As such, new draft revised FEMA maps anticipated to be issued in the near future are expected to show that all or parts of West Sacramento may meet neither the 100-year flood standards nor the 200-year level of flood protection required by the Central Valley Flood Protection Plan for urban areas. It is expected that FEMA will eventually change West Sacramento's flood zone designations from Flood Zone X to a Special Flood Hazard Area (City of West Sacramento 2016b).

A catastrophic failure of any of the six dams (Monticello, Indian Valley, Shasta, Oroville, Folsom, and Nimbus) in the vicinity of the Project site would cause some degree of inundation (County of Yolo 2012). In 2017, erosion was discovered on the lower chute of the main flood control spillway at Lake Oroville. With an onslaught of winter storms, releases down the damaged main spillway were unable to prevent the reservoir from overtopping and water cascaded down the emergency spillway, triggering the evacuation of more than 180,000 people downstream of Lake Oroville (Department of Water Resources [DWR] 2018a). Appropriate site maintenance, continuous inspection and monitoring, and implementation of periodic site improvements improve the safety of most dam facilities (County of Yolo 2012). Following the Lake Oroville incident, the Division of Safety of Dams established the Spillway Re-evaluation Project in 2017 to assess dam appurtenant structures, including spillways, to confirm they meet minimum safety standards. Safety evaluations include the assessment of the spillway's design and construction, geologic attributes, maintenance and inspection programs, the spillway's historical performance, and any previous spillway repairs (DWR 2018b).

The Project site is not located in a volcanic hazard zone or tsunami inundation zone. A maximum momentum magnitude earthquake on one of the active faults in the Project vicinity could potentially produce oscillations or waves in the Sacramento River, which could overtop and damage levees. The danger of seiches during seismic events is limited to those periods when the Sacramento River is full during the flood season (City of West Sacramento 2016c).

3.9.2 Discussion

a. Would the Project violate any water quality standards or waste discharge requirements?

Less Than Significant Impact. Construction activities associated with the Project would include minor earth-disturbing activities (i.e., cut and fill, vegetation removal, grading, trenching, and movement of soil) that could expose disturbed areas and stockpiled soils to winter rainfall and storm water runoff. Areas of exposed or stockpiled soils could be subject to wind or water erosion, allowing temporary discharges of sediment into the storm drain system and ultimately to the Sacramento River. Accidental spills of construction-related contaminants (e.g., fuels, oils, paints, solvents, cleaners, and concrete) or nonstorm water discharges from activities such as construction dewatering also could occur during Project construction, resulting in releases to nearby surface water and thereby degrading water quality. If not managed properly, water used for dust suppression during Project construction could also enter the storm drain system.

Because the area of disturbance associated with Project construction would be more than 1 acre, the Project would be subject to the requirements of the NPDES General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities, 2009-0009-DWQ, as amended by 2010-0014-DWQ and 2012-0006-DWQ (General Construction Permit, BMPs) and a SWPPP would be prepared (as a condition of Project approval) in accordance with the NPDES General Construction Permit to minimize the potential for degradation of storm water quality during construction activities. Post-construction runoff would be conveyed into the existing storm water collection system. Although not anticipated for the proposed Project due to the depth to groundwater, if dewatering is required, a general NPDES Permit for short-term discharges of small volumes of wastewater from certain construction-related activities (General Dewatering Permit) would be obtained. Permit conditions for the discharge of these types of wastewater to surface waters are specified in the General Order for Dewatering and Other Low Threat Discharges to Surface Waters (Order No. R5-2013-0074, NPDES No. CAG995001) and are designed to minimize impacts to water quality during dewatering activities. The General Dewatering Permit also specifies standards for testing, monitoring, and reporting; receiving water limitations; and discharge prohibitions.

Because BMPs, a SWPPP, and dewatering provisions would be implemented (as applicable as a condition of Project approval) and post-construction runoff would be conveyed into the existing storm water collection system, water quality impacts would be **less than significant**. Mitigation is not required.

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

Less Than Significant Impact. Installation of new water lines (water mains and laterals) associated with the Project will require the removal and replacement of the impermeable roadway surfaces within the existing ROW. Any change in the amount of impervious surface would be negligible;

therefore, the Project would not result in a change in infiltration. Groundwater is expected to be encountered at a depth of approximately 19 feet below ground surface and is not anticipated to be encountered during construction activities. Because of the small amount of excavation required, in the event that dewatering is required as part of the Project, it would not result in a substantial depletion of groundwater sources such that there would be a net deficit in aquifer volume at the Project site, as construction activities would be temporary. Consequently, this impact would be **less than significant**. No mitigation is required.

c. Would the Project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?

Less Than Significant Impact. The Project would not alter any natural waterways or drainages. Storm water would be collected and redirected into the existing storm water system and on-site storm water detention pond. No substantial change in the volume of storm water discharged into the storm water system is expected with implementation of the Project. See the response to Threshold a) regarding potential water quality impacts associated with Project construction. The impact would **be less than significant**. No mitigation is required.

d. 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 substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?

Less Than Significant Impact. See the response to Threshold c). No substantial change in the volume of storm water discharged into the storm water system is expected with implementation of the Project. The impact would be **less than significant.** No mitigation is required.

e. Would the Project 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?

Less Than Significant Impact. See the responses to Thresholds a) and c). No substantial change in the volume of storm water discharged into the storm water system or sources of runoff are expected with implementation of the proposed Project. Impacts would be **less than significant** and no mitigation is required.

f. Would the Project otherwise substantially degrade water quality?

Less Than Significant Impact. Water quality effects are described above in the response to Threshold a). The Project would not degrade water quality beyond the conditions described previously. The impact would be **less than significant**. No mitigation is required.

g. Would the Project place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?

No Impact. The Project would not involve the construction of housing; therefore, no housing would be placed within a 100-year flood zone. **No impact** would occur.

h. Would the Project place within a 100-year flood hazard area structures which would impede or redirect flood flows?

Less Than Significant Impact. The Project involves installing new underground water mains and laterals within the existing road ROW. Although the Project is located entirely within an area protected by levees that may be designated as a special flood hazard area in the future, the Project would be designed to allow drainage patterns to remain largely as they currently occur on site, directing runoff to existing storm water collection systems. In addition, the Project would not result in the encroachment of aboveground structures that could impede or redirect flood flows. As a result, this impact would be **less than significant**. No mitigation is required.

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

Less Than Significant Impact. The Project involves installing new underground water mains and laterals within the existing road ROW. Although the Project is located entirely within a dam inundation area and an area protected by levees that may be designated as a special flood hazard area in the future, the Project would be designed to allow drainage patterns to remain largely as they currently occur on site, directing runoff to existing storm water collection systems. In addition, the Project would not result in the encroachment of aboveground structures that could impede or redirect flood flows as a result of the failure of a levee or dam. Consequently, this impact would be **less than significant**. No mitigation is required.

j. Would the Project be inundated by seiche, tsunami, or mudflow?

Less Than Significant Impact. The Project is not located in a tsunami inundation zone and would not be affected by mudflow because of its relatively flat topography. Seiches are earthquake-generated waves within enclosed or restricted bodies of water. The proposed Project could potentially be inundated by a seiche if a maximum momentum magnitude earthquake on one of the active faults in the Project vicinity generated oscillations or waves in the Sacramento River that overtopped and damaged levees; however, the potential is considered to be low and limited to those periods when the Sacramento River is full during the flood season. Because the Project involves installing new underground water mains and laterals within the existing road ROW, it would not contribute to inundation depth if a seiche event were to occur. Therefore, the impact is **less than significant**. No mitigation is required.

3.9.3 Mitigation Measures

No mitigation is required.

This page intentionally left blank

3.10 LAND USE AND PLANNING

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

3.10.1 Environmental Setting

The Project site is located in the Northeast Village neighborhood of West Sacramento, in a long-established urbanized area. The City of West Sacramento General Plan designates the Project site as a Low-Density Residential land use with a zoning designation of Residential One Family (R-1-B). A portion of the proposed Project will extend east into the Liberty Specific Plan area, which has a current land use and zoning designation of Rural Residential (RR and RRA, respectively). The proposed Project does not include or require the redesignation of existing land uses or zoning within West Sacramento.

3.10.2 Discussion

a. Would the Project physically divide an established community?

No Impact. The Project includes the in-place abandonment of existing water mains within an established West Sacramento neighborhood and the installation of new water mains, service laterals and meters. The Project would not physically divide this established community as construction activities would be temporary and, once operational, the design features would be located underground in City-owned ROW and prescriptive easements. Consequently, **no impacts** would occur under this threshold.

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

No Impact. The proposed Project would not involve a change in land use and would continue to comply with the West Sacramento General Plan Land Use Element, Land Use Map, and Zoning Ordinance. The Project would also comply with applicable development standards for utilities as set forth by the City of West Sacramento Public Works Department. The Project would not conflict with applicable land use plans, policies, or regulations. **No impact** would occur.

c. Would the Project conflict with any applicable habitat conservation plan or natural community conservation plan?

No Impact. The Project is not located within the jurisdiction of an applicable Habitat Conservation Plan or Natural Community Conservation Plan. The Project is located in an urbanized neighborhood in West Sacramento. Consequently, **no impact** would occur under this threshold.

3.10.3 Mitigation Measures

No mitigation is required.

3.11 MINERAL RESOURCES

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

3.11.1 Environmental Setting

The principal legislation addressing mineral resources in California is the Surface Mining and Reclamation Act of 1975 (SMARA) (PRC Sections 2710–2719), which was enacted in response to land use conflicts between urban growth and essential mineral production. The stated purpose of SMARA is to provide a comprehensive surface mining and reclamation policy that will encourage the production and conservation of mineral resources while ensuring that adverse environmental effects of mining are prevented or minimized; that mined lands are reclaimed and residual hazards to public health and safety are eliminated; and that consideration is given to recreation, watershed, wildlife, aesthetic, and other related values. SMARA governs the use and conservation of a wide variety of mineral resources, although some resources and activities are exempt from its provisions, including excavation and grading conducted for farming, construction, and recovery from flooding or other natural disaster.

SMARA provides for the evaluation of an area's mineral resources using a system of Mineral Resource Zone (MRZ) classifications that reflect the known or inferred presence and significance of a given mineral resource. The MRZ classifications are based on available geologic information, including geologic mapping and other information on surface exposures, drilling records, and mine data, and on socioeconomic factors such as market conditions and urban development patterns. The MRZ classifications are defined as follows:

- **MRZ-1**—Areas where adequate information indicates that no significant mineral deposits are present, or where it is judged that little likelihood exists for their presence.
- **MRZ-2**—Areas where adequate information indicates that significant mineral deposits are present, or where it is judged that a high likelihood exists for their presence.
- **MRZ-3**—Areas containing mineral deposits, the significance of which cannot be evaluated from available data.
- **MRZ-4**—Areas where available information is inadequate for assignment into any other MRZ.

Although the State of California is responsible for identifying areas containing mineral resources, the county or city is responsible for SMARA implementation and enforcement by providing annual mining inspection reports and coordinating with the CGS.

The proposed Project is located in an area designated as MRZ-1 (no significant mineral deposits), and no areas within the Project boundary are designated as MRZ-2 (likelihood of significant mineral deposits). There is a band of land designated as MRZ-3 (unknown); however, this land is near the Sacramento River and is not within the Project boundary.

3.11.2 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. No historical or current commercial mining operations are known to have occurred in West Sacramento. The California Division of Mines and Geology has classified most of the Project area as MRZ-1 (information indicates that no significant mineral deposits are present). The small area bordering the Sacramento River is classified as MRZ-3 (aggregate deposits of undetermined significance occur there). MRZ-1 and MRZ-3 zones are not subject to State policies that guarantee maintenance of access to regionally significant mineral deposits under SMARA. The Project would therefore have **no impact** on mineral resources.

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 proposed Project is not located in an area where a locally important mineral resource recovery site is delineated in the West Sacramento General Plan, or in any specific plan or other land use plan of the City. As such, implementation of the proposed Project would not result in the loss of availability of a locally important mineral recovery site. **No impact** would occur.

3.11.3 Mitigation Measures

No mitigation is required.

3.12 NOISE

	Potentially Significant Impact	Less Than Significant Impact with Mitigation	Less Than Significant Impact	No Impact
Would the project:				
a. Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☒	☐	☐
b. Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☒	☐
c. A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☐	☒
d. A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☒	☐	☐
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 expose people residing or working in the project area to excessive noise levels?	☐	☐	☒	☐
f. For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☒	☐

3.12.1 Environmental Setting

The following provides an overview of the characteristics of sound and vibration and the regulatory framework that applies to both within the vicinity of the Project site. The existing noise environment in and around the Project site is also described.

3.12.1.1 Characteristics of Sound

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

As noise spreads from a source, it loses energy, so that the farther away the noise receiver is from the noise source, the lower the perceived noise level would be. Geometric spreading causes the

sound level to attenuate or be reduced, resulting in a 6 dB reduction in the noise level for each doubling of distance from a single point source of noise to the noise-sensitive receptor of concern.

There are many ways to rate noise for various time periods, but an appropriate rating of ambient noise affecting humans also accounts for the annoying effects of sound. The equivalent continuous sound level (L_{eq}) is the total sound energy of time varying noise over a sample period. However, the predominant rating scales for human communities in the State of California are the L_{eq}, the community noise equivalent level (CNEL), and the day-night average level (L_{dn}) based on dBA. CNEL is the time varying noise over a 24-hour period, with a 5 dBA weighting factor applied to the hourly L_{eq} for noises occurring from 7:00 p.m. to 10:00 p.m. (defined as relaxation hours) and a 10 dBA weighting factor applied to noise occurring from 10:00 p.m. to 7:00 a.m. (defined as sleeping hours). L_{dn} is similar to the CNEL scale, but without the adjustment for events occurring during the evening relaxation hours. CNEL and L_{dn} are within 1 dBA of each other and are normally interchangeable. The noise adjustments are added to the noise events occurring during the more sensitive hours. Terms used in this noise analysis are defined as follows:

- **Decibel (dB):** A unitless measure of sound on a logarithmic scale that indicates the squared ratio of sound pressure amplitude with respect to reference sound pressure amplitude. The reference pressure is 20 micropascals.

- **A-weighted decibel (dBA):** An overall frequency-weighted sound level in decibels that approximates the frequency response of the human ear.

- **C-weighted decibel (dBC):** The sound pressure level in decibels as measured using the C-weighting filter network. The C-weighting is very close to an unweighted or flat response. C-weighting is used only in special cases (i.e., when low-frequency noise is of particular importance). A comparison of measured A- and C-weighted levels gives an indication of low-frequency content.

- **Maximum sound level (L_{max}):** The maximum sound level measured during the measurement period.

- **Minimum sound level:** The minimum sound level measured during the measurement period.

- **Equivalent sound level (L_{eq}):** The equivalent steady-state sound level that in a stated period of time would contain the same acoustical energy.

- **Percentile-exceeded sound level:** The sound level exceeded xx percent of a specific time period. L_{10} is the sound level exceeded 10 percent of the time, and L_{90} is the sound level exceeded 90 percent of the time. L_{90} is often considered to be representative of the background noise level in a given area.

- **Day-night level:** The energy average of the A-weighted sound levels occurring during a 24-hour period, with 10 dB added to the A-weighted sound levels occurring during the period from 10:00 p.m. to 7:00 a.m.

- **Community Noise Equivalent Level (CNEL)**: The energy average of the A-weighted sound levels occurring during a 24-hour period, with 5 dB added to the A-weighted sound levels occurring during the period from 7:00 p.m. to 10:00 p.m. and 10 dB added to the A-weighted sound levels occurring during the period from 10:00 p.m. to 7:00 a.m.

- **Vibration Velocity Level (or vibration velocity decibels [VdB])**: The root-mean-square velocity amplitude for measured ground motion expressed in dB.

- **Peak Particle Velocity (peak velocity, or PPV)**: A measurement of ground vibration, defined as the maximum speed (measured in inches per second) at which a particle in the ground is moving relative to its inactive state. PPV is usually expressed in inches per second.

- **Frequency: Hertz:** The number of complete pressure fluctuations per second above and below the atmosphere pressure.

3.12.1.2 Existing Noise Conditions

The proposed Project is located in West Sacramento, within the Southport Planning Area. The Southport Planning Area lies in the southern half of West Sacramento and is bounded by the Deep Water Ship Channel to the north and west, the Sacramento River to the east, and the city limits to the south. Surrounding land uses are occupied mostly by residential units; however, there is vacant land to the east and south of the Project site. This vacant land is currently entitled and is anticipated to be developed as part of the Liberty Specific Plan. Noise monitoring was conducted for the City's General Plan Update Draft EIR (City of West Sacramento 2016a), including a long-term noise monitoring site within the Project boundary at the end of the Shasta Way cul-de-sac. The long-term noise-monitoring site referenced in the General Plan Update Draft EIR indicated that noise levels ranged between 59.5 and 60.8 dBA $L_{dn.}$ The dominant noise sources in the Project vicinity are motor vehicles. The amount of noise varies according to many factors, such as volume of traffic, vehicle mix (percentage of cars and trucks), average traffic speed, and distance from the observer.

3.12.1.3 Fundamentals of Vibration

Vibration is a form of noise with energy carried through structures and the earth, whereas noise is simply carried through the air. Thus, vibration is generally felt rather than heard. Some vibration effects can be caused by noise (e.g., the rattling of windows from passing trucks). This phenomenon is related to the coupling of the acoustic energy at frequencies that are close to the resonant frequency of the material being vibrated. Typically, ground-borne vibration generated by man-made activities attenuates rapidly as distance from the source of the vibration increases. Vibration, which spreads through the ground rapidly, diminishes in amplitude with distance from the source.

The ground motion caused by vibration is measured as PPV in inches per second. PPV is the speed at which a particle of earth moves and is expressed in units of inches per second. Vibration also is measured as the root-mean-square amplitude of a motion over a 1-second period. For ease, the logarithmic dB scale is used to describe the vibration velocity level relative to a reference level of 10^6 inches per second and is expressed as VdB.

The vibration velocity level threshold of perception for humans is approximately 65 VdB. A vibration velocity of 75 VdB is considered the approximate threshold between barely and distinctly perceptible levels for many humans. Most perceptible indoor vibration is caused by sources within buildings such as operation of mechanical equipment, movement of people, or slamming of doors. Typical sources of perceptible ground-borne vibration include construction equipment, steel-wheeled trains, and traffic on rough roads. Ground-borne vibration from traffic is barely perceptible if a roadway is smooth.

Analysis regarding ground-borne vibration for utility projects is typically focused on construction activities. Once operational, these projects do not generate ground-borne vibration. Construction activities can result in varying degrees of ground vibration, depending on the equipment and methods employed. Operation of construction equipment causes vibrations that spread through the ground and diminish in strength with distance. Structures built on the soil in the vicinity of the construction site respond to these vibrations, with varying results ranging from no perceptible effects at the lowest levels to low rumbling sounds and perceptible vibrations at moderate levels, and slight damage at the highest levels.

Ground vibrations from construction activities do not often reach the levels that can damage structures, but they can achieve the audible and feelable ranges in buildings very close to the site. A possible exception is the case of fragile buildings, many of them old, where special care must be taken to avoid damage. The construction activities that typically generate the most severe vibrations are blasting and impact pile-driving. Various types of construction equipment have been measured under a wide variety of construction activities, with an average of source levels reported in terms of velocity. **Table 3.12-1: Vibration Source Levels for Construction Equipment** shows the vibration levels of various types of construction equipment measured in PPV and VdB at a distance of 25 feet from the equipment.

Table 3.12-1: Vibration Source Levels for Construction Equipment

Construction Equipment		PPV at 25 feet (in/sec)	Approximate VdB at 25 feet
Pile Driver (impact)	Upper Range	1.518	112
	Typical	0.644	104
Pile Driver (sonic)	Upper Range	0.734	105
	Typical	0.170	93
Clam Shovel Drop (slurry wall)		0.202	94
Hydromill (slurry wall)	In Soil	0.008	66
	In Rock	0.017	75
Vibratory Roller		0.210	94
Hoe Ram		0.089	87
Large Bulldozer		0.089	87
Caisson Drilling		0.089	87
Loaded Trucks		0.076	86
Jackhammer		0.035	79
Small Bulldozer		0.003	58

Source: United States Department of Transportation/Federal Transit Administration (2006).
in/sec = inches per second VdB = vibration velocity decibels
PPV = peak particle velocity

3.12.2 Regulatory Setting

The City of West Sacramento addresses noise in the Health and Safety Element of its General Plan (City of West Sacramento 2016a) and in Chapter 17.32 of its Municipal Code (Performance Standards of Noise). The primary purpose of the noise portion of the element is to protect West Sacramento residents from the harmful effects of excessive noise. The noise guidance serves to set land use compatibility standards for new developments.

The City's performance standards for noise, found in Chapter 17.32 of the City's Municipal Code, are the primary enforcement tool for the operation of locally regulated noise sources, such as construction activity or outdoor recreation facilities. This section of the Municipal Code sets noise level performance standards for nontransportation noise sources, which are summarized in **Table 3.12-2: City of West Sacramento Noise Level Standards of Nontransportation Uses**. Examples of nontransportation noise sources are construction equipment; industrial operations; outdoor recreation facilities; heating, ventilation, and air-conditioning units; and loading docks. The City's performance standards do not specify an exemption for temporary daytime construction activity, so the daytime and nighttime limits specified in the City's performance standards for noise would apply to all construction activities in West Sacramento (City of West Sacramento 2008). The City's Municipal Code also sets noise level performance standards for transportation sources; however, the proposed Project would not generate transportation noise above what already exists under ambient conditions, as the Project only includes the removal of a water main and the installation of a replacement water main and service laterals.

In addition, the City's Municipal Code prohibits the installation of any operation that consistently produces noticeable construction- or operation-related vibration beyond the property line. **Table 3.12-3: Groundborne Vibration Impact Criteria for General Assessment** shows the City of West Sacramento's General Plan Vibration Impact Criteria for frequent events, occasional events, and infrequent events.

Table 3.12-2: City of West Sacramento Noise Level Standards for Nontransportation Uses

Land Use	Noise Level Descriptor (dBA)	Exterior Noise Levels		Interior Noise Levels	
		Daytime[1]	Nighttime[2]	Daytime[1]	Nighttime[2]
Residential	Hourly L_{eq}	50	45	45	35
	Maximum level	70	65	-	-
Transient lodging	Hourly L_{eq}	-	-	45	35
Hospitals, nursing homes	Hourly L_{eq}	-	-	45	35
Theaters, auditoriums, music halls	Hourly L_{eq}	-	-	35	35
Churches, meeting halls	Hourly L_{eq}	-	-	40	40
Office buildings	Hourly L_{eq}	-	-	45	45
Schools, libraries, museums	Hourly L_{eq}	-	-	45	45

Source: City of West Sacramento (2008).
Note: Each noise level specified above will be lowered by 5 dB for simple-tone noises, noises consisting primarily of speech or music, or recurring impulsive noises. These noise level standards do not apply to residential units established in conjunction with industrial or commercial uses (e.g., caretaker dwellings).
[1] Daytime is defined as 7:00 a.m. to 10:00 p.m.
[2] Nighttime is defined as 10:00 p.m. to 7:00 a.m.
dB = decibels
dBA = A-weighted decibels
L_{eq} = equivalent continuous sound level

Table 3.12-3: Groundborne Vibration Impact Criteria for General Assessment

Land Use	Impact Levels (VdB)		
	Frequent Events[a]	Occasional Events[b]	Infrequent Events[c]
Category 1: Building where vibration would interfere with interior operations.	65[d]	65[d]	65[d]
Category 2: Residences and buildings where people normally sleep	72	75	80
Category 3: Institutional land uses with primarily daytime uses	75	78	83

Source: City of West Sacramento (2016a).

[a] "Frequent Events" is defined as more than 70 vibration events of the same source per day.

[b] "Occasional Events" is defined as between 30 and 70 vibration events of the same source per day.

[c] "Infrequent Events" is defined as fewer than 30 vibration events of the same source per day.

[d] This criterion limit is based on levels that are acceptable for most moderately sensitive equipment, such as optical microscopes. Vibration-sensitive manufacturing or research will require detailed evaluation to define the acceptable vibration levels.

VdB = vibration velocity decibels

3.12.3 Discussion

a. Would the Project result in exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

Less than Significant Impact with Mitigation. The following provides a discussion on operational noise impacts and construction noise impacts.

3.12.3.1 Operational Noise Impacts

The proposed Project would remove an existing water main and replace it with a new water main and new service laterals. Once operational, the Project would not result in noise-generating sources. Therefore, once operational, the Project would not result in the exposure of noise-sensitive land uses to noise levels in excess of the City of West Sacramento standards, as shown above in **Table 3.12-2**. Operational impacts would be less than significant.

3.12.3.2 Construction Noise Impacts

Construction often generates community noise complaints, even when it takes place over a limited timeframe. Noise impacts from construction may vary greatly depending on the proximity, duration, and complexity of the project. The noise levels generated by construction equipment would vary depending on the type of equipment, the specific model, the operation being performed, and the condition of the equipment. The L_{eq} of the construction activity also depends on the fraction of time that the equipment is operated over the time period of construction. The dominant source of noise from most construction equipment is the engine, which is usually a diesel engine and often lacks sufficient muffling. In a few cases, such as impact pile driving or pavement breaking, noise generated by the process dominates. Construction equipment can operate in two modes—stationary and mobile. Stationary equipment operates in one location for 1 or more days at a time, with either a fixed power operation (e.g., pumps, generators, and compressors) or a variable noise operation (e.g., pile drivers and pavement breakers). Mobile equipment moves around the construction site

with power applied in cyclic fashion (e.g., bulldozers and loaders), or to and from the site (e.g., trucks). Variation in power imposes additional complexity in characterizing the noise source level from a piece of construction equipment. This variation is handled by describing the noise at a reference distance from the equipment operating at full power and adjusting it based on the duty cycle of the activity to determine the L_{eq} of the operation.

During construction of the proposed Project, noise from construction activities may intermittently dominate the noise environment in the immediate area of construction. Two types of short-term noise impacts would occur during Project construction. The first type would be from construction crew commutes and the transport of construction equipment and materials to the Project site, which would incrementally increase noise levels on the existing roadways leading to the site.

The transport of heavy equipment would occur only a few times (to the Project construction areas prior to construction commencement and from the Project construction areas upon construction completion) and would not add to the daily traffic volume along roadways surrounding the Project site. During arrival and departure of this heavy equipment, there is a potential for a high single-event noise exposure at a maximum level of 87 dBA L_{max} from trucks passing, as measured from a distance of 50 feet. However, the projected construction traffic would be minimal when compared to existing traffic volumes on surrounding roadways, including truck traffic, and the noise levels along these roadways would not be increased permanently. Therefore, short-term construction-related worker commutes and equipment noise impacts would be less than significant.

The second type of short-term noise impact is related to noise generated during excavation, construction, and paving. The proposed Project would include construction of roadway improvements in the Washington district of West Sacramento. Construction activities would include the use of earthmovers such as backhoes, front-end loaders, graders, dump trucks, and water trucks, as well as paving equipment such as cement/asphalt trucks and compactors. Such construction equipment would be used intermittently throughout the duration of the Project construction period. **Table 3.12-4: Anticipated Construction Equipment Used for the Project and Their Maximum Noise Levels, L_{max}** shows the construction equipment types anticipated to be used during Project construction and their maximum sound levels.

Construction of the proposed Project will occur within existing ROW along the following neighborhood roads: Linden Road, Mojave Drive, Merced Way, Shasta Way, Carmel Court, Rubicon Way, Ironwood Way, Spruce Street, Redwood Avenue, Alder Way, Tamarack Road, and Cedar Street. Sensitive receptors (single-family residential units) are located along these roads and would be as close as 40 feet from active construction areas and equipment. Despite the variety in the type and size of construction equipment, similarities in the dominant noise sources and patterns of operation allow construction-related noise ranges to be categorized by work phase. **Table 3.12-4**, below, lists typical construction equipment noise levels recommended for noise impact assessments of the construction equipment that will be used during Project development. Excavation and construction activities at the Project site are expected to require the use of earth movers such as backhoes, front-end loaders, graders, dump trucks, and water trucks, as well as paving equipment such as cement/asphalt trucks and compactors.

Table 3.12-4: Anticipated Construction Equipment Used for the Project and Their Maximum Noise Levels, L_{max}

Type of Equipment	Impact Device? (Yes/No)	Specification L_{max} for Analysis (dBA at 50 feet)
Hydrovac Vacuum Trucks	No	85
Tractors	No	84
Backhoes	No	80
Trencher	No	80
Loader	No	80
Haul Trucks	No	55
Excavator	No	85
Compressor	No	80
Concrete Saw	No	90
Concrete Mixer Truck	No	85
Jack Hammer	Yes	85
Asphalt Planer	No	85
Trench Paver[1]	No	109
Compactors	No	80
Rollers	No	85
Street Sweeper	No	80
Forklift[1]	No	93
Chipping Guns	Yes	85

Source: Federal Highway Administration (2006).
[1] 116 dBA at 7 meters = 109.2 dBA at 50 feet (Berger et al. 2015).
dBA = A-weighted decibels
L_{max} = maximum sound level

Typical operating cycles for these types of construction equipment may involve 1 or 2 minutes of full-power operation followed by 3 or 4 minutes at lower power settings. Impact equipment, such as jack hammers and chipping guns, would be used during construction of this Project. As shown in **Table 3.12-4**, the typical maximum noise level generated by these types of equipment is assumed to be 109 dBA L_{max} at 50 feet. Each doubling of the sound sources with equal strength would increase the noise level by 3 dBA. Assuming the noisiest pieces of construction equipment operates (forklift [50 percent usage factor], trench paver [20 percent usage factor], and concrete saw [20 percent usage factor]) at some distance apart from the other equipment, the worst-case combined noise level during this phase of construction would be 109 dBA L_{max} and 102 dBA L_{eq} at a distance of 50 feet from multiple pieces of heavy construction equipment operating at full power simultaneously.

As stated above, the nearest residential land uses to the Project site would be the single-family residences located directly adjacent to the roadway ROWs where construction would occur, with the nearest building façades located as close as 40 feet from the nearest construction areas. At a distance of 10 feet, intermittent noise levels could reach approximately 111 dBA L_{max} and 105 dBA L_{eq}.

As noted previously, typical operating cycles for heavy construction equipment involve 1 or 2 minutes of full-power operation followed by 3 or 4 minutes at lower power settings. Additionally,

construction at the Project site would be limited to a duration of no more than a few months. Therefore, although there would be a relatively high single-event noise exposure potential causing intermittent noise nuisance, the effect on longer-term (hourly or daily) ambient noise levels would be limited. However, the intermittent noise levels could exceed the maximum exterior noise level of 70 dBA for residential receptors, which is the City's standard as described above in **Table 3.12-4**, resulting in a significant noise impact during construction. However, implementation of **Mitigation Measure MM NOI-1,** as presented below, would reduce short-term construction-related noise impacts to a **less than significant** level.

b. Would the Project result in exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?

Less Than Significant Impact. Construction activities associated with implementation of the proposed Project are not expected to result in excessive groundborne vibration or groundborne noise levels. Jackhammers will be used during Project construction and would generate the highest amount of vibration. Jackhammers that are operating as close as 40 feet to sensitive receptors would generate vibration levels of approximately 72.7 VdB, which is below the City of West Sacramento's vibration threshold for category 2 land uses (residences and buildings where people normally sleep). Additionally, groundborne vibration during construction activities is temporary and would cease to occur after Project construction is complete. Once the water main and laterals are installed and operational, groundborne vibrations would not be generated. As such, impacts would be **less than significant**.

c. Would the Project result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?

No Impact. The proposed Project includes the installation of a new water main and new laterals for residential connection to the water system. Once operational, the Project would not result in noise-generating sources. Therefore, the proposed Project would not result in a substantial permanent increase in ambient noise levels in the Project vicinity above levels existing without the Project, and there would be **no impact.**

d. Would the Project result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?

Less Than Significant Impact with Mitigation. Temporary intermittent noise from short-term construction activities associated with installation of the new water main and laterals would increase ambient noise levels during the construction period. However, the increased noise levels would be temporary and intermittent, and would occur in association with excavation, earthwork, and paving activities. Additionally, implementation of **Mitigation Measure MM-NOI-1** would further minimize the short-term noise increase generated during construction activities on the Project site to a **less than significant** level.

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 expose people residing or working in the project area to excessive noise levels?

Less Than Significant Impact. The proposed Project is approximately 1.8 miles northwest of Sacramento Executive Airport (located at 6151 Freeport Boulevard, Sacramento). The Sacramento Executive Airport Comprehensive Land Use Plan (Sacramento Area Council of Governments 1998) was reviewed to determine if the proposed Project is located within the airport's land use plan or noise contours where construction personnel on the Project site could be exposed to excessive noise levels. The proposed Project is not located within the boundary of the Sacramento Executive Airport Land Use Plan and is not within the 65 dBA CNEL noise contour boundary of the airport. As such, implementation of the Project would not expose construction workers to excessive noise levels associated with operation of Sacramento Executive Airport. Impacts would be **less than significant.**

f. For a project within the vicinity of a private airstrip, would the Project expose people residing or working in the project area to excessive noise levels?

Less Than Significant Impact. The proposed Project is not located within the vicinity of a private airstrip. The closest private airstrip to the proposed Project is California Highway Patrol Academy Airport (60CL), located approximately 3.9 miles northwest of the Project site. As such, the proposed Project would not expose people residing or working in the Project area to excessive noise levels. This impact would be **less than significant.**

3.12.4 Mitigation Measures

Prior to commencement of Project construction, the following mitigation measure shall be implemented:

MM-NOI-1: Prior to initiating construction, the Project proponent shall complete a noise reduction plan. The noise reduction plan shall identify the type and quantity of construction equipment to be operated, the expected noise levels of each piece of equipment, and the duration of operation at each area of construction. The noise reduction plan shall include measures to ensure construction of the Project will meet the standards of Chapter 17.32 of the City of West Sacramento Municipal Code (Performance Standards of Noise).

With implementation of **Mitigation Measure MM-NOI-1**, short-term construction noise impacts would be **less than significant.**

3.13 POPULATION AND HOUSING

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

3.13.1 Environmental Setting

In 1987, the year West Sacramento was incorporated, the City had an estimated population of 28,195 residents. Currently (Year 2016 as this is the most recent data available), the American Community Survey 5-year demographic and housing estimates reports the population is 51,386 persons, with a total of 18,860 housing units. Because population data for the Project area is analyzed at the census tract level (Census Tract 103.02, Yolo County, California), population estimates for the Project area are limited to the information collected in the decennial Census. The 2010 Census estimated 2,566 occupied households distributed among a total population of 7,270 persons within the Project area, of which 77.6 percent of households are owner-occupied and 22.4 percent are renter-occupied, with an average household size of 2.83 persons (United States Census Bureau 2010).

3.13.2 Discussion

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

No Impact. The proposed Project includes the installation of a new water main and laterals to connect to residential units in an established neighborhood. The proposed Project does not include design features that would promote direct or indirect population growth, as the Project is being constructed in an established neighborhood in West Sacramento. As such, the proposed Project would not promote population growth and **no impact** would occur.

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

No Impact. The proposed Project would include the installation of a new water main and laterals to existing residential units within an established neighborhood in West Sacramento. The installation of the water main and laterals would occur within City-owned ROW in the roads of the neighborhood. A portion of the Project will extend into the Liberty Specific Plan area; however, this area is currently unoccupied, and the Project would not displace existing housing. As such, **no**

impacts would occur with implementation of the proposed Project on existing housing stock in West Sacramento.

c) Would the Project displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?

No Impact. The proposed Project would not displace residents, as the Project includes replacement of a water main and installation of laterals in road ROWs in an established West Sacramento neighborhood. The proposed Project would not necessitate the construction of replacement housing elsewhere in West Sacramento. As such, **no impacts** would occur with implementation of the proposed Project.

3.13.3 Mitigation Measures

No mitigation is required.

3.14 PUBLIC SERVICES

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

3.14.1 Environmental Setting

The proposed Project is located in an area of West Sacramento that is served by the WSFD for fire protection services. The WSFD is divided into three major units that provide a wide range of services for the community: Fire Administration, Emergency Operations, and Fire Prevention/Hazardous Materials. There are five fire stations located within West Sacramento that operate 24 hours per day, 7 days per week, with a combined staffing of 17 personnel on duty. The personnel on duty include a battalion chief who responds to all structure fires and major emergencies, providing incident command and scene management. Fire Station #45 (located at 2040 Lake Washington Boulevard in West Sacramento) is the closest station to the Project site, approximately 0.37 mile to the northwest. The City, through its General Plan, is required to maintain an average response time to emergency calls (Priority 1) of 5 minutes for 95 percent of Priority 1 calls. The average response time for the WSFD overall is 4 minutes, 42 seconds, from time of dispatch to arrival on scene. Therefore, the WSFD is currently meeting the General Plan goals and policies of response times.

Law enforcement services in West Sacramento and at the Project site are provided by the West Sacramento Police Department, which comprises three main divisions: Administration, Support Services, and Field Operations. Field Operations is under the command of two watch commanders and eight police sergeants who provide direct supervision to 65 sworn officers and 4 community services officers. This staff is assigned to five patrol shifts and two specialty units. The average response time for law enforcement services in 2015 ranged from 0.02 minute for Priority 0 Calls (life-threatening emergencies and crimes in progress) to 7.6 minutes for Priority 5 Calls (non-emergency). Response times for Priority 2 and 4 calls (the most abundant in 2015) were 5.96 minutes and 11.81 minutes, respectively. The West Sacramento Police Department station is located at 550 Jefferson Boulevard in West Sacramento, approximately 2.7 miles north of the Project site.

Education services in West Sacramento are provided by the Washington Unified School District (WUSD). The WUSD provides primary, secondary, and high school education services to the residents of West Sacramento. As of 2014, WUSD had an enrollment of 7,421 students and a staff of 400 certificated employees and 350 classified employees. River City High School (located at 1 Raider Lane in West Sacramento) is the closest school to the Project site and is located approximately 0.3 mile to the west.

The West Sacramento Parks and Recreation division oversees the maintenance of 145+ acres of developed City parks. The City currently has an inventory of 33 parks, plazas, and playfields totaling 152.6 acres. Based on the City of West Sacramento's population of 51,386 residents in 2016 and its park acreage to population ratio requirements of 5:1, the City is deficient in parkland for the existing population. The closest park to the Project site, Southport Gateway Park, is approximately 0.6 mile to the north.

The Yolo County Library provides library services to the City of West Sacramento. The Arthur F. Turner Community Library is located at 1212 Merkley Avenue and is 2.3 miles north of the Project site. This library is approximately 18,000 square feet in size and provides West Sacramento residents with access to books and other materials, including DVDs, CDs, magazines, and newspapers.

3.14.2 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:

i. Fire protection?

ii. Police protection?

iii. Schools?

iv. Parks?

v. Other public facilities?

Less Than Significant Impact. The proposed Project includes the installation of a new water main and laterals connecting to existing residential units in a neighborhood in West Sacramento. The Project is not growth-inducing and would therefore not increase the population of West Sacramento, the need for new schools, or the use of parks or other public facilities. During construction of the Project, road detours may be needed, which may temporarily affect response times of fire and law enforcement staff in the neighborhood where the Project will be located. However, a Traffic Management Plan (as discussed in Section 3.16) would be implemented as a condition of approval for the Project, and thus would reduce potential impacts to temporary increased response times for fire and law enforcement staff. As such, impacts would be **less than significant**.

3.14.3 Mitigation Measures

No mitigation is required.

This page intentionally left blank

3.15 RECREATION

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

3.15.1 Environmental Setting

As discussed above in Section 3.13, Public Services, the West Sacramento Parks and Recreation division oversees parks and recreational facilities within West Sacramento. The closest park to the Project site, Southport Gateway Park, is approximately 0.6 mile to the north. The Sacramento River, which provides recreational opportunities on a regional and local basis, is approximately 0.41 mile east of the Project site.

3.15.2 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?

No Impact. The proposed Project would not generate population growth as it includes the installation of a water main and laterals in an existing neighborhood within West Sacramento. As such, implementation of the proposed Project would not generate an increased use of existing neighborhood parks, regional parks or recreational facilities above and beyond the amount of use currently occurring. **No impacts** would occur to recreational facilities due to Project implementation.

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 includes the installation of a water main and laterals in an established residential neighborhood of West Sacramento. The design elements of the proposed Project do not include the construction of recreational facilities that may have an adverse physical effect on the environment. As such, **no impact** would occur due to Project implementation.

3.15.3 Mitigation Measures

No mitigation is required.

This page intentionally left blank

3.16 TRANSPORTATION/TRAFFIC

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

3.16.1 Environmental Setting

The proposed Project is located in the Northeast Village neighborhood of West Sacramento in an area with local roads. Local roads are intended to serve adjacent properties. They carry minimal through traffic and generally carry very low traffic volumes. Many of West Sacramento's local roads are arranged in a grid (similar to the roads in the neighborhood where the Project would be implemented), making through travel possible but not desirable because of slow speeds, traffic control or calming, and competing roadway users. The speed limits on the roads where the Project would be implemented do not exceed 25 miles per hour. Collector roads are also near the proposed Project and are intended to convey traffic from local roads to larger roads. Collector roads also serve adjacent properties and generally carry light to moderate traffic volumes, with typical speed limits of 25 to 35 miles per hour.

An Environmental Impact Report for the Liberty Specific Plan (adjacent to the Project site) was released for public review in August 2017. The EIR for the Liberty Specific Plan provided data for existing intersection LOS and roadway segment volumes near the proposed Project. The intersection

of Stonegate Drive/Linden Road currently operates at LOS B in the a.m. and p.m. peak hours, and the intersection of Mojave Drive/Linden Road currently operates at LOS A in the a.m. and p.m. peak hours. These are acceptable LOS when compared to the City's LOS C threshold for these intersections. Linden Road between Stonegate Drive and Mojave Drive has an existing daily traffic volume of 4,400 vehicles; Linden Road between Mojave Drive and Santiam Street has an existing daily traffic volume of 2,800 vehicles; and Linden Road between Alder Way and Bastone Court has an existing daily traffic volume of 1,200 vehicles. All of these road segments are considered two-lane arterial moderate access control with a maximum desirable volume of 14,400 vehicles. As such, these roadway segments operate below desirable volumes under existing conditions. Other roadway segments and their existing volumes within the Project site include Tamarack Road between Redwood Avenue and Cedar Court, with an existing volume of 150 vehicles; Trinity Way between Shasta Way and the cul-de-sac, with an existing volume of 310 vehicles; Mojave Drive between Trinity Way and Merced Way, with an existing volume of 670 vehicles; and Redwood Avenue between Alder Way and Linden Road, with an existing volume of 330 vehicles. All of these roadway segments operate below maximum desirable volumes under existing conditions.

There are existing bicycle and pedestrian facilities within the proposed Project site. A Class II Bike Lane is located along Linden Road between Mojave Drive and Spruce Street and along Mojave Drive between Linden Road and Merced Way. Sidewalks exist within the Project site, providing pedestrian access throughout the neighborhood.

The Yolo County Transportation District provides public transportation through Yolobus, which offers fixed-route and special services in Yolo County and West Sacramento. Bus service is provided near the Project site through Yolobus Routes 35 and 39. Both of these routes travel along Stonegate Drive and Linden Road, with the closest bus stops at the intersection of Stonegate Drive/Linden Road.

3.16.2 Discussion

a. Would the Project conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?

Less Than Significant Impact. The proposed Project includes the installation of a water main and laterals in an existing neighborhood within West Sacramento. During construction, vehicle trips by construction crews accessing the Project area would be added to the local circulation system. However, this increase would be nominal compared to existing vehicle volumes and would occur temporarily for the duration of construction. This nominal temporary vehicle volume increase would not be enough to degrade existing LOS performance standards as set forth by the City of West Sacramento in its 2035 General Plan. Once operational, the proposed Project would not generate vehicle trips as the features of the Project include water main and lateral installation. As such, the proposed Project would not conflict with an applicable plan, ordinance, or policy establishing measures of effectiveness for the performance of circulation, and impacts would be **less than significant**.

b. Would the Project conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?

No Impact. The proposed Project would not generate an increase in vehicle miles traveled, as the Project is a utility replacement that would require the installation of a new water main and laterals in an established West Sacramento neighborhood. As such, the proposed Project would not conflict with an applicable congestion management program and established LOS standards or travel demand measures. **No impact** would occur with implementation of the proposed Project.

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

No Impact. The proposed Project would install water mains and laterals that would be buried in road ROWs in an established West Sacramento neighborhood. The Project does not include tall design features that would penetrate areas of air traffic patterns and therefore would not generate substantial safety risks to aircraft. **No impact** would occur with implementation of the proposed Project.

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

No Impact. The proposed Project would install a new water main and laterals underground in existing road ROW. The proposed Project does not include hazardous design features or components that are incompatible with the residential uses located in the neighborhood where installation would occur. As such, **no impact** would occur with implementation of the proposed Project.

e. Would the Project result in inadequate emergency access?

Less Than Significant Impact with Mitigation. Construction of the proposed Project could temporarily result in inadequate emergency access due to temporary closures and/or road detours. The City of West Sacramento published an emergency evacuation map in 2009, detailing routes near the Project site designated as Surface Evacuation Streets. Linden Road, Jefferson Boulevard, and Village Parkway are the closest Surface Evacuation Streets to the proposed Project. During construction, **Mitigation Measure MM-TRANS-1** (discussed below) would be implemented to reduce construction impacts to emergency access within the Project area. With implementation of this mitigation measure, impacts would be **less than significant**.

f. Would the Project conflict with adopted policies, plans or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?

No Impact. The proposed Project includes the installation of a new water main and lateral lines in an established neighborhood in West Sacramento. This type of project would not conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, nor would it

decrease the performance or safety of such facilities. As such, **no impact** would occur with implementation of the proposed Project.

3.16.3 Mitigation Measures

The following mitigation measure would be implemented to reduce impacts to emergency access during Project construction:

MM-TRANS-1: A Traffic Management Plan/Emergency Services Plan shall be prepared by the Project proponent following the Yolo County Multi-Hazard Functional Plan recommendations. This plan shall be implemented during construction of the proposed Project to ensure that emergency access to and from the Project site is provided during construction activities and to ensure that emergency responders (i.e., fire, law enforcement, and paramedics/emergency medical technicians) are aware of potential detours and road closures to help in reducing emergency response times to the Project site.

Implementation of this mitigation measure during Project construction would reduce impacts to **less than significant.**

3.17 TRIBAL CULTURAL RESOURCES

	Potentially Significant Impact	Less Than Significant Impact with Mitigation	Less Than Significant Impact	No Impact
Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				
a. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k)	☐	☒	☐	☐
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.	☐	☒	☐	☐

3.17.1 Environmental Setting

Please refer to Section 3.5, Cultural Resources, for the environmental setting.

3.17.2 Regulatory Setting

CEQA, relevant sections of the PRC, and Section 7050.5 of the California Health and Safety Code make up the regulatory framework for cultural resources on the Project site.

3.17.2.1 California Environmental Quality Act

CEQA applies to all discretionary projects undertaken or subject to approval by the State's public agencies (14 CCR §15022(i)). CEQA states that it is the policy of the State of California to "take all action necessary to provide the people of this state with… historic environmental qualities… and preserve for future generations examples of the major period of California history" (PRC §21001(b), (c)). Under the provisions of CEQA, "A project with an effect that may cause a substantial adverse change in the significance of an historical resource is a project that may have a significant effect on the environment" (14 CCR §15126.4 (a)(1)).

3.17.2.2 Tribal Cultural Resources

AB 52, which became law on January 1, 2015, provides for consultation with California Native American tribes during the CEQA process, and equates significant impacts to "tribal cultural resources" with significant environmental impacts. PRC §21074 states that "tribal cultural resources" are:

- Sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe and are one of the following:

  A. Included or determined to be eligible for inclusion in the California Register.

  B. Included in a local register of historical resources as defined in subdivision (k) of PRC §5020.1.

  C. 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 PRC §5024.1. In applying the criteria set forth in subdivision (c) of PRC §5024.1 for the purposes of this paragraph, the Lead Agency shall consider the significance of the resource to a California Native American tribe.

  D. The consultation provisions of the law require that within 14 days of determining that a project application is complete, or a decision by a public agency to undertake a project, the Lead Agency must notify tribes of the opportunity to consult on the project. California Native American tribes must be recognized by the NAHC as traditionally and culturally affiliated with the project site, and must have previously requested that the Lead Agency notify them of projects. Tribes have 30 days following notification of a project to request consultation with the Lead Agency.

The purpose of consultation is to inform the Lead Agency in its identification and determination of the significance of tribal cultural resources. Consultation may also include a discussion of project alternatives, significant effects, and mitigation measures, and should be undertaken in good faith by both the tribe and the Lead Agency. If a project is determined to result in a significant impact to an identified tribal cultural resource, the consultation process must occur and conclude prior to adoption of a Negative Declaration or MND, or certification of an EIR (PRC §21080.3.1, §21080.3.2, and §21082.3).

Please refer to Section 3.5, Cultural Resources, for the complete regulatory setting.

3.17.3 Discussion

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

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

Less Than Significant Impact with Mitigation. A preliminary records search of the Project site and a 0.5-mile buffer was conducted on February 7, 2017, at the Northwest Information Center of the California Historical Resources Information System at Sonoma State University. A subsequent records search was done at the Northwest Information Center on June 22, 2017, to identify cultural resource investigations and recorded archaeological resources, as well as supplemental ethnographic information, historical literature, historical maps, local inventories, and General Land

Office and Rancho Plat maps relevant to the Project. The records search did not identify any listed or eligible tribal cultural resources within the Project site.

Consultation with the NAHC was initiated by LSA on June 6, 2017. The NAHC responded stating that tribal cultural resources were present in the Project area. Consultation with Native American tribal organizations was initiated by LSA on June 12, 2017, and followed by formal meetings with the City as described in the Environmental Setting discussion in Section 3.5, Cultural Resources, where it was determined that the Project site is sensitive for tribal cultural resources. None of the tribal cultural resources identified were listed in the California Register or a local register; however, eligibility for listing was not evaluated. As such, the Project has the potential to result in impacts to tribal cultural resources that are assumed eligible for listing in the California Register or a local register. Implementation of **Mitigation Measure MM-CUL-1** will reduce the potential for impacts to **less than significant.**

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.

Less Than Significant Impact with Mitigation. As stated above, tribal cultural resources are present in the Project site. On August 23, 2017, representatives of the UAIC met with LSA and the City for a formal consultation. UAIC provided a sensitivity map, requested an Archaeological Work Plan, and requested that a tribal monitor be present during archaeological testing. On September 21, 2017, representatives of the YDWN met with LSA and the City for a formal consultation. YDWN requested that a tribal monitor be present during archaeological testing as well.

Mitigation Measure MM-CUL-1 requires that a qualified archaeologist and a tribal representative shall be present to monitor Project excavation, grading, and other earthmoving activities within 100 feet of the current site boundary of CA-YOL-18. With implementation of **Mitigation Measure MM-CUL-1,** the potential for impacts to tribal cultural resources would be reduced to **less than significant.**

3.17.4 Mitigation Measures

Please refer to Section 3.5, Cultural Resources, for **Mitigation Measure MM-CUL-1**.

This page intentionally left blank

3.18 UTILITIES AND SERVICE SYSTEMS

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

3.18.1 Environmental Setting

The potable water supply for West Sacramento is sourced from the Sacramento River and water available under contract with the United States Bureau of Reclamation. The combined maximum available water supply from these sources is 23,600 acre-feet per year (AFY) in an average year and 5,900 AFY during a single dry year. Based on projected City of West Sacramento population growth, between 2015 and 2030, the demand for water is expected to range between 16,418 and 20,123 AFY. In 2035, the City of West Sacramento would require 23,920 AFY to adequately supply the estimated population; as such, the water supply would be deficient by 320 AFY in 2035 based on population projections.

Collection and conveyance of wastewater is currently provided by the City of West Sacramento. The Sacramento Regional County Sanitation District provides wastewater treatment and disposal through its Sacramento Regional Wastewater Treatment Plant. The average dry-weather flow for wastewater is estimated at 11.56 million gallons per day, while the peak wet-weather flow is estimated at 35.20 million gallons per day. The Sacramento Regional County Sanitation District and Sacramento Regional Wastewater Treatment Plant currently have daily capacity to receive wastewater flows from West Sacramento.

Storm water is currently managed in West Sacramento primarily by Reclamation District Number 900 and the City, and to a smaller extent by Reclamation District 537.

3.18.2 Discussion

a. Would the Project exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?

No Impact. The proposed Project includes the abandonment of existing deficient water mains in an established neighborhood and the installation of new water mains and laterals to provide efficient water supply to existing residential units. The portion of the proposed Project that extends into the Liberty Specific Plan area will be abandoned in the future, as it is temporary. The developer of the Liberty Specific Plan will be directed by the City (per a condition of approval) to connect that proposed water distribution system to the proposed Project at Tamarack Road and at the north water line coming east from Bastone Court. The proposed Project itself does not include an increase in population that would cause the City of West Sacramento to exceed the wastewater treatment requirements of the CVRWQCB. As such, **no impacts** would occur and no mitigation measures would be required.

b. Would the Project require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

Less than Significant Impact. The proposed Project would not construct new residential or commercial uses that could generate increases in water demand or the need for wastewater service disposal. As such, the construction of new water or wastewater treatment facilities or the expansion of existing facilities would not be required. The proposed Project would abandon the existing 16-inch, 12-inch, 8-inch, and 6-inch water mains in the neighborhood. The new water mains being installed would be 8 inches, 16 inches, and 12 inches in size; 111 of the new laterals will be 0.75 inch in size and 94 new laterals will be 1 inch in size. Short-term service disruptions of up to a few hours would be unavoidable while connecting each property to the new water infrastructure. However, each property owner will be notified at least 48 hours and the City will direct the construction contractor not to exceed four hours of service interruption for any individual property.

It should be noted that the Liberty Specific Plan will eventually connect its water system to the proposed Project at Tamarack Road and the north water line coming east from Bastone Court to maintain the water distribution loop system. The proposed Project's water main that will extend into the Liberty Specific Plan will be abandoned in the future once development of the specific plan area commences. An EIR was prepared for the Liberty Specific Plan, and utilities and services were analyzed in the document. The environmental document concluded that the existing water treatment plant had adequate treatment capacity and would not require expansion as a result of the Liberty Specific Plan build out. Additionally, it is noted that if the water infrastructure is not updated or expanded, the City's projected population increases and associated increased demand could lead to a deficit in potable and fire service water supplies whether or not the Liberty Specific Plan is developed.

As such, implementation of the proposed Project, as well as connecting to the Liberty Specific Plan area to complete the water system, would not require the construction or expansion of new or existing water and wastewater facilities. Impacts would be **less than significant**.

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

No Impact. Please see the discussion under Threshold b). The proposed Project would not require construction or expansion of storm water drainage facilities, as the Project involves replacement of existing water delivery infrastructure to an established neighborhood. As such, **no impact** would occur and no mitigation measures would be required.

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

Less than Significant Impact. Please see the discussion under Threshold b). The proposed Project includes the replacement of water mains and laterals in an established West Sacramento neighborhood. The existing water conveyance system is old and deficient, and system maintenance/interruption of service occurs frequently. The proposed Project is not growth-inducing; as such, the existing water supplies to the neighborhood would continue to be sufficient as under existing conditions. The proposed Project would connect to the future Liberty Specific Plan area; however, analysis has previously been conducted and a determination was made that such a connection would not in itself require new or expanded water supply entitlements. Impacts would be **less than significant** and no mitigation measures are required.

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

No Impact. Please see the discussion under Thresholds b), c), and d). Because the proposed Project would include installation of water mains and laterals to replace existing infrastructure in an established neighborhood, wastewater would not be generated due to Project implementation. As such, the existing wastewater treatment provider would continue to have adequate capacity. **No impact** would occur and no mitigation measures are required.

f. Would the Project be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?

Less than Significant. Solid waste disposal is provided and governed by the City of West Sacramento General Plan in close consultation with the Yolo County Department of Public Works. This plan defines the projects for recycling and reuse, resource recovery, and disposal. Solid waste currently is disposed of at the Yolo County Central Landfill in Woodland. In fall 2009, the remaining capacity for the Yolo County Central Landfill was 37,108,000 cubic yards.

Installing water mains and laterals would generate some quantities of earth and concrete material that would require disposal. Solid waste materials such as asphalt, concrete, pipes, and gravel would be removed from the Project site and disposed of at the Yolo County Central Landfill. The current Yolo County Central Landfill closure projection is in 2070, which takes into account the disposal growth rate. The landfill therefore has sufficient capacity to serve the solid waste disposal needs of the proposed Project during construction. It should be noted that the existing water conveyance infrastructure system in the neighborhood would be abandoned in place and disposal of infrastructure components would not be required. Impacts would be **less than significant** and mitigation measures would not be required.

g. Would the Project comply with federal, state, and local statutes and regulations related to solid waste?

No Impact. Construction of the proposed Project would comply with all federal, State, and local statutes and regulations related to solid waste. As such, **no impact** would occur and mitigation measures would not be required.

3.18.3 Mitigation Measures

No mitigation is required.

3.19 MANDATORY FINDINGS OF SIGNIFICANCE

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

3.19.1 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 with Mitigation. The proposed Project would include the installation of a water main and laterals connecting to existing residential units in an established West Sacramento neighborhood. As described throughout this document, implementation of the proposed Project would have the potential to impact air quality, biological resources, cultural resources, geology and soils, hazards and hazardous materials, hydrology and water quality, noise, transportation/traffic, and tribal cultural resources. With implementation of the mitigation measures recommended in this document, compliance with County of Yolo and City of West Sacramento requirements, and application of standard practices, the proposed Project would not degrade the quality of the environment, substantially reduce the habitat of fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, or reduce the number or restrict the range of a rare or endangered plant or animal.

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

Less Than Significant Impact with Mitigation. The impacts of the proposed Project described in this environmental document would be individually limited and would not be cumulatively considerable. All environmental impacts of the proposed Project would be reduced to a less than significant level with implementation of the mitigation measures recommended throughout this document. When viewed in conjunction with other closely related past, present, or reasonably foreseeable future projects, development of this Project would not cumulatively contribute to impacts.

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

Less Than Significant Impact. As described in this document, implementation of the proposed Project could result in temporary impacts to air quality, cultural resources, hazards and hazardous materials, noise, and transportation/traffic during the construction period. Implementation of the mitigation measures recommended in this document, compliance with County of Yolo and City of West Sacramento regulations, application of standard construction practices, and conditions of Project approval would ensure that the proposed Project would not result in environmental impacts that would cause substantial direct or indirect adverse impacts on human beings. Impacts would be **less than significant.**

3.19.2 Mitigation Measures

No additional mitigation measures would be required beyond what is presented in this document.

4.0 REFERENCES

Berger, Elliot H., Rick Neitzel, and Cynthia A. Kladden. 2015. Noise Navigator Sound Level Database, E-A-R 88-34/HP, Version 1.8. June 26.

California Air Resources Board (CARB). 2000. *Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-Fueled Engines and Vehicles*. October.

California Department of Conservation, Division of Oil, Gas, and Geothermal Resources (DOGGR). 2017. *Well finder website*. Website: https://secure.conservation.ca.gov/WellSearch (accessed August 11, 2017).

California Department of Conservation, Farmland Mapping and Monitoring Program, Yolo County Important Farmland Map, 2016 ftp://ftp.consrv.ca.gov/pub/dlrp/FMMP/pdf/2016/yol16.pdf. Website accessed January 2018.

California Department of Forestry and Fire Protection (CAL FIRE). 2007. *Yolo County Draft Fire Hazard Severity Zones in LRA*. Fire and Resource Assessment Program. October 5. Website: http://frap.fire.ca.gov/webdata/maps/yolo/fhszl06_1_map.57.pdf (accessed March 7, 2018).

California Department of Toxic Substances Control (DTSC). 2018. *EnviroStor*. Website: http://www.envirostor.dtsc.ca.gov/public/ (accessed March 7, 2018).

California Environmental Protection Agency. 2018. *Cortese List Data Resources.* Website: http://www.calepa.ca.gov/SiteCleanup/CorteseList/ (accessed March 7, 2018).

California Geological Survey (CGS). 2018. Alquist-Priolo Earthquake Fault Zoning Maps. Website: http://maps.conservation.ca.gov/cgs/informationwarehouse/index.html?map= regulatorymaps (accessed March 7, 2018).

Central Valley Regional Water Quality Control Board (CVRWQCB). 2016a. Water Quality Control Plan for the Sacramento and San Joaquin River Basins. Sacramento, CA. July (amended May 17, 2016).

_____. 2016b. *Final California 2016 Integrated Report (303 (d) List/305(b) Report).* Sacramento, CA.

City of West Sacramento. 2008. West Sacramento Municipal Code, Section 17.32.030 Standards, Table II-4: Noise Level Performance Standards for New Projects Affected by or Including Non-Transportation Noise Sources. October.

_____. 2016a. *City of West Sacramento General Plan 2035 Policy Document, Safety Element*. Pp. 2-144 to 2-149. November.

_____. 2016b. City of West Sacramento Emergency Operations Plan. December. Website: https://www.cityofwestsacramento.org/home/showdocument?id=4268 (accessed March 7, 2018).

_____. 2016c. *City of West Sacramento General Plan Update Draft Environmental Impact Report.* Chapter 3.6, Geology, Soils, and Paleontological Resources.

City of West Sacramento Community Development Department. 2017. *Proposed Liberty Specific Plan Draft Environmental Impact Report*. Chapter 3.16, Transportation/Traffic, pp. 3.16-7 to 3.16-12. August.

County of Yolo. 2012. *Yolo County Operational Area Multi-jurisdictional Hazard Mitigation Plan.* Woodland, CA. December. Website: http://www.yolocounty.org/home/showdocument?id=24428 (accessed March 7, 2018).

Department of Water Resources (DWR) 2018a. Oroville Spillway Incident. Available at https://www.water.ca.gov/oroville-spillway/. Accessed on March 27, 2018.

_____. 2018b. Oroville Spillway Incident. Available at https://www.water.ca.gov/oroville-spillway/. Accessed on March 27, 2018.

Environmental Data Resources, Inc. (EDR). 2017a. EDR Historical Topo Map Report, Inquiry No. 5019736.4. August 11.

_____. 2017b. EDR Radius Map™ Report with GeoCheck®, Inquiry No. 5019736.2s. August 11.

_____. 2017c. EDR Aerial Photo Decade Package, Inquiry No. 5019736.9. August 14.

_____. 2017d. EDR City Directory Image Report, Inquiry No. 5019736.5. August 15.

Federal Emergency Management Agency (FEMA). 1995. Flood Insurance Rate Map. City of West Sacramento, Yolo County, California. Map No. 06072800100B. Website: https://msc.fema.gov/portal/search#searchresultsanchor (accessed on March 6, 2018).

Federal Highway Administration. 2006. *Highway Construction Noise Handbook*. August.

Gallagher, Barbara. Environmental Health Technician II, Yolo County Division of Environmental Health. August 14, 2017, e-mail to Chani Hutto of AECOM indicating no records pertaining to sites within the Project area and vicinity were found during AECOM's public records request.

Gutierrez, Carlos I. 2011 Preliminary Geologic Map of the Sacramento 30-minute x 60-minute Quadrangle, California. California Geological Survey. Map Scale 1:100,000.

Jefferson, George T. 1991a. A Catalogue of Late Quaternary Vertebrates from California: Part One: Non-marine Lower Vertebrate and Avian Taxa. Natural History Museum of Los Angeles County Technical Reports No. 5, Los Angeles.

_____. 1991b. A Catalogue of Late Quaternary Vertebrates from California: Part Two: Mammals. Natural History Museum of Los Angeles County Technical Reports No. 7, Los Angeles.

Natural Resources Conservation Service (NRCS). 2018. Web Soil Survey for Project Site in Yolo County. Website: http://websoilsurvey.nrcs.usda.gov/app/HomePage.htm (accessed March 6, 2018).

Peak and Associates. 2016. *Determination of Eligibility Cultural Resources Within the Liberty Project*. March. (Job # 14-017.) El Dorado Hills, CA. Prepared for PACO Steel and Engineering Corporation, East Rancho Dominguez, CA.

Sacramento Area Council of Governments (SACOG). 1998. *Sacramento Executive Airport Comprehensive Land Use Plan*, pp. 9–26. May (amended May 1999). Website: http://www.sacog.org/sites/main/files/file-attachments/sacramentoexecclup.pdf (accessed on March 7, 2018).

Sacramento Metropolitan Air Quality Management District (SMAQMD). 2013a. Sacramento Regional 8-Hour Ozone Attainment and Reasonable Further Progress Plan, 2013 SIP Revisions. September 26.

_____. 2013b. *$PM_{2.5}$ Implementation/Maintenance Plan and Re-designation Request for Sacramento $PM_{2.5}$ Nonattainment Area*. October 24.

State Water Resources Control Board (SWRCB). 2018. *Welcome to GeoTracker*. Website: http://geotracker.waterboards.ca.gov/ (accessed March 7, 2018).

Society of Vertebrate Paleontology. 2010. Standard Procedures for the Assessment and Mitigation of Adverse Impacts to Paleontological Resources. Society of Vertebrate Paleontology. Impact Mitigation Guidelines Revision Committee. pp. 1–11.

United States Department of Transportation/Federal Transit Administration. 2006. *Transit Noise and Vibration Impact Assessment FTA-VA-90-1003-06,* Chapter 12: Noise and Vibration During Construction, Table 12-2 Vibration Source Levels for Construction Equipment, p. 12-12. May.

United States Environmental Protection Agency (USEPA). 2017. California EPA Map of Radon Zones. Website: https://www.epa.gov/sites/production/files/2014-08/documents/california.pdf (accessed August 20, 2017).

University of California, Berkeley, Museum of Paleontology. 2015. UCMP specimen search for Yolo County. Website: http://ucmpdb.berkeley.edu/ (accessed September 21, 2015).

United States Census Bureau, American Fact Finder, Profile of General Population and Housing Characteristics: 2010. Census Summary File 1, Census Tract 103.02, Yolo County, California. Website: https://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=ACS_16_5YR_DP05&prodType=table (accessed March, 2, 2018).

Walker, M.J.C., M. Berkelhammer, S. Bjorck, L.C. Cwynar, D.A. Fisher, A.J. Long, J.J. Lowe, R. Newnham, S.O. Rasmussen, and H. Weiss. 2012. Formal Subdivision of the Holocene Series/Epoch: A Discussion Paper by a Working Group of INTIMATE (Integration of Ice- Core, Marine and Terrestrial Records) and the Subcommision on Quaternary Stratigraphy (International Commission on Stratigraphy). Journal of Quaternary Science 27:649-659.

West Environmental Services & Technology (West). 2017. *Fourth Quarter 2016 Groundwater Monitoring Report, Former Time Oil Facility, 1155 Linden Road, West Sacramento, CA.*

Yolo-Solano Air Quality Management District (YSAQMD). 2007. *Handbook for Assessing and Mitigating Air Quality Impacts.* July.

_____. 2016. Attainment Status. https://www.ysaqmd.org/plans-data/attainment/. Accessed September 2017.

5.0 RESPONSE TO COMMENTS

Letter A: UAIC Comment Letter (5-21-18)

CITY OF WEST SACRAMENTO

Letter A

NEGATIVE DECLARATION AND REQUEST FOR COMMENTS

DATE: May 2, 2018

TO: Interested Agencies and Individuals

FROM: Kathy Allen, Associate Planner

PROJECT NAME: Linden Acres Water Main Replacement Project

PROJECT LOCATION: Linden Road to the north, Mojave Drive to the west, Trinity Way and the proposed Liberty Specific Plan to the south, and the proposed Liberty Specific Plan to the east.

This Negative Declaration is being sent to you for your review and comment. Please advise this office within thirty days (30) days of the date above, of any comments you may have on the Negative Declaration. Failure to respond will be considered acceptance of the draft statements.

GENERAL QUESTIONS

1. Do you have jurisdiction by law over this project? X YES ___ NO

A-1

2. Are you a responsible agency? ___ YES X NO

   If yes, indicate required permits: _____

3. Do you recommend:
   ___ Approval of the draft as submitted.
   X Have the following comments summarized below.

4. Recommended conditions of approval (Use additional pages if necessary).
   Based on sensitivity of area and know burial sites in close proximity, UAIC recommends a tribal monitor.

1110 West Capitol Avenue
West Sacramento, CA 95691
(916) 617-4500
www.cityofwestsacramento.org

CITY OF WEST SACRAMENTO

5. For each mitigation measure or condition of approval, specify how your agency intends to monitor the measure. Please clearly describe the monitoring program, responsible individual(s), the timing for monitoring, and submittal of reports. (Use additional pages if necessary.)

see mitigation measures.

6. Indicate areas of environmental concern and availability of appropriate technical data: (Use additional pages if necessary.)

Call for map.

A-1 Con.

7. Have you previously reviewed an application on any portion of this project?

___ YES (X) NO

Name of Respondent: Marcos Guerrero

Title: Cultural Resources Manager

Telephone Number: 916-300-8792

E-mail: mguerrero@auburnrancheria.com

Name of Reviewing Agency: UAIC

Tribal Cultural Resource Avoidance Mitigation Measure

Avoidance and preservation in place is the preferred manner of mitigating impacts to tribal cultural resources and will be accomplished by several means, including:

- Planning construction to avoid tribal cultural resources, archaeological sites and/ or other resources; incorporating sites within parks, green-space or other open space; covering archaeological sites; deeding a site to a permanent conservation easement; or other preservation and protection methods agreeable to consulting parties and regulatory authorities with jurisdiction over the activity. Recommendations for avoidance of cultural resources will be reviewed by the CEQA lead agency representative, interested Native American Tribes and the appropriate agencies, in light of factors such as costs, logistics, feasibility, design, technology and social, cultural and environmental considerations, and the extent to which avoidance is consistent with project objectives. Avoidance and design alternatives may include realignment within the project area to avoid cultural resources, modification of the design to eliminate or reduce impacts to cultural resources or modification or realignment to avoid highly significant features within a cultural resource. Native American Representatives from interested Native American Tribes will be allowed to review and comment on these analyses and shall have the opportunity to meet with the CEQA lead agency representative and its representatives who have technical expertise to identify and recommend feasible avoidance and design alternatives, so that appropriate and feasible avoidance and design alternatives can be identified.

A-2

- If the resource can be avoided, the construction contractor(s), with paid Native American Monitors from culturally affiliated Native American Tribes present, will install protective fencing outside the site boundary, including a buffer area, before construction restarts. The construction contractor(s) will maintain the protective fencing throughout construction to avoid the site during all remaining phases of construction. The area will be demarcated as an “Environmentally Sensitive Area”. Native American Representatives from interested Native American Tribes and the CEQA lead agency representative will also consult to develop measures for long term management of the resource and routine operation and maintenance within culturally sensitive areas that retain resource integrity, including tribal cultural integrity, and including archaeological material, Traditional Cultural Properties and cultural landscapes, in accordance with state and federal guidance including National Register Bulletin 30 (*Guidelines for Evaluating* and *Documenting Rural Historic Landscapes*), Bulletin 36 (*Guidelines for Evaluating and Registering Archaeological Properties*), and Bulletin 38 (*Guidelines for Evaluating and Documenting Traditional Cultural Properties*); National Park Service Preservation Brief 36 (*Protecting Cultural Landscapes: Planning, Treatment and Management of Historic Landscapes*) and using the Advisory Council on Historic Preservation (ACHP) *Native American Traditional Cultural Landscapes Action Plan* for further guidance. Use of temporary and

A-2
Con.

permanent forms of protective fencing will be determined in consultation with Native American Representatives from interested Native American Tribes.

Native American Monitoring Mitigation Measure

To minimize the potential for destruction of or damage to existing or previously undiscovered archaeological and Cultural resources and to identify any such resources at the earliest possible time during project-related earthmoving activities, THE PROJECT PROPONENT and its construction contractor(s) will implement the following measures:

A-3

- Paid Native American Monitors from culturally affiliated Native American Tribes will be invited to monitor the vegetation grubbing, stripping, grading or other ground-disturbing activities in the project area to determine the presence or absence of any cultural resources. Native American Representatives from cultural affiliated Native American Tribes act as a representative of their Tribal government and shall be consulted before any cultural studies or ground-disturbing activities begin.

- Native American Representatives and Native American Monitors have the authority to identify sites or objects of significance to Native Americans and to request that work be stopped, diverted or slowed if such sites or objects are identified within the direct impact area. Only a Native American Representative can recommend appropriate treatment of such sites or objects.

Inadvertent Discoveries Mitigation Measures

Develop a standard operating procedure, points of contact, timeline and schedule for the project so all possible damages can be avoided or alternatives and cumulative impacts properly accessed.

If potential tribal cultural resources, archaeological resources, other cultural resources, articulated, or disarticulated human remains are discovered by Native American Representatives or Monitors from interested Native American Tribes, qualified cultural resources specialists or other Project personnel during construction activities, work will cease in the immediate vicinity of the find (based on the apparent distribution of cultural resources), whether or not a Native American Monitor from an interested Native American Tribe is present. A qualified cultural resources specialist and Native American Representatives and Monitors from culturally affiliated Native American Tribes will assess the significance of the find and make recommendations for further evaluation and treatment as necessary. These recommendations will be documented in the project record. For any recommendations made by interested Native American Tribes which are not implemented, a justification for why the recommendation was not followed will be provided in the project record.

A-4

If adverse impacts to tribal cultural resources, unique archeology, or other cultural resources occurs, then consultation with UAIC regarding mitigation contained in the Public Resources Code sections 21084.3(a) and (b) and CEQA Guidelines section 15370 should occur, in order to coordinate for compensation for the impact by replacing or providing substitute resources or environments.

Tribal Cultural Resource – Awareness Training - Mitigation Measure

A-5

A consultant and construction worker tribal cultural resources awareness brochure and training program for all personnel involved in project implementation will be developed in coordination with interested Native American Tribes. The brochure will be distributed and the training will be conducted in coordination with qualified cultural resources specialists and Native American Representatives and Monitors from culturally affiliated Native American Tribes before any stages of project implementation and construction activities begin on the project site. The program will include relevant information regarding sensitive tribal cultural resources, including applicable regulations, protocols for avoidance, and consequences of violating State laws and regulations. The worker cultural resources awareness program will also describe appropriate avoidance and minimization measures for resources that have the potential to be located on the project site and will outline what to do and whom to contact if any potential archaeological resources or artifacts are encountered. The program will also underscore the requirement for confidentiality and culturally-appropriate treatment of any find of significance to Native Americans and behaviors, consistent with Native American Tribal values.

Response to Comment A-1: This comment is based on a questionnaire the City of West Sacramento sent out to interested agencies and individuals requesting comments on the IS/MND. As this comment is a questionnaire, it does not have any effect on the information prepared for the IS/MND. As such, revisions to the environmental document are not required and no further response is required based on this comment.

Response to Comment A-2: The commenter requests that "Tribal Cultural Resource Avoidance Mitigation Measure" is implemented as part of the Project. Examples of measures suggested by the commenter include, but are not limited to, "planning construction to avoid tribal cultural resources, archaeological sites, and/or other resources; incorporating sites within parks, green-space or other open space; covering archaeological sites; deeding a site to a permanent conservation easement; or other preservation and protection methods agreeable to consulting parties and regulatory authorities with jurisdiction over the activity" and "if resource can be avoided, the construction contractor(s), with paid Native American Monitors from culturally affiliated Native American Tribes present, will install protective fencing outside the boundary, including a buffer area, before construction starts." The IS/MND, in Section 3.5 Cultural Resources, provides Mitigation Measure CUL-1 (MM-CUL-1), which implements similar strategies as requested by the commenter. MM-CUL-1 indicates procedures will be followed prior to and during construction if sensitive tribal cultural resources are discovered and indicates a qualified archaeologist and a geographically-affiliated tribal member will be present to monitor Project excavation near known resources. MM-CUL-1 also stipulates that if a cultural resource is inadvertently encountered during construction, all work will stop within 50 feet of the discovery until recommendations regarding the treatment of the discovery and proper mitigation measures are developed. Since the language of MM-CUL-1 is similar to the commenter's request of implementing their specific measures and has similar mitigation intention, revisions of MM-CUL-1 to include specific language as presented by the commenter is not warranted. As such, no revisions to the environmental document have been made.

Response to Comment A-3: The commenter requests that "Native American Monitoring Mitigation Measures" are implemented as part of the Project. The commenter requests that measures such as "paid Native American Monitors from culturally affiliated Native American Tribes will be invited to monitor vegetation grubbing, stripping, grading, or other ground-disturbing activities in the project area to determine the presence or absence of any cultural resources" and "Native American Representatives and Native American Monitors have the authority to identify sites or objects of significance to Native American and to request that work be stopped, diverted or slowed if such sites or objects are identified within the direct impact area" be included in the environmental document. Mitigation Measure MM- CUL-1, in Section 3.5, of this environmental document includes similar strategies that will be implemented as part of the Project. Mitigation Measure CUL-1 indicates that a qualified archaeologist and a tribal representative from a geographically-affiliated tribe shall be present to monitor Project excavation, grading, and other earthmoving activities within 100 feet of the current site boundary of CA-YOL-18. The Mitigation Measure also provides measures for work stoppage and or avoidance if prehistoric or historical archaeological materials are inadvertently encountered. Since the language of MM-CUL-1 is similar to the commenter's request of implementing their specific measures and has similar mitigation intention, revisions of MM-CUL-1 to include specific language as presented by the commenter is not warranted. As such, no revisions to the environmental document have been made.

Response to Comment A-4: The commenter requests that "Inadvertent Discoveries Mitigation Measures" are implemented as part of the Project. The commenter requests that if potential tribal cultural resources, archaeological resources, other cultural resources, articulated, or disarticulated human remains are discovered that work will cease in the immediate vicinity of the find whether or not a Native American Monitor or Native American Tribe is present. Mitigation Measure MM-CUL-1 provides similar provisions requiring construction stoppage if such resources are inadvertently encountered during construction and also requires notification of geographically-affiliated Native American tribal members, archaeologists, and other qualified personal to determine the significance of such finds. Since the language of MM-CUL-1 is similar to the commenter's request of implementing their specific measures and has similar mitigation intention, revisions of MM-CUL-1 to include specific language as presented by the commenter is not warranted. As such, no revisions to the environmental document have been made.

Response to Comment A-5: The commenter requests that "Tribal Cultural Resource – Awareness Training – Mitigation Measures" are implemented as part of the Project. Specifically, the commenter requests that language be added into the environmental document that requires "a consultant and construction worker tribal cultural resource awareness brochure and training program for all personnel involved in project implementation will be developed in coordination with interested Native American Tribes" Mitigation Measure CUL-1 includes provisions that a pre-construction briefing will be held by a professional archaeologist to alert construction staff to the possibility of exposing significant historic or prehistoric archaeological resources (including Native American resources) within the Project area. The briefing will also discuss any resources that could be exposed, the need to stop excavation at the discovery site, and procedures to follow regarding discovery protection and notification. The language presented in Mitigation Measure MM-CUL-1 is similar in nature and intent as the commenter's request; however, a revision has been made to state that a geographically-affiliated Native American Representative will be invited to assist in the training.

Letter B: Central Valley Regional Water Quality Control Board (5/24/18)

Letter B

Central Valley Regional Water Quality Control Board

Governor's Office of Planning & Research

MAY 31 2018

STATE CLEARINGHOUSE

Clear
5-31-18
E

24 May 2018

Mauricio Meza-Pedraza
City of West Sacramento
1110 West Capitol Avenue
West Sacramento, CA 95691

CERTIFIED MAIL
91 7199 9991 7039 6992 3990

COMMENTS TO REQUEST FOR REVIEW FOR THE MITIGATED NEGATIVE DECLARATION, LINDEN ACRES WATER MAIN REPLACEMENT PROJECT, SCH# 2018052001, YOLO COUNTY

Pursuant to the State Clearinghouse's 2 May 2018 request, the Central Valley Regional Water Quality Control Board (Central Valley Water Board) has reviewed the *Request for Review for the Draft Mitigated Negative Declaration* for the Linden Acres Water Main Replacement Project, located in Yolo County. B-1

Our agency is delegated with the responsibility of protecting the quality of surface and groundwaters of the state; therefore our comments will address concerns surrounding those issues.

I. Regulatory Setting

Basin Plan

The Central Valley Water Board is required to formulate and adopt Basin Plans for all areas within the Central Valley region under Section 13240 of the Porter-Cologne Water Quality Control Act. Each Basin Plan must contain water quality objectives to ensure the reasonable protection of beneficial uses, as well as a program of implementation for achieving water quality objectives with the Basin Plans. Federal regulations require each state to adopt water quality standards to protect the public health or welfare, enhance the quality of water and serve the purposes of the Clean Water Act. In California, the beneficial uses, water quality objectives, and the Antidegradation Policy are the State's water quality standards. Water quality standards are also contained in the National Toxics Rule, 40 CFR Section 131.36, and the California Toxics Rule, 40 CFR Section 131.38. B-2

The Basin Plan is subject to modification as necessary, considering applicable laws, policies, technologies, water quality conditions and priorities. The original Basin Plans were adopted in 1975, and have been updated and revised periodically as required, using Basin Plan amendments. Once the Central Valley Water Board has adopted a Basin Plan amendment in noticed public hearings, it must be approved by the State Water Resources Control Board (State Water Board), Office of Administrative Law (OAL) and in some cases,

the United States Environmental Protection Agency (USEPA). Basin Plan amendments only become effective after they have been approved by the OAL and in some cases, the USEPA. Every three (3) years, a review of the Basin Plan is completed that assesses the appropriateness of existing standards and evaluates and prioritizes Basin Planning issues.

B-2 Con.

For more information on the *Water Quality Control Plan for the Sacramento and San Joaquin River Basins*, please visit our website: http://www.waterboards.ca.gov/centralvalley/water_issues/basin_plans/.

Antidegradation Considerations

All wastewater discharges must comply with the Antidegradation Policy (State Water Board Resolution 68-16) and the Antidegradation Implementation Policy contained in the Basin Plan. The Antidegradation Policy is available on page IV-15.01 at: http://www.waterboards.ca.gov/centralvalleywater_issues/basin_plans/sacsjr.pdf

In part it states:

B-3

Any discharge of waste to high quality waters must apply best practicable treatment or control not only to prevent a condition of pollution or nuisance from occurring, but also to maintain the highest water quality possible consistent with the maximum benefit to the people of the State.

This information must be presented as an analysis of the impacts and potential impacts of the discharge on water quality, as measured by background concentrations and applicable water quality objectives.

The antidegradation analysis is a mandatory element in the National Pollutant Discharge Elimination System and land discharge Waste Discharge Requirements (WDRs) permitting processes. The environmental review document should evaluate potential impacts to both surface and groundwater quality.

II. Permitting Requirements

Construction Storm Water General Permit

Dischargers whose project disturb one or more acres of soil or where projects disturb less than one acre but are part of a larger common plan of development that in total disturbs one or more acres, are required to obtain coverage under the General Permit for Storm Water Discharges Associated with Construction Activities (Construction General Permit), Construction General Permit Order No. 2009-009-DWQ. Construction activity subject to this permit includes clearing, grading, grubbing, disturbances to the ground, such as stockpiling, or excavation, but does not include regular maintenance activities performed to restore the original line, grade, or capacity of the facility. The Construction General Permit requires the development and implementation of a Storm Water Pollution Prevention Plan

B-4

(SWPPP).

For more information on the Construction General Permit, visit the State Water Resources Control Board website at:
http://www.waterboards.ca.gov/water_issues/programs/stormwater/constpermits.shtml.

B-4 Con.

Phase I and II Municipal Separate Storm Sewer System (MS4) Permits[1]

The Phase I and II MS4 permits require the Permittees reduce pollutants and runoff flows from new development and redevelopment using Best Management Practices (BMPs) to the maximum extent practicable (MEP). MS4 Permittees have their own development standards, also known as Low Impact Development (LID)/post-construction standards that include a hydromodification component. The MS4 permits also require specific design concepts for LID/post-construction BMPs in the early stages of a project during the entitlement and CEQA process and the development plan review process.

B-5

For more information on which Phase I MS4 Permit this project applies to, visit the Central Valley Water Board website at:
http://www.waterboards.ca.gov/centralvalley/water_issues/storm_water/municipal_permits/.

For more information on the Phase II MS4 permit and who it applies to, visit the State Water Resources Control Board at:
http://www.waterboards.ca.gov/water_issues/programs/stormwater/phase_ii_municipal.shtml

Industrial Storm Water General Permit

Storm water discharges associated with industrial sites must comply with the regulations contained in the Industrial Storm Water General Permit Order No. 2014-0057-DWQ.

B-6

For more information on the Industrial Storm Water General Permit, visit the Central Valley Water Board website at:
http://www.waterboards.ca.gov/centralvalley/water_issues/storm_water/industrial_general_permits/index.shtml.

Clean Water Act Section 404 Permit

If the project will involve the discharge of dredged or fill material in navigable waters or wetlands, a permit pursuant to Section 404 of the Clean Water Act may be needed from the United States Army Corps of Engineers (USACOE). If a Section 404 permit is required by the USACOE, the Central Valley Water Board will review the permit application to ensure

B-7

[1] Municipal Permits = The Phase I Municipal Separate Storm Water System (MS4) Permit covers medium sized Municipalities (serving between 100,000 and 250,000 people) and large sized municipalities (serving over 250,000 people). The Phase II MS4 provides coverage for small municipalities, including non-traditional Small MS4s, which include military bases, public campuses, prisons and hospitals.

that discharge will not violate water quality standards. If the project requires surface water drainage realignment, the applicant is advised to contact the Department of Fish and Game for information on Streambed Alteration Permit requirements.

If you have any questions regarding the Clean Water Act Section 404 permits, please contact the Regulatory Division of the Sacramento District of USACOE at (916) 557-5250.

B-7 Con.

Clean Water Act Section 401 Permit – Water Quality Certification

If an USACOE permit (e.g., Non-Reporting Nationwide Permit, Nationwide Permit, Letter of Permission, Individual Permit, Regional General Permit, Programmatic General Permit), or any other federal permit (e.g., Section 10 of the Rivers and Harbors Act or Section 9 from the United States Coast Guard), is required for this project due to the disturbance of waters of the United States (such as streams and wetlands), then a Water Quality Certification must be obtained from the Central Valley Water Board prior to initiation of project activities. There are no waivers for 401 Water Quality Certifications.

B-8

Waste Discharge Requirements – Discharges to Waters of the State

If USACOE determines that only non-jurisdictional waters of the State (i.e., "non-federal" waters of the State) are present in the proposed project area, the proposed project may require a Waste Discharge Requirement (WDR) permit to be issued by Central Valley Water Board. Under the California Porter-Cologne Water Quality Control Act, discharges to all waters of the State, including all wetlands and other waters of the State including, but not limited to, isolated wetlands, are subject to State regulation.

B-9

For more information on the Water Quality Certification and WDR processes, visit the Central Valley Water Board website at:
http://www.waterboards.ca.gov/centralvalley/help/business_help/permit2.shtml.

Dewatering Permit

If the proposed project includes construction or groundwater dewatering to be discharged to land, the proponent may apply for coverage under State Water Board General Water Quality Order (Low Risk General Order) 2003-0003 or the Central Valley Water Board's Waiver of Report of Waste Discharge and Waste Discharge Requirements (Low Risk Waiver)
R5-2013-0145. Small temporary construction dewatering projects are projects that discharge groundwater to land from excavation activities or dewatering of underground utility vaults. Dischargers seeking coverage under the General Order or Waiver must file a Notice of Intent with the Central Valley Water Board prior to beginning discharge.

B-10

For more information regarding the Low Risk General Order and the application process, visit the Central Valley Water Board website at:

http://www.waterboards.ca.gov/board_decisions/adopted_orders/water_quality/2003/wqo/wqo2003-0003.pdf

For more information regarding the Low Risk Waiver and the application process, visit the Central Valley Water Board website at:

http://www.waterboards.ca.gov/centralvalley/board_decisions/adopted_orders/waivers/r5-2013-0145_res.pdf

B-10 Con.

Regulatory Compliance for Commercially Irrigated Agriculture

If the property will be used for commercial irrigated agricultural, the discharger will be required to obtain regulatory coverage under the Irrigated Lands Regulatory Program. There are two options to comply:

1. **Obtain Coverage Under a Coalition Group.** Join the local Coalition Group that supports land owners with the implementation of the Irrigated Lands Regulatory Program. The Coalition Group conducts water quality monitoring and reporting to the Central Valley Water Board on behalf of its growers. The Coalition Groups charge an annual membership fee, which varies by Coalition Group. To find the Coalition Group in your area, visit the Central Valley Water Board's website at: http://www.waterboards.ca.gov/centralvalley/water_issues/irrigated_lands/for_growers/apply_coalition_group/index.shtml or contact water board staff at (916) 464-4611 or via email at IrrLands@waterboards.ca.gov.

2. **Obtain Coverage Under the General Waste Discharge Requirements for Individual Growers, General Order R5-2013-0100**. Dischargers not participating in a third-party group (Coalition) are regulated individually. Depending on the specific site conditions, growers may be required to monitor runoff from their property, install monitoring wells, and submit a notice of intent, farm plan, and other action plans regarding their actions to comply with their General Order. Yearly costs would include State administrative fees (for example, annual fees for farm sizes from 10-100 acres are currently $1,084 + $6.70/Acre); the cost to prepare annual monitoring reports; and water quality monitoring costs. To enroll as an Individual Discharger under the Irrigated Lands Regulatory Program, call the Central Valley Water Board phone line at (916) 464-4611 or e-mail board staff at IrrLands@waterboards.ca.gov.

B-11

Low or Limited Threat General NPDES Permit

If the proposed project includes construction dewatering and it is necessary to discharge the groundwater to waters of the United States, the proposed project will require coverage under a National Pollutant Discharge Elimination System (NPDES) permit. Dewatering discharges are typically considered a low or limited threat to water quality and may be covered under the General Order for *Dewatering and Other Low Threat Discharges to Surface Waters* (Low Threat General Order) or the General Order for *Limited Threat Discharges of Treated/Untreated Groundwater from Cleanup Sites, Wastewater from Superchlorination Projects, and Other Limited Threat Wastewaters to Surface Water*

B-12

(Limited Threat General Order). A complete application must be submitted to the Central Valley Water Board to obtain coverage under these General NPDES permits.

For more information regarding the Low Threat General Order and the application process, visit the Central Valley Water Board website at:
http://www.waterboards.ca.gov/centralvalley/board_decisions/adopted_orders/general_orders/r5-2013-0074.pdf

B-12 Con.

For more information regarding the Limited Threat General Order and the application process, visit the Central Valley Water Board website at:
http://www.waterboards.ca.gov/centralvalley/board_decisions/adopted_orders/general_orders/r5-2013-0073.pdf

NPDES Permit

If the proposed project discharges waste that could affect the quality of surface waters of the State, other than into a community sewer system, the proposed project will require coverage under a National Pollutant Discharge Elimination System (NPDES) permit. A complete Report of Waste Discharge must be submitted with the Central Valley Water Board to obtain a NPDES Permit.

B-13

For more information regarding the NPDES Permit and the application process, visit the Central Valley Water Board website at:
http://www.waterboards.ca.gov/centralvalley/help/business_help/permit3.shtml

If you have questions regarding these comments, please contact me at (916) 464-4644 or Stephanie.Tadlock@waterboards.ca.gov.

Stephanie Tadlock
Environmental Scientist

cc: State Clearinghouse unit, Governor's Office of Planning and Research, Sacramento

Response to Comment B-1: The commenter indicates that the Central Valley Regional Water Quality Control Board (Central Valley Water Board) reviewed the document and has provided comments. This comment is noted. No further response is required because this comment does not pertain to the adequacy of information and analysis presented in the environmental document.

Response to Comment B-2: The commenter discusses the regulatory setting surrounding Basin Plans and accompanying water quality objectives within the Central Valley Region. This comment is noted. No further response is required because the comment does not pertain to the adequacy of information and analysis presented in the environmental document.

Response to Comment B-3: The commenter discusses the regulatory setting surrounding wastewater discharges, and notes that the environmental document should evaluate potential impacts to both surface and groundwater quality. The Initial Study explains in the Hydrology and Water Quality Section (response to threshold question A) that the Project would implement BMPs, an SWPPP, and dewatering provisions (as applicable) to maintain water quality and comply with State Water Board's Regulation 68-16. These implementation strategies would ensure that water quality impacts associated with construction of the Project would be less than significant. The Central Valley Regional Water Quality Control Board states that the environmental document should analyze the potential for water degradation for both groundwater and surface water supplies. The Initial Study analyzes potential impacts to ground and surface water quality in the Hydrology section in compliance with the National Pollutant Discharge Elimination System (NPDES) permitting process.

Response to Comment B-4: The Central Valley Regional Water Quality Control Board states the parameters for which a project should seek to obtain coverages under the General Permit for Storm Water Discharges Associated with Construction Activities (Construction General Permit). In the Initial Study, under Section 3.6 Geology and Soils, threshold question B, it is discussed that the construction contractor would be required to comply with NPDES General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities, 2009-0009-DWQ, as amended by 2010-0014-DWQ (General Construction Permit), during construction. Furthermore, potential short-term water quality impacts from construction related activities at the Project site would be minimized and reduced through implementation of BMPs and compliance with existing water quality regulatory requirements. These BMPs and compliance would be part of the conditions of approval for the Project to be approved.

Response to Comment B-5: The commenter summarizes the Municipal Separate Storm Sewer System Permit process. Comment is noted. To protect water quality and control sedimentation during and after Project implementation, the City will prepare and implement BMPs outlined in any authorizations or permits, issued under the authorities of the Clean Water Act. All refueling, maintenance, and staging of equipment and vehicles will occur at least 60 feet from riparian habitat or water bodies and not in a location from where a spill would drain directly toward aquatic habitat.

Response to Comment B-6: The commenter discusses the Industrial Storm Water General Permit process. This comment is directed towards parcels that will be used for industrial purposes. The proposed Project does not include industrial use components. No further response is required because this comment does not pertain to the adequacy of information and analysis presented in the environmental document.

Response to Comment B-7: The commenter discusses the requirement to obtain a permit pursuant to Section 404 of the Clean Water Act for all projects involving discharge or fill material in navigable waters or wetlands. The proposed Project is located in a fully urbanized location and would not involve discharge or fill material in navigable water or wetlands. The construction contractor would be required to comply with NPDES General Permit for Storm Water Discharge Associated with Construction and Land Disturbance Activities, 2009-0009-DWQ, as amended by 2010-0014-DWQ (General Construction Permit), during construction. With implementation of this permit as a condition of approval, necessary permitting will be pursued by the Project prior to construction as applicable.

Response to Comment B-8: The commenter discusses the requirements to obtain a Water Quality Certification pursuant to Section 401 of the Clean Water Act. The construction contractor would comply with NPDES General Permit for Storm Water Discharge Associated with Construction and Land Disturbance Activities, 2009-0009-DWQ, as amended by 2010-0014-DWQ (General Construction Permit), during construction. With implementation of this condition of approval and implementation of BMPs for water quality discussed in the Hydrology and Water Resources section of the IS/MND impacts to water quality would be less than significant and in compliance with the Water Quality Certification Section 401 and the Clean Water Act.

Response to Comment B-9: The commenter discusses Waste Discharge Requirements related to non-jurisdictional waters of the State, dredging activity, and septic tank and leach field regulation. The proposed Project would not be subject to these requirements as it is a water main replacement Project in an urbanized existing neighborhood. Additionally, BMPs discussed in the Hydrology and Water Quality section would be implemented to reduce waste discharge during Project construction. The proposed Project would not impact or be impacted by any septic tanks or leach field systems.

Response to Comment B-10: The commenter discusses the dewatering permit process. This comment is directed towards projects that discharge groundwater to land from excavation activities or from dewatering of underground utility vaults. Those projects would be eligible to apply for coverage under the Low Risk General Order or Low Risk Waiver through the Central Valley Water Board. With implementation of BMPs discussed in the Hydrology and Water Quality section of the IS/MND, the proposed Project would adhere to the requirements of the General Waste Discharge provisions. Additionally, the City would comply with all applicable provisions in the de minimus permit, including water sampling, analysis, and reporting of dewatering-related discharges as applicable and required.

Response to Comment B-11: The commenter discusses regulatory compliance for parcels that will be used for commercial irrigated agricultural use. The proposed Project is a water main replacement project and would not be used for commercial irrigated agricultural use. No further response is required because this comment does not pertain to the adequacy of information and analysis presented in the environmental document.

Response to Comment B-12: The commenter discusses the requirements for projects that include discharges of groundwater into waters of the U.S. during construction dewatering; the commenter indicates that these projects require coverage under a NPDES permit. With implementation of BMPs

associated with the NPDES permit as discussed in the Hydrology and Water Quality Resources section of the IS/MND, the City would prepare and implement temporary BMPs in compliance with provisions of the Caltrans Statewide NPDES Permit.

Response to Comment B-13: The commenter discusses the NPDES Permit Process. The City would be required to apply for an NPDES Permit and to follow the BMPs associated with the permit as a condition of approval. The City would prepare and implement temporary BMPs in compliance with provisions of the Caltrans Statewide NPDES Permit.

Letter C: State Clearinghouse Compliance Letter (6/1/18)

STATE OF CALIFORNIA

GOVERNOR'S OFFICE *of* PLANNING AND RESEARCH

EDMUND G. BROWN JR.
GOVERNOR

Letter C

KEN ALEX
DIRECTOR

June 1, 2018

Maricio Meza-Pedraza
City of West Sacramento
1110 W. Capitol Avenue, 2nd Floor
West Sacramento, CA 95691

Subject: Linden Acres Water Main Replacement Project
SCH#: 2018052001

Dear Maricio Meza-Pedraza:

The State Clearinghouse submitted the above named Mitigated Negative Declaration to selected state agencies for review. On the enclosed Document Details Report please note that the Clearinghouse has listed the state agencies that reviewed your document. The review period closed on May 31, 2018, and the comments from the responding agency (ies) is (are) enclosed. If this comment package is not in order, please notify the State Clearinghouse immediately. Please refer to the project's ten-digit State Clearinghouse number in future correspondence so that we may respond promptly.

Please note that Section 21104(c) of the California Public Resources Code states that:

C-1

> "A responsible or other public agency shall only make substantive comments regarding those activities involved in a project which are within an area of expertise of the agency or which are required to be carried out or approved by the agency. Those comments shall be supported by specific documentation."

These comments are forwarded for use in preparing your final environmental document. Should you need more information or clarification of the enclosed comments, we recommend that you contact the commenting agency directly.

This letter acknowledges that you have complied with the State Clearinghouse review requirements for draft environmental documents, pursuant to the California Environmental Quality Act. Please contact the State Clearinghouse at (916) 445-0613 if you have any questions regarding the environmental review process.

Sincerely,

Scott Morgan
Director, State Clearinghouse

Enclosures
cc: Resources Agency

Document Details Report
State Clearinghouse Data Base

SCH# 2018052001
Project Title Linden Acres Water Main Replacement Project
Lead Agency West Sacramento, City of

Type **MND** Mitigated Negative Declaration

Description The project is located in the city of West Sacramento and consist of ROW work and is bounded by Linden Rd to the north, Mojave Dr to the west, Trinity War and the proposed Liberty Specific Plan to the south, and the proposed Liberty SP to the east. The purpose of the project is to replace the existing backyard water mains with new mains in the city owned roadway within ROW and dedicated easements. The existing water mains will be abandoned in place at average depths ranging from 4 to 8 ft deep. The new water main will be placed in the existing roadway sections and will be accessible for future city maintenance. The replacement of water mains will include approx 11,000 lf of 16 and 18 in pipe with the addition of fire hydrants and service lines that will include new water meters. The service laterals consist of 111 pipes that are 0.75 inch in size and 94 pipes that are 1 inch in size. Most of the pipe excavations will be approx 4 ft deep, with a small section that will be as deep as 10 ft to connect to the existing system. The project will be implemented on the following roads: Linden Rd, Mojave Dr, Merced Way, Shasta Way, Carmel Court, Rubicon Way, Ironwood Way, Spruce St, Redwood Ave, Alder Way, Tamarack Rd, and Cedar St.

Lead Agency Contact

Name Maricio Meza-Pedraza
Agency City of West Sacramento
Phone (916) 617-4850 **Fax**
email
Address 1110 W. Capitol Avenue, 2nd Floor
City West Sacramento **State** CA **Zip** 95691

Project Location

County Yolo
City West Sacramento
Region
Lat / Long 38° 32' .581" N / 121° 31' .646" W
Cross Streets Linden Rd/Mojave Dr
Parcel No. city owned ROW
Township 8N **Range** 4E **Section** 57 **Base** MDBM

Proximity to:

Highways I-5
Airports Sacramento Executive
Railways SSR
Waterways Sacramento River
Schools River city HS
Land Use work will be occurring in city owned ROW roadways

Project Issues Aesthetic/Visual; Agricultural Land; Air Quality; Archaeologic-Historic; Biological Resources; Cumulative Effects; Drainage/Absorption; Flood Plain/Flooding; Forest Land/Fire Hazard; Geologic/Seismic; Landuse; Minerals; Noise; Population/Housing Balance; Public Services; Recreation/Parks; Schools/Universities; Sewer Capacity; Soil Erosion/Compaction/Grading; Solid Waste; Toxic/Hazardous; Traffic/Circulation; Vegetation; Water Quality; Water Supply; Wetland/Riparian

Reviewing Agencies Resources Agency; Central Valley Flood Protection Board; Department of Fish and Wildlife, Region 2; Department of Parks and Recreation; California Highway Patrol; Caltrans, District 3 N; Caltrans, Division of Aeronautics; State Water Resources Control Board, Division of Drinking Water; State Water Resources Control Board, Division of Drinking Water, District 9; Regional Water Quality Control

Note: Blanks in data fields result from insufficient information provided by lead agency.

Document Details Report
State Clearinghouse Data Base

Bd., Region 5 (Sacramento); Delta Protection Commission; Delta Stewardship Council; Native American Heritage Commission; State Lands Commission; Department of Toxic Substances Control

---

Date Received 05/01/2018 ***Start of Review*** 05/02/2018 ***End of Review*** 05/31/2018

Note: Blanks in data fields result from insufficient information provided by lead agency.

Response to Comment C-1: The commenter notes that the Initial Study was received by the State Clearinghouse and distributed to selected state agencies for review; any comments from those agencies received by the State Clearinghouse have been included with the commenter's letter. This comment is noted and no revisions to the environmental document are necessary.

6.0 MITIGATION MONITORING AND REPORTING PROGRAM

This Mitigation and Monitoring Reporting Program (MMRP) has been formulated based upon findings of the Initial Study/Mitigated Negative Declaration (IS/MND) prepared for the proposed Project. The purpose of this MMRP is to ensure the implementation of mitigation measures identified as part of the environmental review for the Project. The MMRP includes the following information:

- A list of mitigation measures
- The party responsible for implementing the mitigation measures
- The timing for implementation of the mitigation measure
- The agency/jurisdictional department responsible for monitoring the implementation
- The monitoring action and frequency

The City of West Sacramento must adopt this MMRP, or an equally effective program, if it approves the Project, with the mitigation measures that were adopted or made conditions of approval.

Monitoring Item Number	Initial Study Mitigation Measures	Mitigation Measure	Timing	Implementing Party	Monitoring Party	Frequency and Duration of Monitoring
1	MM AQ-1	The City of West Sacramento (City) or construction contractor shall implement the following measures at the Project site: ● Water all active construction sites at least twice daily. The frequency shall be based on the type of operation, soil, and wind exposure. ● Haul trucks shall maintain at least 2 feet of freeboard ● Cover all trucks hauling dirt, sand, or loose materials. ● Apply nontoxic binders (e.g., latex acrylic copolymer) to exposed areas after cut and fill operations and hydroseed the area as applicable. ● Apply chemical soil stabilizers on inactive construction areas (disturbed lands within construction projects that are unused for at least 4 consecutive days). ● Plant tree windbreaks on the windward perimeter of construction projects if adjacent to open land. ● Plant vegetative ground cover in disturbed areas as soon as possible. ● Cover inactive storage piles. ● Sweep streets if visible soil material is carried out from the construction site. ● Treat accesses to a distance of 100 feet from the paved road with a 6 to 12 inch layer of wood chips or mulch or with a 6-inch layer of gravel.	During Construction	City of West Sacramento or Construction Contractor	City of West Sacramento	During Construction
2	MM-BIO-1	The measures listed below shall be implemented to mitigate potential impacts to western burrowing owl: ● Preconstruction surveys for western burrowing owl shall be conducted by a qualified biologist in accordance with the California Department of Fish and Wildlife's (CDFW) 2012 Staff Report on Burrowing Owl Mitigation. ● If burrowing owls are identified during the preconstruction survey, passive exclusion shall be implemented per CDFW's 2012 Staff Report of Burrowing Owl Mitigation (including avoidance of occupied burrows during the breeding season [February 1 to August 31]) ● Following construction, all areas, temporarily impacted during Project construction shall be restored to pre-construction	Prior to and during construction	City of West Sacramento	Qualified Biologist	

<table>
<tr><th>Monitoring Item Number</th><th>Initial Study Mitigation Measures</th><th>Mitigation Measure</th><th>Timing</th><th>Implementing Party</th><th>Monitoring Party</th><th>Frequency and Duration of Monitoring</th></tr>
<tr><td></td><td></td><td>contours (if necessary) and revegetated with native species as specified in the table below:

Native Species Mix<table><tr><th>Scientific Name</th><th>Common Name</th><th>Rate (lbs/acre)</th><th>Minimum Percent Germination</th></tr><tr><td>Artemisia douglasiana</td><td>Mugwort</td><td>2.0</td><td>50</td></tr><tr><td>Bromus carinatus carinatus</td><td>California brome</td><td>5.0</td><td>85</td></tr><tr><td>Elymus trachycaulus</td><td>Slender wheatgrass</td><td>2.0</td><td>60</td></tr><tr><td>Elymus X triticum</td><td>Regreen</td><td>10.0</td><td>80</td></tr><tr><td>Eschscholizia californica</td><td>California poppy</td><td>2.0</td><td>70</td></tr><tr><td>Hordeum brachyantherum</td><td>California barley</td><td>2.0</td><td>80</td></tr><tr><td>Lupinus bicolor</td><td>Bicolored lupine</td><td>4.0</td><td>80</td></tr></table></td><td></td><td></td><td></td><td></td></tr>
<tr><td>3</td><td>MM-CUL-1</td><td>Construction Monitoring. Prior to construction, the City shall retain a professional archaeologist and invite a geographically-affiliated Native American Representative to provide a pre-construction briefing to supervisory personnel of any excavation contractor to alert them to the possibility of exposing significant historic or prehistoric archaeological resources within the project area. The briefing shall discuss any resources that could be exposed, the need to stop excavation at the discovery site, and the procedures to follow regarding discovery protection and notification. The City will notify geographically-affiliated tribal groups 7 days prior to excavation, grading, and other earthmoving activities within 100 feet of the current site boundary of CA-YOL-18. During construction, a qualified archaeologist and a tribal representative from a geographically-</td><td>During Construction</td><td>City of West Sacramento</td><td>Qualified Archaeologist</td><td>During Construction</td></tr>
</table>

Monitoring Item Number	Initial Study Mitigation Measures	Mitigation Measure	Timing	Implementing Party	Monitoring Party	Frequency and Duration of Monitoring
		affiliated tribe shall be present to monitor Project excavation, grading, and other earthmoving activities within 100 feet of the current site boundary of CA-YOL-18. Monitoring shall continue until excavation, grading, and other earthmoving activities within 100 feet of the current site boundary have been completed. **Discovery of Unidentified Archaeological Resources.** If deposits of prehistoric or historical archaeological materials are encountered during Project construction activities, all work within 50 feet of the discovery shall be redirected and a qualified archaeologist should be contacted (if one is not already on site) to assess the situation and make recommendations regarding the treatment of the discovery, and to develop proper mitigation measures required for the discovery (California Code of Regulations [CCR] Title 14, § 15064.5 (f)). The City of West Sacramento shall also be notified. The archaeologist should prepare a report documenting the methods and results of the investigation, and provide recommendations for the treatment of the archaeological materials discovered. The report should be submitted to the City of West Sacramento and the Northwest Information Center. **Discovery of Human Remains.** During construction, consistent with the requirements outlined by CEQA Guidelines, Section 15064.5(e)(1), and in accordance with Section 7050.5 of the Health and Safety Code, Section 5097.98 of the PRC (Chapter 1492, Statutes of 1982, Senate Bill 297), as relevant, should be followed and no further disturbance shall occur until the Yolo County Coroner can evaluate them. If the human remains are of Native American origin, the coroner must notify the NAHC within 24 hours of identification. Pursuant to Section 5097.9 and 5097.993 of the PRC, the NAHC shall identify a "Native American Most Likely Descendent" to inspect the site and provide recommendations for the proper treatment of the remains and any associated grave goods.				

Monitoring Item Number	Initial Study Mitigation Measures	Mitigation Measure	Timing	Implementing Party	Monitoring Party	Frequency and Duration of Monitoring
4	MM-PALEO-1	If paleontological resources are encountered during project excavation and no monitor is present, all ground-disturbing activities within 50 feet of the find shall be redirected to other areas until a qualified paleontologist can be retained to evaluate the find and make recommendations for additional paleontological mitigation, which may include paleontological monitoring; collection of observed resources; preservation, stabilization, and identification of collected resources; curation of resources into a museum repository; and preparation of a final report documenting the monitoring methods and results to be submitted to the museum repository and the City.	During Construction	City of West Sacramento	Qualified Paleontologist	During Construction
5	MM-NOI-1	Prior to initiating construction, the Project proponent shall complete a noise reduction plan. The noise reduction plan shall identify the type and quantity of construction equipment to be operated, the expected noise levels of each piece of equipment, and the duration of operation at each area of construction. The noise reduction plan shall include measures to ensure construction of the Project will meet the standards of Chapter 17.32 of the City of West Sacramento Municipal Code (Performance Standards of Noise).	Prior to Construction	City of West Sacramento	City of West Sacramento	During Construction
6	MM-TRANS-1	A Traffic Management Plan/Emergency Services Plan shall be prepared by the Project proponent following the Yolo County Multi-Hazard Functional Plan recommendations. This plan shall be implemented during construction of the proposed Project to ensure that emergency access to and from the Project site is provided during construction activities and to ensure that emergency responders (i.e., fire, law enforcement, and paramedics/emergency medical technicians) are aware of potential detours and road closures to help in reducing emergency response times to the Project site.	Prior to Construction start	City of West Sacramento	City of West Sacramento	During Construction

This page intentionally left blank

APPENDIX A

NOTICE OF COMPLETION

This page intentionally left blank

Print Form

Appendix C

Notice of Completion & Environmental Document Transmittal

Mail to: State Clearinghouse, P.O. Box 3044, Sacramento, CA 95812-3044 (916) 445-0613
For Hand Delivery/Street Address: 1400 Tenth Street, Sacramento, CA 95814

SCH # 2018052001

Project Title: Linden Acres Water Main Replacement Project

Lead Agency: City of West Sacramento | Contact Person: Mauricio Meza-Pedraza

Mailing Address: 1110 West Capitol Avenue | Phone: 916 617 4850

City: West Sacramento | Zip: 95691 | County: Yolo

Project Location: County: Yolo | City/Nearest Community: West Sacramento

Cross Streets: Linden Road/Mojave Drive | Zip Code: 95691

Longitude/Latitude (degrees, minutes and seconds): 38 ° 32 ′ 581 ″ N / 121 ° 31 ′ 646 ″ W | Total Acres: Boundary 109 acres

Assessor's Parcel No.: City owned Right-of-way (Road) | Section: 57 | Twp.: 8N | Range: 4E | Base: Mt Diablo

Within 2 Miles: State Hwy #: Interstate 5 | Waterways: Sacramento River

Airports: Sacramento Executive | Railways: SSR | Schools: River City H.S.

Document Type:

CEQA: ☐ NOP ☐ Early Cons ☐ Neg Dec ☒ Mit Neg Dec | ☐ Draft EIR ☐ Supplement/Subsequent EIR (Prior SCH No.) ____ Other: ____

NEPA: ☐ NOI ☐ EA ☐ Draft EIS ☐ FONSI

Other: ☐ Joint Document ☐ Final Document ☐ Other: ____

Local Action Type:

☐ General Plan Update ☐ General Plan Amendment ☐ General Plan Element ☐ Community Plan
☐ Specific Plan ☐ Master Plan ☐ Planned Unit Development ☐ Site Plan
☐ Rezone ☐ Prezone ☐ Use Permit ☐ Land Division (Subdivision, etc.)
☐ Annexation ☐ Redevelopment ☐ Coastal Permit ☒ Other: Utility

Development Type:

☐ Residential: Units ____ Acres ____
☐ Office: Sq.ft. ____ Acres ____ Employees ____
☐ Commercial: Sq.ft. ____ Acres ____ Employees ____
☐ Industrial: Sq.ft. ____ Acres ____ Employees ____
☐ Educational: ____
☐ Recreational: ____
☐ Water Facilities: Type ____ MGD ____
☐ Transportation: Type ____
☐ Mining: Mineral ____
☐ Power: Type ____ MW ____
☐ Waste Treatment: Type ____ MGD ____
☐ Hazardous Waste: Type ____
☒ Other: Utility Work - Water Main

Project Issues Discussed in Document:

☒ Aesthetic/Visual
☒ Agricultural Land
☒ Air Quality
☒ Archeological/Historical
☒ Biological Resources
☐ Coastal Zone
☒ Drainage/Absorption
☐ Economic/Jobs
☐ Fiscal
☒ Flood Plain/Flooding
☒ Forest Land/Fire Hazard
☒ Geologic/Seismic
☒ Minerals
☒ Noise
☒ Population/Housing Balance
☒ Public Services/Facilities
☒ Recreation/Parks
☒ Schools/Universities
☐ Septic Systems
☒ Sewer Capacity
☒ Soil Erosion/Compaction/Grading
☒ Solid Waste
☒ Toxic/Hazardous
☒ Traffic/Circulation
☒ Vegetation
☒ Water Quality
☒ Water Supply/Groundwater
☒ Wetland/Riparian
☐ Growth Inducement
☒ Land Use
☒ Cumulative Effects
☐ Other: ____

Present Land Use/Zoning/General Plan Designation:

Work will be occurring in City owned right-of-way roadways.

Project Description: *(please use a separate page if necessary)*

Please see separate pages that contain the Project Description.

Note: The State Clearinghouse will assign identification numbers for all new projects. If a SCH number already exists for a project (e.g. Notice of Preparation or previous draft document) please fill in.

Reviewing Agencies Checklist

Lead Agencies may recommend State Clearinghouse distribution by marking agencies below with and "X".
If you have already sent your document to the agency please denote that with an "S".

X	Air Resources Board	____	Office of Historic Preservation
____	Boating & Waterways, Department of	____	Office of Public School Construction
____	California Emergency Management Agency	____	Parks & Recreation, Department of
____	California Highway Patrol	____	Pesticide Regulation, Department of
____	Caltrans District # ____	____	Public Utilities Commission
____	Caltrans Division of Aeronautics	X	Regional WQCB # 5
____	Caltrans Planning	____	Resources Agency
X	Central Valley Flood Protection Board	____	Resources Recycling and Recovery, Department of
____	Coachella Valley Mtns. Conservancy	____	S.F. Bay Conservation & Development Comm.
____	Coastal Commission	____	San Gabriel & Lower L.A. Rivers & Mtns. Conservancy
____	Colorado River Board	____	San Joaquin River Conservancy
____	Conservation, Department of	____	Santa Monica Mtns. Conservancy
____	Corrections, Department of	____	State Lands Commission
____	Delta Protection Commission	____	SWRCB: Clean Water Grants
____	Education, Department of	____	SWRCB: Water Quality
____	Energy Commission	____	SWRCB: Water Rights
X	Fish & Game Region # 3	____	Tahoe Regional Planning Agency
____	Food & Agriculture, Department of	____	Toxic Substances Control, Department of
____	Forestry and Fire Protection, Department of	____	Water Resources, Department of
____	General Services, Department of		
____	Health Services, Department of	____	Other: ____
____	Housing & Community Development	____	Other: ____
____	Native American Heritage Commission		

Local Public Review Period (to be filled in by lead agency)

Starting Date May 2, 2018 Ending Date May 31, 2018

Lead Agency (Complete if applicable):

Consulting Firm: LSA
Address: 201 Creekside Ridge Court, Suite 250
City/State/Zip: Roseville, CA 95678
Contact: Chris Graham
Phone: 916 772 7450

Applicant: City of West Sacramento
Address: 1110 West Capitol Avenue
City/State/Zip: West Sacramento, CA 95691
Phone: 916-617-4850

Signature of Lead Agency Representative: Mauricio Meyer **Date:** 5/1/18

Authority cited: Section 21083, Public Resources Code. Reference: Section 21161, Public Resources Code.

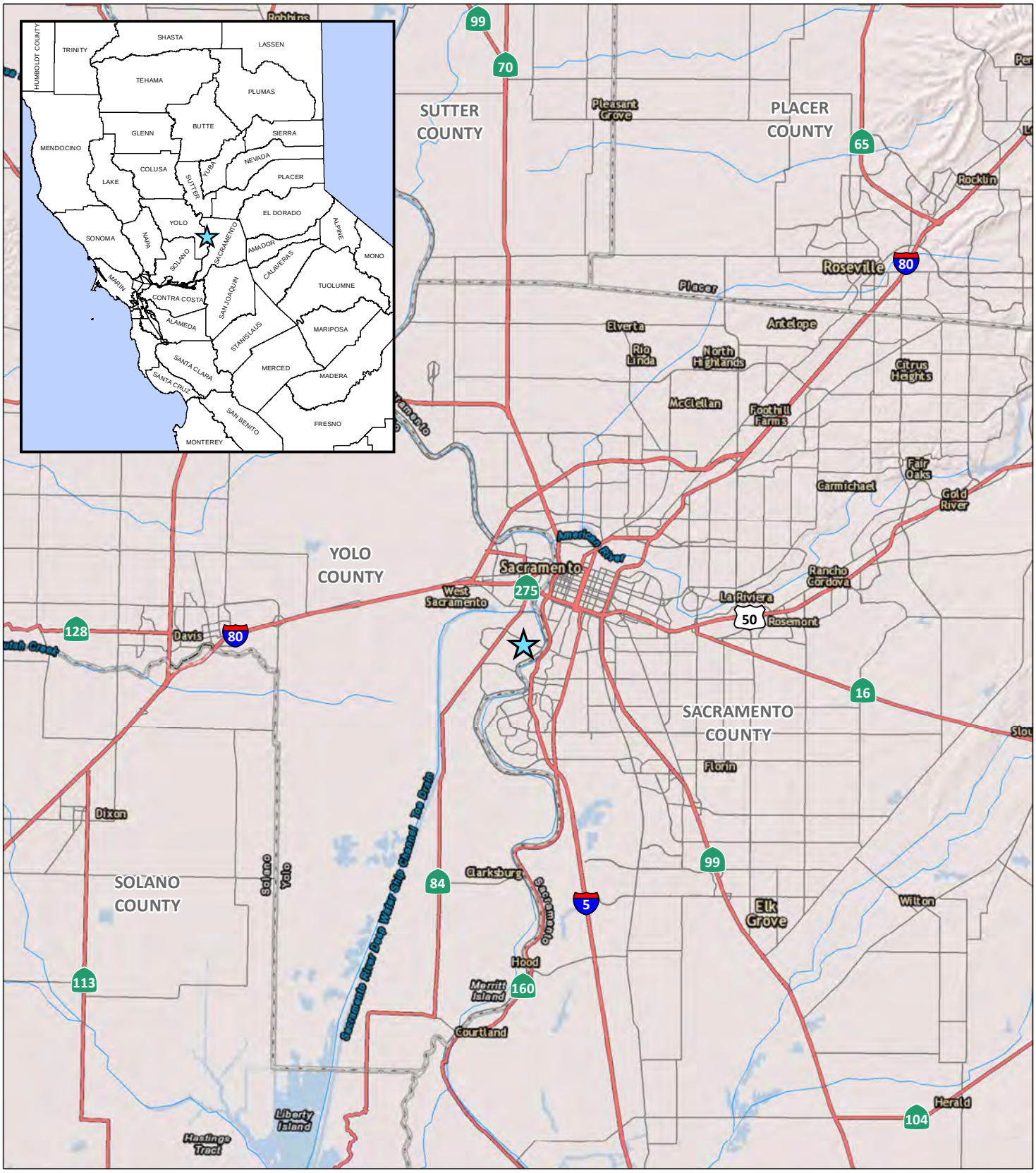
LINDEN ACRES WATER MAIN REPLACEMENT PROJECT DESCRIPTION FOR NOC

The Linden Acres Water Main Replacement Project (herein referred to as the proposed Project) is located in West Sacramento, within the Southport Planning Area. The Southport Planning Area lies in the southern half of West Sacramento and is bounded by the Deep Water Ship Channel to the north and west, the Sacramento River to the east, and the city limits to the south. The Project site consists of right-of-way (ROW) (roadway) work and is bounded by Linden Road to the north, Mojave Drive to the west, Trinity Way and the proposed Liberty Specific Plan to the south, and the proposed Liberty Specific Plan to the east. **Figure 2-1: Regional Location** and **Figure 2-2: Project Location** show the location of the Project site on a regional and local scale. **Figure 2-2** also shows the location of the proposed Project in comparison to the Liberty Specific Plan area.

The purpose of the Project is to replace the existing backyard water mains with new mains in the City of West Sacramento (City) owned roadway within ROW and dedicated easements. The existing water mains (16 inches, 12 inches, 8 inches, and 6 inches in diameter) will be abandoned in place at average depths ranging from 4 to 8 feet deep. The Project anticipates extending a water main to the south of Redwood Avenue, then east to reconnect at the east end of Tamarack Road to complete the water distribution system. It should be noted that this Project would extend into the boundaries of the privately owned Liberty Specific Plan to the east. The Liberty Specific Plan will eventually connect to the proposed Project at Tamarack Road and at the north water line coming east from Bastone Court in order to maintain the water distribution loop system. The water main associated with the proposed Project that extends into the Liberty Specific Plan area will be temporary and abandoned once development of the Liberty Specific Plan commences.

The new water main will be placed in the existing roadway sections and will be accessible for future City maintenance. The replacement of water mains will include approximately 11,000 linear feet of 16- and 8-inch pipe with the addition of fire hydrants and service lines (laterals) that will include new water meters. The service laterals consist of 111 pipes that are 0.75 inch in size and 94 pipes that are 1 inch in size. Most of the pipe excavations will be approximately 4 feet deep, with a small section that will be as deep as 10 feet to connect to the existing system. **Figure 2-3: Project Design** shows the design of the proposed Project. The Project will be implemented on the following roads: Linden Road, Mojave Drive, Merced Way, Shasta Way, Carmel Court, Rubicon Way, Ironwood Way, Spruce Street, Redwood Avenue, Alder Way, Tamarack Road, and Cedar Street.

Construction of the proposed Project is anticipated to commence in spring 2019 and will last 8 months (170 working days). During construction, affected roadways may be closed to through traffic; however, access by residents will still be permitted. The City of West Sacramento would direct the construction contractor to locate construction equipment at staging areas as far from residential units as possible. The construction equipment anticipated to be used includes: Hydrovac vacuum trucks, tractors, a backhoe, a trencher, a loader, a haul truck, an excavator, a compressor, a concrete saw, a concrete mixer truck, jack hammers, an asphalt planer, a trench paver, compactors, rollers, heavy-duty trucks, dump trucks, a street sweeper, a heavy equipment transport truck, a forklift, pickups, and chipping guns.



LSA

LEGEND

Project Area

FIGURE 2-1

Linden Acres Water Main Replacement Project
West Sacramento, Yolo County, California
LSA Project No. WSA1701

Regional Location

0 2.5 5
MILES

SOURCE: ESRI World Street Map (2016)

I:\WSA1701\GIS\Reports\Cultural Study\WSA1701_Figure1.mxd (6/6/2017)

LSA

LEGEND

Project Area (109.7 acres)

Liberty Specific Plan Area

N

0 500 1000

FEET

SOURCE: NAIP (2016); City of West Sacramento (2017)

I:\WSA1701\GIS\Reports\PD\Figure2.mxd (3/16/2018)

FIGURE 2-2

Linden Acres Water Main Replacement Project
West Sacramento, Yolo County, California
LSA Project No. WSA1701

Project Location

LSA

FIGURE 2-3

LEGEND

- Project Area (109.7 acres)
- Parcels
- Trenching Location

Design

- Existing Water Accessory
- Right-of-Way
- Existing Water Main
- Water Fittings
- Proposed Water Main

N

0 250 500

FEET

Linden Acres Water Main Replacement Project
West Sacramento, Yolo County, California
LSA Project No. WSA1701

Project Design

SOURCE: Esri World Imagery (2014); Design - City of West Sacramento (07/2017); Mapping - LSA (07/2017)

I:\WSA1701\GIS\Figure3_design.mxd (7/25/2017)

APPENDIX B

NOTICE OF DETERMINATION

This page intentionally left blank

Print Form

Notice of Determination

Appendix D

To:

☒ Office of Planning and Research

U.S. Mail: P.O. Box 3044, Sacramento, CA 95812-3044

Street Address: 1400 Tenth St., Rm 113, Sacramento, CA 95814

☒ County Clerk
County of: Yolo
Address: 625 Court Street #B01
Woodland, CA 95695

From:

Public Agency: City of West Sacramento
Address: 1110 West Capitol Avenue
West Sacramento, CA 95691
Contact: Mauricio Meza-Pedraza
Phone: 916-617-4645

Lead Agency (if different from above):

Address:

Contact:
Phone:

SUBJECT: Filing of Notice of Determination in compliance with Section 21108 or 21152 of the Public Resources Code.

State Clearinghouse Number (if submitted to State Clearinghouse): 2018052001

Project Title: Linden Acres Water Main Replacement Project

Project Applicant: City of West Sacramento

Project Location (include county): City of West Sacramento Yolo County

Project Description:
See attached Project Description.

This is to advise that the City of West Sacramento (☒ Lead Agency or ☐ Responsible Agency) has approved the above

described project on July 13, 2018 (date) and has made the following determinations regarding the above described project.

1. The project [☐ will ☒ will not] have a significant effect on the environment.
2. ☐ An Environmental Impact Report was prepared for this project pursuant to the provisions of CEQA.
   ☒ A Negative Declaration was prepared for this project pursuant to the provisions of CEQA.
3. Mitigation measures [☒ were ☐ were not] made a condition of the approval of the project.
4. A mitigation reporting or monitoring plan [☒ was ☐ was not] adopted for this project.
5. A statement of Overriding Considerations [☐ was ☒ was not] adopted for this project.
6. Findings [☐ were ☒ were not] made pursuant to the provisions of CEQA.

This is to certify that the final EIR with comments and responses and record of project approval, or the negative Declaration, is available to the General Public at:
City of West Sacramento Public Works Department

Signature (Public Agency): _____ Title: _____

Date: _____ Date Received for filing at OPR: _____

Authority cited: Sections 21083, Public Resources Code.
Reference Section 21000-21174, Public Resources Code.

Revised 2011

APPENDIX C

STATE CLEARINGHOUSE COMPLIANCE LETTER

This page intentionally left blank

STATE OF CALIFORNIA

GOVERNOR'S OFFICE *of* PLANNING AND RESEARCH

EDMUND G. BROWN JR.
GOVERNOR

KEN ALEX
DIRECTOR

June 1, 2018

Maricio Meza-Pedraza
City of West Sacramento
1110 W. Capitol Avenue, 2nd Floor
West Sacramento, CA 95691

Subject: Linden Acres Water Main Replacement Project
SCH#: 2018052001

Dear Maricio Meza-Pedraza:

The State Clearinghouse submitted the above named Mitigated Negative Declaration to selected state agencies for review. On the enclosed Document Details Report please note that the Clearinghouse has listed the state agencies that reviewed your document. The review period closed on May 31, 2018, and the comments from the responding agency (ies) is (are) enclosed. If this comment package is not in order, please notify the State Clearinghouse immediately. Please refer to the project's ten-digit State Clearinghouse number in future correspondence so that we may respond promptly.

Please note that Section 21104(c) of the California Public Resources Code states that:

> "A responsible or other public agency shall only make substantive comments regarding those activities involved in a project which are within an area of expertise of the agency or which are required to be carried out or approved by the agency. Those comments shall be supported by specific documentation."

These comments are forwarded for use in preparing your final environmental document. Should you need more information or clarification of the enclosed comments, we recommend that you contact the commenting agency directly.

This letter acknowledges that you have complied with the State Clearinghouse review requirements for draft environmental documents, pursuant to the California Environmental Quality Act. Please contact the State Clearinghouse at (916) 445-0613 if you have any questions regarding the environmental review process.

Sincerely,

Scott Morgan
Director, State Clearinghouse

Enclosures
cc: Resources Agency

Document Details Report
State Clearinghouse Data Base

SCH# 2018052001
Project Title Linden Acres Water Main Replacement Project
Lead Agency West Sacramento, City of

Type **MND** Mitigated Negative Declaration

Description The project is located in the city of West Sacramento and consist of ROW work and is bounded by Linden Rd to the north, Mojave Dr to the west, Trinity War and the proposed Liberty Specific Plan to the south, and the proposed Liberty SP to the east. The purpose of the project is to replace the existing backyard water mains with new mains in the city owned roadway within ROW and dedicated easements. The existing water mains will be abandoned in place at average depths ranging from 4 to 8 ft deep. The new water main will be placed in the existing roadway sections and will be accessible for future city maintenance. The replacement of water mains will include approx 11,000 lf of 16 and 18 in pipe with the addition of fire hydrants and service lines that will include new water meters. The service laterals consist of 111 pipes that are 0.75 inch in size and 94 pipes that are 1 inch in size. Most of the pipe excavations will be approx 4 ft deep, with a small section that will be as deep as 10 ft to connect to the existing system. The project will be implemented on the following roads: Linden Rd, Mojave Dr, Merced Way, Shasta Way, Carmel Court, Rubicon Way, Ironwood Way, Spruce St, Redwood Ave, Alder Way, Tamarack Rd, and Cedar St.

Lead Agency Contact

Name Maricio Meza-Pedraza
Agency City of West Sacramento
Phone (916) 617-4850 **Fax**
email
Address 1110 W. Capitol Avenue, 2nd Floor
City West Sacramento **State** CA **Zip** 95691

Project Location

County Yolo
City West Sacramento
Region
Lat / Long 38° 32' .581" N / 121° 31' .646" W
Cross Streets Linden Rd/Mojave Dr
Parcel No. city owned ROW
Township 8N **Range** 4E **Section** 57 **Base** MDBM

Proximity to:

Highways I-5
Airports Sacramento Executive
Railways SSR
Waterways Sacramento River
Schools River city HS
Land Use work will be occurring in city owned ROW roadways

Project Issues Aesthetic/Visual; Agricultural Land; Air Quality; Archaeologic-Historic; Biological Resources; Cumulative Effects; Drainage/Absorption; Flood Plain/Flooding; Forest Land/Fire Hazard; Geologic/Seismic; Landuse; Minerals; Noise; Population/Housing Balance; Public Services; Recreation/Parks; Schools/Universities; Sewer Capacity; Soil Erosion/Compaction/Grading; Solid Waste; Toxic/Hazardous; Traffic/Circulation; Vegetation; Water Quality; Water Supply; Wetland/Riparian

Reviewing Agencies Resources Agency; Central Valley Flood Protection Board; Department of Fish and Wildlife, Region 2; Department of Parks and Recreation; California Highway Patrol; Caltrans, District 3 N; Caltrans, Division of Aeronautics; State Water Resources Control Board, Division of Drinking Water; State Water Resources Control Board, Division of Drinking Water, District 9; Regional Water Quality Control

Note: Blanks in data fields result from insufficient information provided by lead agency.

Document Details Report
State Clearinghouse Data Base

Bd., Region 5 (Sacramento); Delta Protection Commission; Delta Stewardship Council; Native American Heritage Commission; State Lands Commission; Department of Toxic Substances Control

---

Date Received 05/01/2018 ***Start of Review*** 05/02/2018 ***End of Review*** 05/31/2018

Note: Blanks in data fields result from insufficient information provided by lead agency.