FIRSTCARBONSOLUTIONS™

RECIRCULATED DRAFT
Springtown Trunkline Sewer Replacement Project
Initial Study/Mitigated Negative Declaration
City of Livermore, Alameda County, California

Prepared for:
City of Livermore
1052 South Livermore Avenue
Livermore, CA 94550

Contact: Andy Ross, Economic Development Manager

Prepared by:
FirstCarbon Solutions
2999 Oak Road, Suite 250
Walnut Creek, CA 94597
925.357.2562

Contact: Mary Bean, Project Director
Grant Gruber, Project Manager

Report Date: October 11, 2023

THIS PAGE INTENTIONALLY LEFT BLANK

Table of Contents

Acronyms and Abbreviations v

Section 1: Introduction 1
1.1 - Purpose 1
1.2 - Project Location 1
1.3 - Environmental Setting 1
1.4 - Project History 2
1.5 - Project Description 2
1.5.1 - Background 2
1.5.2 - Pipeline Abandonment 2
1.5.3 - Pipeline Installation 3
1.5.4 - Equipment 4
1.5.5 - Schedule 4
1.6 - Required Discretionary and Ministerial Approvals 4
1.7 - Intended Uses of this Document 4

Section 2: Environmental Checklist and Environmental Evaluation 13
2.1 Aesthetics 14
2.2 Agriculture and Forestry Resources 16
2.3 Air Quality 19
2.4 Biological Resources 30
2.5 Cultural Resources and Tribal Cultural Resources 46
2.6 Energy 55
2.7 Geology and Soils 59
2.8 Greenhouse Gas Emissions 64
2.9 Hazards and Hazardous Materials 69
2.10 Hydrology and Water Quality 72
2.11 Land Use and Planning 76
2.12 Mineral Resources 77
2.13 Noise 78
2.14 Population and Housing 83
2.15 Public Services 84
2.16 Recreation 86
2.17 Transportation 87
2.18 Utilities and Service Systems 89
2.19 Wildfire 92
2.20 Mandatory Findings of Significance 94

Section 3: List of Preparers 97

Appendix A: Air Quality and Greenhouse Gas Emissions Supporting Information

Appendix B: Biological Resources Supporting Information

Appendix C: Cultural Resources Supporting Information

Appendix D: Geotechnical Exploration Report

Appendix E: Noise Supporting Information

List of Tables

Table 1: Project Consistency with Applicable Clean Air Plan Control Measures....22
Table 2: Preliminary Construction Schedule....24
Table 3: Annual Unmitigated Construction Emissions....25
Table 4: Odor Screening Distances....28
Table 5: City of Livermore Community 2005 GHG Inventory....64
Table 6: Consistency with SB 32 2017 Scoping Plan Update....67

List of Exhibits

Exhibit 1: Regional Location Map....7
Exhibit 2: Local Vicinity Map Aerial Base....9
Exhibit 3: Proposed Sewer Alignment....11
Exhibit 4: Potential Biological Impacts....33

ACRONYMS AND ABBREVIATIONS

ABAG	Association of Bay Area Governments
ACTM	Airborne Toxics Control Measure
APE	Area of Potential Effect
AQP	Air Quality Plan
ARB	California Air Resources Board
BAAQMD	Bay Area Air Quality Management District
BERD	Built Environment Resource Directory
BMP	Best Management Practices
CalEEMod	California Emissions Estimator Model
CAL FIRE	California Department of Forestry and Fire Protection
Caltrans	California Department of Transportation
CAP	Climate Action Plan
CASQA	California Stormwater Quality Association
CCR	California Code of Regulations
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CFS	cubic feet per second
CNDDB	California Natural Diversity Data Base
CNEL	Community Noise Equivalent Level
CNPS	California Native Plant Society
CO	carbon monoxide
CRHR	California Register of Historical Resources
CRLF	California red-legged frog
CTS	California tiger salamander
dB	decibel
dBA	A-weighted decibel
DPM	diesel particulate matter
DPR	California Department of Parks and Recreation
EACCS	East Alameda County Conservation Strategy
EIR	Environmental Impact Report
EMFAC	Emissions Factors mobile source emission model
EPA	United States Environmental Protection Agency
FAC	facultative
FCS	FirstCarbon Solutions
FTA	Federal Transit Administration

GHG	greenhouse gas
LCFS	Low Carbon Fuel Standard
L_{dn}	day/night average sound level
L_{eq}	equivalent continuous sound level
MBTA	Migratory Bird Treaty Act
MM	Mitigation Measure
mph	miles per hour
MTC	Metropolitan Transportation Commission
NAAQS	National Ambient Air Quality Standards
NAHC	Native American Heritage Commission
NO_X	oxides of nitrogen
NRHP	National Register of Historic Places
NWIC	Northwest Information Center
OBL	obligate wetland species
OHP	California Office of Historic Preservation
PM_{10}	particulate matter less than 2.5 microns in diameter
$PM_{2.5}$	particulate matter less than 10 microns in diameter
PPV	peak particle velocity
ROG	reactive organic gases
RTP	Regional Transportation Plan
RWQCB	Regional Water Quality Control Board
SLCP	Short-Lived Climate Pollutant
SWPPP	Storm Water Pollution Prevention Plan
TAC	toxic air contaminant
USACE	United States Army Corps of Engineers
USDA	United States Department of Agriculture
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey
VMT	Vehicle Miles Traveled
WEAP	Worker Environmental Awareness Program
WRA	WRA Environmental Consultants
ZEV	Zero-Emission Vehicle

SECTION 1: INTRODUCTION

1.1 - Purpose

The purpose of this Draft Initial Study/Mitigated Negative Declaration (Draft IS/MND) is to identify any potential environmental impacts that would result from implementation of the proposed Springtown Trunkline Sewer Replacement Project (proposed project) in the City of Livermore, California. Pursuant to California Environmental Quality Act (CEQA) Guidelines Section 15367, the City of Livermore has discretionary authority over the proposed project and is the Lead Agency in the preparation of this Draft IS/MND and any additional environmental documentation required for the project.

The remainder of this section provides a brief description of the project location and the primary project characteristics. Section 2 includes an environmental checklist that provides an overview of the potential impacts that may result from project implementation, elaborates on the information contained in the environmental checklist, and provides justification for each checklist response. Feasible mitigation measures are analyzed to reduce all impacts to below a level of significance. Section 3 contains the List of Preparers.

Pursuant to Section 15073.5 and 15072 of the State CEQA Guidelines and in consideration of additional information regarding details related to the project description and updated design information, the City has elected to revise the previously circulated IS/MND in its entirety and recirculate the entire IS/MND for public comment.

1.2 - Project Location

The project site is located in the City of Livermore, in Alameda County, California (Exhibit 1). The project site consists of approximately 1.5 lineal acres extending approximately 3,000 feet from a manhole located within Redwood Road to a manhole located near Interstate 580 (I-580)/Las Colinas Road (Exhibit 2). The project site is surrounded by undeveloped grazing land (west), the Springtown neighborhood (north), undeveloped grazing land entitled for a Catholic High School (east), and a Livermore Valley Joint Unified School District facility (south). The project site is located on the *Livermore, California* United States Geological Survey (USGS) 7.5-Minute Quadrangle, Township 3 South, Range 2 East, Unsectioned (Latitude 37° 42’ 26” North; Longitude 121° 45’ 7” West).

1.3 - Environmental Setting

The project site is mostly contained within a 122.5-acre privately owned property (Catholic Diocese Property) that was entitled for a Catholic High School in 2006. The Catholic Diocese Property contains actively grazed land with vegetation consisting of mostly non-native grasses. The western portion of the site consists of flat relief that gently slopes from Redwood Road in the north to Arroyo Seco in the south. Arroyo Seco, a perennial drainage, enters the southern portion of the property and meanders westward across the southern property boundary. Altamont Creek, a perennial drainage, enters the northern portion of the property and meanders south to its confluence with

Arroyo Seco. Both drainages support riparian vegetation such as cattails. Arroyo Seco also supports numerous trees. The eastern portion of the site contains an upland area consisting of several knolls. A corral area is located near Redwood Road. Unpaved ranch roads and barbed wire fences occur throughout the property. Vehicular access is taken from a gate at Redwood Road.

An existing 33-inch diameter gravity underground sewer pipeline crosses the property from Redwood Road to Las Colinas Road. The line is located in a 20-foot public utility easement. Manholes are located along the alignment to allow for maintenance access.

A small portion of the project site is within a section of an unpaved road near the Livermore Valley Joint Unified School District facility.

1.4 - Project History

In November 2020, the Livermore City Council approved the Lassen Road Residential Project (the location of which is shown on Exhibit 2). As part of the Development Agreement between the City and the applicant for the Lassen Road Residential Project, the existing 33-inch diameter sewer pipeline would be abandoned, and a new 24-inch diameter sewer pipeline would be installed. The existing 33-inch diameter sewer pipe was installed at a time when the North Livermore area had a much larger buildout potential. As a result, the existing pipe is oversized and the flow in the pipe is insufficient to flush the line, requiring higher levels of maintenance.

1.5 - Project Description

1.5.1 - Background

The Springtown Sewer Trunkline Project includes installation of a new Sewer Transmission Main as a part of the Springtown Sewer Trunkline to improve the City's ability to properly maintain the Sewer Trunkline. The existing 33-inch sewer pipe was previously installed when a bigger buildout of the North Livermore area was anticipated by the City of Livermore. As a result, the existing pipe is oversized and the flow in the pipe is insufficient to flush the line, requiring higher levels of maintenance. The existing line is also hard to maintain because of the proximity to Arroyo Las Positas, which is hard to access during the rainy season. In addition, the existing pipe is an unlined reinforced concrete pipe, subject to corrosion, and at the end of its useful life. The City of Livermore's Risk Management Program identified this line as one of the highest risk sewer lines due to the sensitive environment where it is located, the condition of the pipe, and the level of flow in the pipe. The new alignment will be farther away from Arroyo Las Positas, allowing easier access and maintenance, and the material will be corrosion resistant to reduce the risk of future failure.

1.5.2 - Pipeline Abandonment

The existing sewer pipeline between just north of Las Colinas Road and Redwood Road, including a segment below Arroyo Seco, will be abandoned in place. Abandonment of the existing sewer line will take place entirely in uplands with no impacts to Arroyo Seco. An approximately 100-square-foot area around each existing manhole (seven manholes / 700 square feet total) will be excavated to approximately 4 feet below grade using an excavator and concrete saw. At the location of each

manhole, a controlled low-strength material (water, cement, and aggregate) will be pumped from a premix truck into the underground pipe segments to close the underground pipes, including the segment below Arroyo Seco. The native soil excavated at the manholes will be replaced and the areas returned to the original grade. A 20-foot-wide corridor along the existing pipe alignment will be utilized for access during sewer abandonment work.

1.5.3 - Pipeline Installation

A new 24-inch sewer pipeline will be installed east of the existing sewer alignment. The pipeline will be installed through a combination of open trench construction in upland areas and trenchless drilling below the bed of Arroyo Seco. Pipe installation will occur along approximately 2,990 linear feet, with approximately 100 linear feet of pipe installation per day on average. Exhibit 3 depicts the proposed sewer alignment.

In upland areas, open trench construction will occur within a 20-foot-wide easement for the sewer. An additional approximately 20-foot-wide buffer on either side of the sewer easement will be utilized for access and staging of materials, along with two additional staging areas (one located at the north end and one located at the south end). The trench will include a vertical cut with shoring and some amount of layback at the top. Bedding material (i.e., gravel) will be placed at the bottom of the trench, the pipe will be placed on top of the bedding, and the native soil will be returned to the trench to match pre-project grade.

Installation of the sewer pipeline below Arroyo Seco will utilize one of two trenchless drilling methods such as horizontal directional drilling, jack and bore, or similar methods. Entry and exit pits located on either side of Arroyo Seco and in upland areas (at minimum 10 feet from the top of bank elevation) will be excavated to facilitate drilling efforts and pipe threading. Each pit will measure approximately 100 by 100 feet. The pits will be excavated approximately 20 to 25 feet below existing grade.

Between the two entry and exit pits, a minimum 36-inch diameter casing will be installed approximately 5 to 8 feet below the bed of Arroyo Seco (this would result in the top of the pipe at approximately 5 feet below the bed of Arroyo Seco). The existing pipeline tie-in constraints limit further deepening the gravity fed sewer at the crossing location. After the casing is installed, the 24-inch sanitary sewer pipeline will be installed within the casing. After the pipeline is installed below Arroyo Seco, native soil will be returned to the entry and exit pits to match pre-project grade.

Temporary dewatering of Arroyo Seco will occur below the top of bank elevation as a preventative measure for the trenchless drilling activities. Dewatering structures include an upstream and downstream cofferdam (approximately 20 feet in length and 5 feet in width for each cofferdam), a pump for water intake in the upstream cofferdam, and a pipe for water diversion. The pump intake will be covered with 0.125-inch mesh to prevent entrainment of wildlife into the pump system. The water diversion pipe and pump should accommodate up to 5 cubic feet per second (CFS) of flow, which is anticipated to be the maximum water flow in Arroyo Seco during the construction activities planned in the dry season. Two blue gum eucalyptus trees (Eucalyptus globulus) trees will be

removed below the top of bank elevation to facilitate sewer installation and prevent future maintenance issues.

All areas of temporary ground disturbance will be restored to existing condition after the sewer pipeline is installed and the areas are backfilled. Seventeen manholes (20 square feet each) will be installed along the new sewer alignment in uplands.

1.5.4 - Equipment

Equipment will include excavators and trucks. If horizontal direction drilling is selected, a horizontal drilling machine will be placed in the entry pit. Drilling slurry will be used to keep the excavation open under the creek. If jack and bore is selected, a jack and bore machine will be installed in the entry pit.

1.5.5 - Schedule

The sewer abandonment and installation process is anticipated to take approximately eight weeks, with approximately 15 days for trenchless drilling below Arroyo Seco.

1.6 - Required Discretionary and Ministerial Approvals

As mentioned previously, the City of Livermore has discretionary authority over the proposed project and is the CEQA Lead Agency for the preparation of this Draft IS/MND. In order to implement the project, the City would need to secure the following permits/approvals:

- Establishment of New Easement (City of Livermore)
- Section 404 Permit (Individual or Nationwide) (United States Army Corps of Engineers)
- Section 1602 Lakebed/Stream Alteration Agreement (California Department of Fish and Wildlife)
- Section 401 Water Quality Certification (San Francisco Bay Regional Water Quality Control Board)

In addition, the following agencies may need to approve ministerial actions:

- County of Alameda (Issuance of Encroachment Permit)
- Livermore Valley Joint Unified School District (Issuance of Encroachment Permit)

1.7 - Intended Uses of this Document

This Draft IS/MND has been prepared to document the potential significant adverse environmental impacts associated with the proposed project and identify feasible mitigation that would reduce impacts to below a level of significance. This document will also serve as a basis for soliciting comments and input from members of the public and public agencies regarding the proposed project. The Draft IS/MND will be circulated for a minimum of 30 days, during which comments concerning the analysis contained in the Draft IS/MND should be sent to:

Andy Ross, Economic Development Manager
Community Development Department
City of Livermore
1052 South Livermore Avenue
Livermore, CA 94550
Phone: 925.960.4450
Email: aaross@LivermoreCA.gov

THIS PAGE INTENTIONALLY LEFT BLANK

Source: Census 2000 Data, The California Spatial Information Library (CaSIL).

FIRSTCARBON SOLUTIONS™

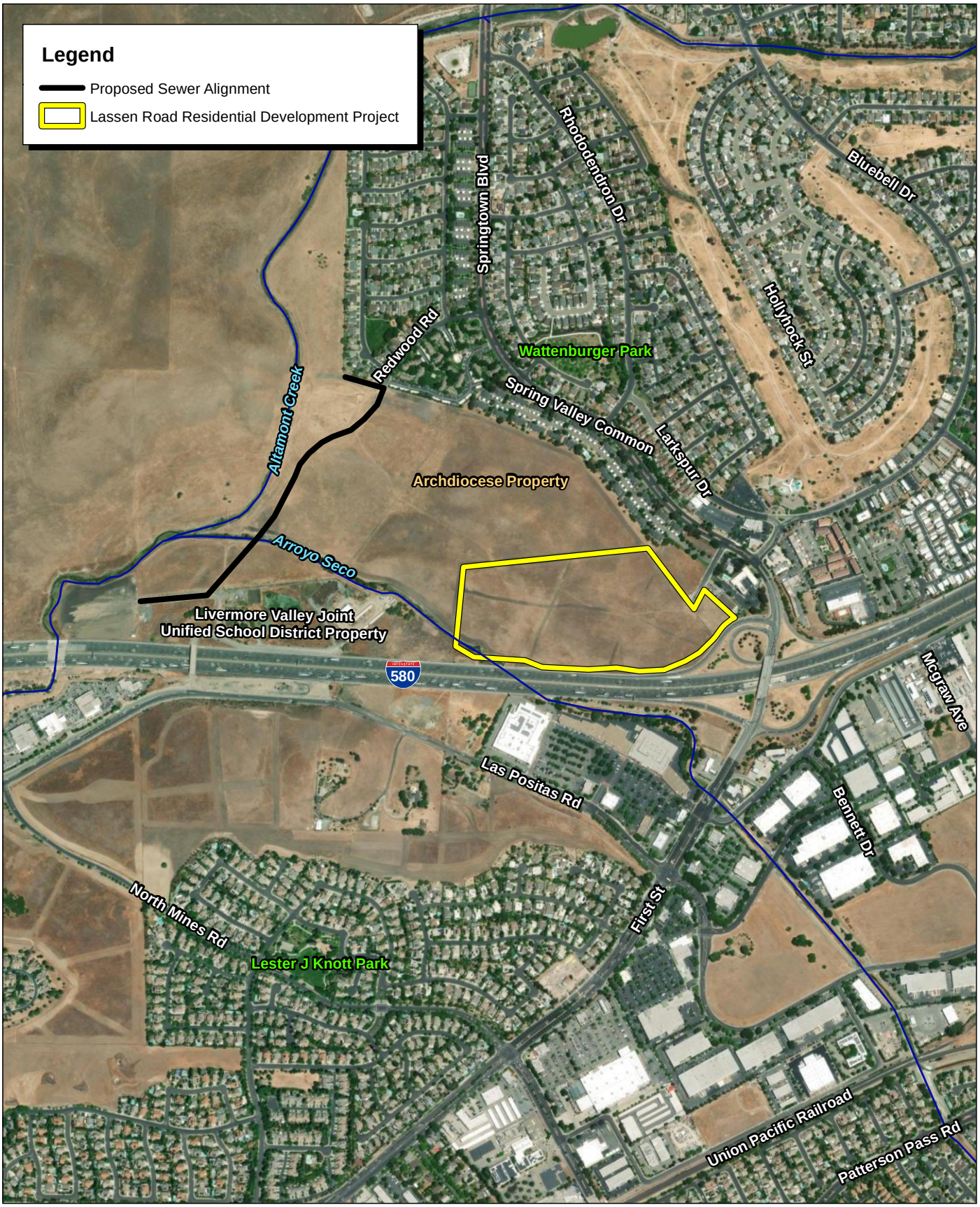
5 2.5 0 5 Miles

Exhibit 1
Regional Location Map

17280018 • 10/2022 | 1_regional.mxd

CITY OF LIVERMORE
SPRINGTOWN TRUNKLINE SEWER REPLACEMENT PROJECT
INITIAL STUDY/MITIGATED NEGATIVE DECLARATION

THIS PAGE INTENTIONALLY LEFT BLANK



Source: ESRI Aerial Imagery.

FIRSTCARBON SOLUTIONS™

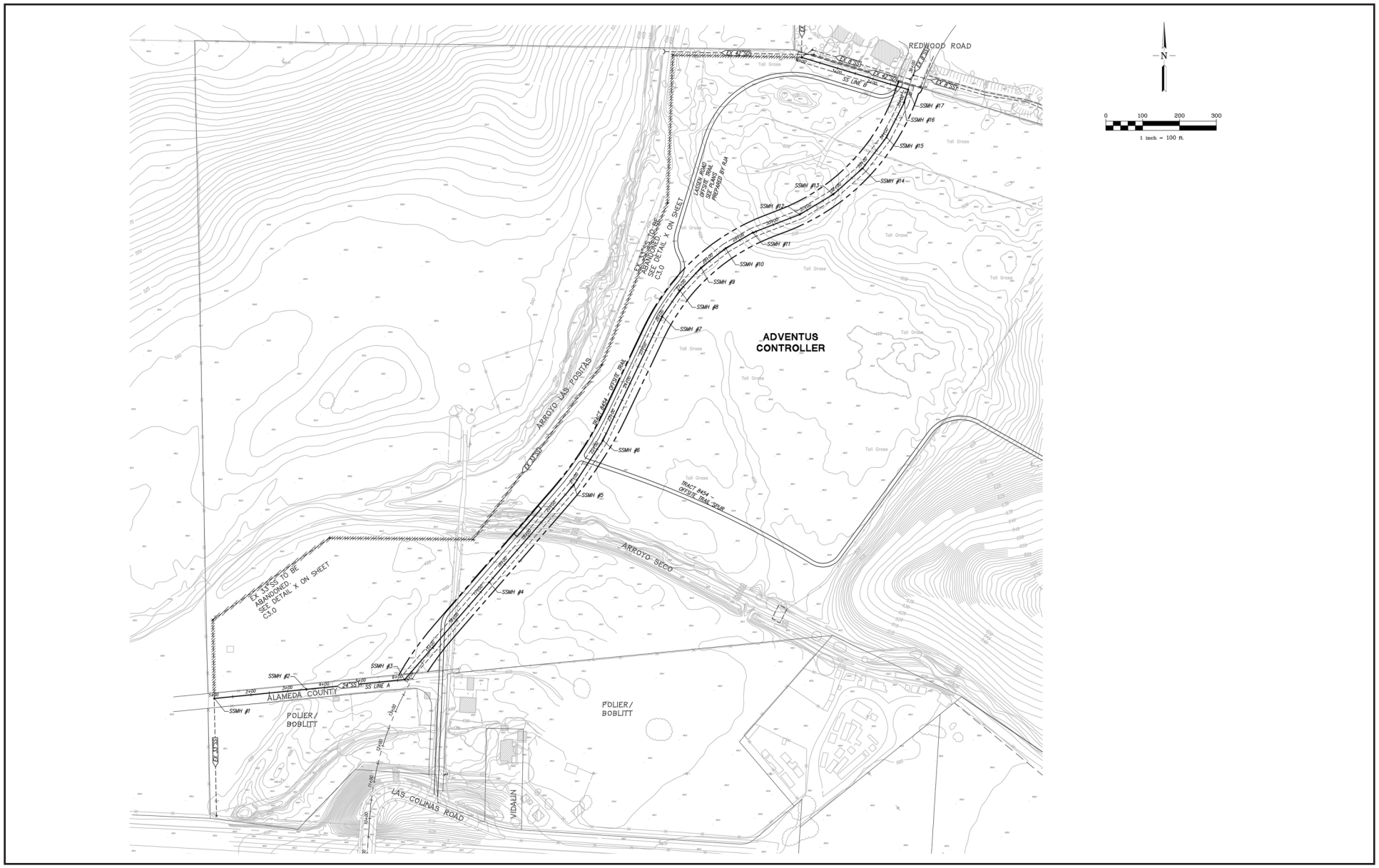
1,000 500 0 1,000 Feet

Exhibit 2
Local Vicinity Map

17280018 • 10/2022 | 2_local_vicinity.mxd

CITY OF LIVERMORE
SPRINGTOWN TRUNKLINE SEWER REPLACEMENT PROJECT
INITIAL STUDY/MITIGATED NEGATIVE DECLARATION

THIS PAGE INTENTIONALLY LEFT BLANK



Source: Ruggeri-Jensen-Azar, June 2021.

FIRSTCARBON SOLUTIONS™

Exhibit 3
Proposed Sewer Alignment

17280018 • 10/2022 | 3_Proposed_Sewer_Alignment.cdr

CITY OF LIVERMORE
SPRINGTOWN TRUNKLINE SEWER REPLACEMENT PROJECT
INITIAL STUDY/MITIGATED NEGATIVE DECLARATION

THIS PAGE INTENTIONALLY LEFT BLANK

SECTION 2: ENVIRONMENTAL CHECKLIST AND ENVIRONMENTAL EVALUATION

Environmental Factors Potentially Affected					
The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.					
☐	Aesthetics	☐	Agriculture and Forestry Resources	☒	Air Quality
☒	Biological Resources	☒	Cultural Resources	☐	Energy
☒	Geology/Soils	☐	Greenhouse Gas Emissions	☐	Hazards/Hazardous Materials
☐	Hydrology/Water Quality	☐	Land Use/Planning	☐	Mineral Resources
☐	Noise	☐	Population/Housing	☐	Public Services
☐	Recreation	☐	Transportation	☒	Tribal Cultural Resources
☐	Utilities/Services Systems	☐	Wildfire	☐	Mandatory Findings of Significance
Environmental 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 measure 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.

Date: October 11, 2023 Signed: Andy Ross, Economic Development Director

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

Environmental Evaluation

Would the project:

a) Have a substantial adverse effect on a scenic vista?

No impact. The City of Livermore General Plan (General Plan) Community Character Element identifies ridgelines and peaks including Brushy Peak and Mt. Diablo as scenic vistas. The proposed project consists of the installation of a 2,990-lineal-foot, 24-inch diameter underground sewer pipeline between Las Colinas Road and Redwood Drive in the Springtown neighborhood. In addition, an existing nearby 33-inch diameter underground sewer pipeline would be abandoned in place. Construction activities would be temporary and, thus, would not have the potential to permanently alter views of scenic vistas. The new sewer pipeline would be located underground and, thus, operational activities would not have the potential to alter views of scenic vistas. No impact would occur.

b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic building within a State Scenic Highway?

No impact. The General Plan designates I-580 as scenic corridor. In addition, this segment of freeway is also an “Eligible” State Scenic Highway. The proposed project consists of the installation of a 2,990-lineal-foot, 24-inch diameter underground sewer pipeline between Las Colinas Road and Redwood Drive in the Springtown neighborhood. In addition, an existing nearby 33-inch diameter underground sewer pipeline would be abandoned in place. Construction activities may be visible

from I-580; however, they would be temporary and, thus, would not have the potential to permanently alter the freeway viewshed. The new sewer pipeline would be located underground and, thus, operational activities would not have the potential to alter the freeway viewshed. No impact would occur.

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

No impact. The sewer alignment contains grazing land and Arroyo Seco. The proposed project consists of the installation of a 2,990-lineal-foot, 24-inch diameter underground sewer pipeline between Las Colinas Road and Redwood Drive in the Springtown neighborhood. In addition, an existing nearby 33-inch diameter underground sewer pipeline would be abandoned in place. Construction activities may change the appearance of the sewer alignment; however, disturbed areas would be restored and, thus, they would not have the potential to permanently alter the visual character of the alignment. The new sewer pipeline would be located underground and, thus, operational activities would not have the potential to alter visual character. No impact would occur.

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

No impact. There are no existing sources of light and glare along the sewer alignment. The proposed project consists of the installation of a 2,990-lineal-foot, 24-inch diameter underground sewer pipeline between Las Colinas Road and Redwood Drive in the Springtown neighborhood. In addition, an existing nearby 33-inch diameter underground sewer pipeline would be abandoned in place. Construction activities may involve the use of lights along the sewer alignment; however, the use of lights would be temporary and, thus, they would not have the potential to permanently introduce new sources of light and glare. The new sewer pipeline would be located underground and, thus, operational activities would not have the potential to introduce new sources of light and glare. No impact would occur.

Mitigation Measures

None.

Environmental Issues	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
2.2 Agriculture and Forestry Resources *In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California 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 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 nonagricultural 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 nonagricultural use, or conversion of forest land to non-forest use?	☐	☐	☐	☒

Environmental Evaluation

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

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 nonagricultural use?

No impact. The California Department of Conservation Farmland Mapping and Monitoring Program maps the sewer alignment as mostly grazing land with a small area mapped as Other Land near Las Colinas Road. Neither land use category is classified as Important Farmland. As such, there is no potential for the proposed project to covert Important Farmland to nonagricultural use. No impact would occur.

b) Conflict with existing zoning for agricultural use, or a Williamson Act Contract?

No impact. The City of Livermore Development Code zones the sewer alignment "Open Space Agricultural," an agricultural zoning designation. The proposed project consists of the installation of a 2,990-lineal-foot, 24-inch diameter underground sewer pipeline between Las Colinas Road and Redwood Drive in the Springtown neighborhood. In addition, an existing nearby 33-inch diameter underground sewer pipeline would be abandoned in place. Construction activities may cause temporary changes to grazing activities through restricted access; however, disturbed areas would be restored and, thus, they would not have the potential to permanently alter the agricultural viability of the alignment. The new sewer pipeline would be located underground and, thus, operational activities would not have the potential to alter agricultural viability. No impact would occur.

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))?

No impact. The City of Livermore Development Code zones the sewer alignment "Open Space Agricultural," a non-forest zoning designation. This condition precludes the possibility of conflicts with forest zoning. No impact would occur.

d) Result in the loss of forest land or conversion of forest land to non-forest use?

No impact. Although there are trees located along the Arroyo Seco riparian corridor, they do not meet the State definition for "forest land" because of species type and lack of density. This condition precludes the possibility of loss of forest land. No impact would occur.

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

No impact. The proposed project consists of the installation of a 2,990-lineal-foot, 24-inch diameter underground sewer pipeline between Las Colinas Road and Redwood Drive in the Springtown neighborhood. In addition, an existing nearby 33-inch diameter underground sewer pipeline would

be abandoned in place. Construction activities may cause temporary changes to grazing activities through restricted access; however, disturbed areas would be restored and, thus, they would not have the potential to permanently alter the agricultural viability of the alignment or of neighboring properties. The new sewer pipeline would be located underground and, thus, operational activities would not have the potential to alter agricultural viability. No impact would occur.

Mitigation Measures

None.

Environmental Issues	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
2.3 Air Quality *Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations.* *Would the project:*				
a) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☒	☐	☐
b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or State ambient air quality standard?	☐	☒	☐	☐
c) Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☒	☐
d) Result in other emissions (such as those leading to odors or) adversely affecting a substantial number of people?	☐	☐	☒	☐

Environmental Evaluation

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

Setting

The proposed project is located in the City of Livermore in Alameda County. It is within the San Francisco Bay Area Air Basin (Air Basin), where the Bay Area Air Quality Management District (BAAQMD) regulates air quality. The United States Environmental Protection Agency (EPA) is responsible for identifying nonattainment and attainment areas for each criteria pollutant within the Air Basin. The Air Basin is designated nonattainment for State standards for 1-hour and 8-hour ozone, 24-hour respirable particulate matter with an aerodynamic diameter of 10 microns or less (PM_{10}), annual PM_{10}, and annual fine particulate matter with an aerodynamic diameter of 2.5 microns or less ($PM_{2.5}$).[1]

The BAAQMD has adopted several air quality policies and plans to address regional air quality standards, the most recent of which is the 2017 Clean Air Plan. The 2017 Clean Air Plan was adopted in April of 2017 and serves as the regional Air Quality Plan (AQP) for the Air Basin for attaining National Ambient Air Quality Standards (NAAQS). The primary goals of the 2017 Clean Air Plan are to protect public health and protect the climate. The 2017 Clean Air Plan acknowledges that the BAAQMD's two stated goals of protection are closely related. As such, the 2017 Clean Air Plan identifies a wide range of control measures intended to decrease both criteria pollutants and

[1] Bay Area Air Quality Management District (BAAQMD). 2017. California Environmental Quality Act. Air Quality Guidelines.

greenhouse gas (GHG) emissions. The EPA has established NAAQS for six of some of the most common air pollutants—carbon monoxide, lead, ground level ozone, particulate matter, nitrogen dioxide, and sulfur dioxide—known as "criteria" air pollutants. GHGs are gaseous compounds in the atmosphere that are capable of absorbing infrared radiation, thereby trapping, and holding heat in the atmosphere. By increasing the heat in the atmosphere, GHGs are responsible for the greenhouse effect, which ultimately leads to global warming. The 2017 Clean Air Plan also accounts for projections of population growth provided by the Association of Bay Area Governments (ABAG) and Vehicle Miles Traveled (VMT) provided by the Metropolitan Transportation Commission (MTC) and identifies strategies to bring regional emissions into compliance with federal and State air quality standards. A project would be judged to conflict with or obstruct implementation of the 2017 Clean Air Plan if it would result in substantial new regional emissions not foreseen in the air quality planning process. This section will discuss the air quality impacts resulting from the proposed project.

Would the project:

a) Conflict with or obstruct implementation of the applicable air quality plan?

Less than significant impact with mitigation incorporated. The Air Basin is designated as nonattainment for the California Ambient Air Quality Standards for 1 hour and 8-hour ozone, 24-hour PM_{10}, annual PM_{10}, and annual fine particulate matter ($PM_{2.5}$) and as nonattainment for the NAAQS for 8-hour ozone and $PM_{2.5}$.[2] To address regional air quality standards, the BAAQMD has adopted several air quality policies and plans, the most recent of which is the 2017 Clean Air Plan. As discussed above, the 2017 Clean Air Plan was adopted in April 2017, and serves as the regional AQP for the Air Basin for attaining federal ambient air quality standards. The primary goals of the 2017 Clean Air Plan are to protect public health and protect the climate. The 2017 Clean Air Plan acknowledges that the BAAQMD's two stated goals of protection are closely related. As such, the 2017 Clean Air Plan identifies a wide range of control measures intended to decrease both criteria pollutants[3] and GHGs.[4]

The BAAQMD does not provide a numerical threshold of significance for the project-level consistency analysis with AQPs. Therefore, the following criteria are used for determining a project's consistency with the 2017 Clean Air Plan:

Criterion 1: Does the project support the primary goals of the AQP?
Criterion 2: Will the project conform to the assumptions in the AQPs?
Criterion 3: Does the project disrupt or hinder implementation of any AQP control measures?

[2] Bay Area Air Quality Management District (BAAQMD). 2017. Air Quality Standards and Attainment Status. Website: http://www.baaqmd.gov/about-air-quality/research-and-data/air-quality-standards-and-attainment-status. Accessed October 30, 2022.

[3] The EPA has established NAAQS for six of the most common air pollutants—carbon monoxide, lead, ground level ozone, particulate matter, nitrogen dioxide, and sulfur dioxide—known as "criteria" air pollutants (or simply "criteria pollutants").

[4] A GHG is any gaseous compound in the atmosphere that is capable of absorbing infrared radiation, thereby trapping and holding heat in the atmosphere. By increasing the heat in the atmosphere, GHGs are responsible for the greenhouse effect, which ultimately leads to global warming.

Criteria 1: Support Primary Goals of AQP

The primary goals of the 2017 Clean Air Plan, the current AQP to date, are to:

- Attain air quality standards.
- Reduce population exposure to unhealthy air and protect public health in the Bay Area.
- Reduce GHG emissions and protect the climate.

Measures for determining whether the proposed project supports the primary goals of the AQP include whether the proposed project would not result in an increase in the frequency or severity of existing air quality violations, cause or contribute to new violations, or delay timely attainment of air quality standards or the interim emission reductions specified in the air quality plans. These measures are determined by comparison to the regional and localized thresholds identified by the BAAQMD for construction- and operational-related pollutants, which are used in the evaluation of Impact AIR-2, below. As discussed under Impact AIR-2, the proposed project would not significantly contribute to cumulative nonattainment pollutant violations after incorporation of mitigation. Fugitive dust control measures would be required to be implemented during construction of the proposed project in order to reduce localized dust impacts. Impacts related to fugitive dust from the construction of the proposed project could expose nearby residents to unhealthy air quality and would be potentially significant without the inclusion of sufficient dust control measures. Mitigation Measure (MM) AIR-1 requires the inclusion of Best Management Practices (BMPs) put forth by the BAAQMD to reduce potential impacts related to fugitive dust emissions from use of construction equipment. The proposed project is, therefore, consistent with Criterion 1 after incorporation of MM AIR-1.

Criteria 2: Assumptions in AQP

A measure for determining whether a project is consistent with the AQP is to determine whether the project is consistent with the growth assumptions incorporated into the AQP and thus, whether it would interfere with the region's ability to comply with federal and California air quality standards. Typically, this involves determining whether a project's land use and/or effect on population growth has been accounted for by the AQP, because if a project results in a land use pattern or population increase that exceeds the AQP's assumptions, then the project may generate emissions beyond what has been accounted for by the AQP.

In this case, the proposed project would replace an existing 33-inch sewer pipeline with a 24-inch pipeline that would operate via gravity. This type of infrastructure project would not conflict with the 2017 Clean Air Plan's assumptions regarding land use patterns and population growth. Implementation of the proposed project also would not indirectly lead to greater population growth. As explained, the proposed project proposes a reduction in the diameter of existing sewer infrastructure to reduce maintenance issues. Therefore, it would not indirectly facilitate greater population growth than what is accommodated by the existing sewer pipeline or assumed by the 2017 Clean Air Plan.

The AQPs also assume that all mandatory regulations to reduce air pollution would be adhered to. Therefore, to conform to the assumptions in the AQP, a project must be consistent with all applicable measures contained in the applicable AQP. The 2017 Clean Air Plan contains control measures to

reduce air pollutants and GHGs at the local, regional, and global levels. The AQP's control measures for stationary sources such as the proposed project are generally targeted at facilities that generate substantial emissions, such as refineries, sulfuric acid plants, cement plants, and large combustion sources. As such, only one construction-related measure has limited relevance to the proposed project. Table 1 lists this measure and evaluates the proposed project's consistency with it. As shown below, the proposed project would not conflict with the AQP's control measure to reduce particulate matter from trackout. Therefore, the proposed project would be consistent with Criterion 2.

Table 1: Project Consistency with Applicable Clean Air Plan Control Measures

Control Measure	Project Consistency
Stationary Control Measures	
SS36 Particulate Matter from Trackout: Develop new Air District rule to prevent mud/dirt and other solid trackout from construction, landfills, quarries, and other bulk material sites.	**No Conflict.** This measure tasks the BAAQMD with developing new regulations to reduce trackout from stationary sources. As such, it would not directly apply to construction of the proposed project. Nevertheless, construction of the proposed project would implement the BAAQMD's measures for fugitive dust control, which include measures to reduce trackout, after implementation of MM AIR-1.
Source: Bay Area Air Quality Management District (BAAQMD). 2017. Final 2017 Clean Air Plan.	

Criteria 3: Control Measures

As discussed above, the AQP's control measures have limited relevance to the proposed project. The proposed project's construction of a 24-inch sewer pipeline would not disrupt or hinder the implementation of any other AQP control measure. Therefore, the proposed project would be consistent with Criterion 3.

Summary

As discussed above, the proposed project would be consistent with criteria for determining consistency with the AQP. Thus, the proposed project would not conflict with the AQP, and impacts associated with conflicting with or obstructing implementation of the 2017 Clean Air Plan would be less than significant after mitigation.

b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or State ambient air quality standard?

Less than significant impact with mitigation incorporated. This impact is related to the cumulative effect of a project's regional criteria pollutant emissions. By its nature, air pollution is largely a cumulative impact resulting from emissions generated over a large geographic region. The nonattainment status of regional pollutants is a result of past and present development within the Air Basin, and this regional impact is a cumulative impact. Therefore, new development projects (such as the proposed project) within the Air Basin would contribute to this impact only on a

cumulative basis. No single project would be sufficient in size, by itself, to result in nonattainment of regional air quality standards. Instead, a project's emissions may be individually limited, but cumulatively considerable when taken in combination with past, present, and future development projects.

Potential localized and regional impacts would result in exceedances of State or federal standards for NO_X, particulate matter (PM_{10} and $PM_{2.5}$), or CO. NO_X emissions are of concern because of potential health impacts from exposure to NO_x emissions during both construction and operation and as a precursor in the formation of airborne ozone. PM_{10} and $PM_{2.5}$ are of concern during construction because of the potential to emit exhaust emissions from the operation of off-road construction equipment and fugitive dust during earth-disturbing activities (construction fugitive dust). CO emissions are of concern during project operation because operational CO hotspots are related to increases in on-road vehicle congestion.

Reactive organic gases (ROG) emissions are also important because of their participation in the formation of ozone. Ozone is a respiratory irritant and an oxidant that increases susceptibility to respiratory infections and that can cause substantial damage to vegetation and other materials. Elevated ozone concentrations result in reduced lung function, particularly during vigorous physical activity. This health problem is particularly acute in sensitive receptors such as the sick, elderly, and young children.

The cumulative analysis focuses on whether a specific project would result in cumulatively considerable emissions. According to Section 15064(h)(4) of the CEQA Guidelines, the existence of significant cumulative impacts caused by other projects alone does not constitute substantial evidence that the proposed project's incremental effects would be cumulatively considerable. Rather, the determination of cumulative air quality impacts for construction and operational emissions is based on whether the proposed project would result in regional emissions that exceed the BAAQMD regional thresholds of significance for construction and operations on a project level. The thresholds of significance represent the allowable amount of emissions each project can generate without generating a cumulatively considerable contribution to regional air quality impacts. Therefore, a project that would not exceed the BAAQMD thresholds of significance on the project level also would not be considered to result in a cumulatively considerable contribution to these regional air quality impacts. Construction and operational emissions are discussed separately below.

Construction Emissions

As previously mentioned, fugitive dust (PM_{10} and $PM_{2.5}$) would be generated during ground disturbance activities (e.g., trenching, backfilling, etc.) but would largely remain localized near the project site.

Construction Fugitive Dust

The BAAQMD does not recommend a numerical threshold for fugitive dust particulate matter emissions. Instead, the BAAQMD bases the determination of significance for fugitive dust upon consideration of the control measures to be implemented. If all appropriate emissions control measures are implemented for a project as put forth by the BAAQMD, then fugitive dust emissions during construction are not considered significant. During construction activities, air pollution

control measures shall be implemented as outlined in MM AIR-1, which would require BMPs, such as watering the project site twice per day and limiting on-site vehicle speeds to 15 miles per hour (mph). With incorporation of this condition, short-term construction impacts associated with violating an air quality standard or contributing substantially to an existing or projected air quality violation would be less than significant.

Construction Air Pollutant Emissions: ROG, NO_X, PM_{10}, and $PM_{2.5}$

CalEEMod, Version 2020.4.0, was used to estimate the proposed project's construction emissions. CalEEMod provides a consistent platform for estimating construction and operational emissions from a wide variety of land use projects and is the model put forth by the BAAQMD for estimating project emissions. Estimated construction emissions are compared with the applicable thresholds of significance established by the BAAQMD to assess ROG, NO_X, exhaust PM_{10}, and exhaust $PM_{2.5}$ construction emissions to determine significance for this criterion.

As shown in Table 2, it has been assumed that the proposed project would be constructed over a total of 23 workdays. This is a conservative schedule that relies on the most aggressive construction assumptions for the proposed project. For example, the pipeline installation phase assumes that up to approximately 300 feet of pipeline would be constructed per day on average. From a methodological standpoint, use of this conservative schedule results in "worst-case" emissions that are not likely to be exceeded. First, the site preparation phase would consist of installing temporary construction fences around the project site and clearing vegetation. After this, pipeline installation would commence. As noted, up to 300 feet of pipeline may be constructed per day, on average. This process would involve trenching for the new pipeline, installing the new pipeline, and then backfilling the trench. Once the new pipeline has been installed and certified, flow would be transferred from the existing pipeline to the new pipeline. Then, the old pipeline would be filled with concrete and its manholes would be filled with soil. At the same time, an unpaved access road would be constructed to provide maintenance access to the new pipeline. For a more detailed description of the construction parameters used in estimating the proposed project's air pollutant emissions, please refer to Appendix A.

Table 2: Preliminary Construction Schedule

Construction Activity	Start Date	End Date	Working Days per Week	Total Number of Working Days
Site Preparation	5/1/2024	5/7/2024	5	5
Pipeline Installation	5/8/2024	5/24/2024	5	13
Demolition of Existing Pipeline	5/29/2024	6/4/2024	5	5
Access Road Construction	5/29/2024	6/4/2024	5	5
Source: CalEEMod Output Files, Appendix A.				

Estimated pollutant emissions from the proposed project's construction account for the type of equipment, horsepower, and load factors of the equipment, as well as their daily duration of use.

Refer to Appendix A for more details on the proposed project's construction modeling. Average daily construction emissions are compared with the BAAQMD's significance thresholds in Table 3.

Table 3: Annual Unmitigated Construction Emissions

Parameter	Air Pollutants[1]			
	ROG	NO_X	PM_{10} (Exhaust)	$PM_{2.5}$ (Exhaust)
Project Construction				
Site Preparation (tons)	<0.01	0.02	<0.01	<0.01
Pipeline Installation (tons)	0.01	0.08	<0.01	<0.01
Demolition of Existing Pipeline (tons)	<0.01	0.01	<0.01	<0.01
Access Road Construction (tons)	<0.01	0.02	<0.01	<0.01
Total Emissions (tons/year)	0.01	0.13	0.01	0.01
Total Emissions (lbs/year)	25.26	265.34	11.24	10.34
Average Daily Emissions (lbs/day)[2]	1.10	11.54	0.49	0.45
Significance Threshold (lbs/day)	**54**	**54**	**82**	**54**
Exceeds Significance Threshold?	**No**	**No**	**No**	**No**

Notes:
lbs = pounds
NO_X = oxides of nitrogen
PM_{10} = particulate matter 10 microns in diameter
$PM_{2.5}$ = particulate matter 2.5 microns in diameter
ROG = reactive organic gases
[1] Calculations use unrounded totals.
[2] Calculated by dividing the total lbs. of emissions by the total number of working days of construction (23).
Source: CalEEMod Output (see Appendix A).

As shown in Table 3, the construction emissions from all construction activities are below the recommended thresholds of significance. Therefore, construction of the proposed project would have a less than significant impact with regard to emissions of ROG, NO_X, exhaust PM_{10}, and exhaust $PM_{2.5}$. As previously discussed, the proposed project would implement MM AIR-1 for BMPs put forth by the BAAQMD to reduce potential impacts related to fugitive dust emissions from use of the construction equipment. Therefore, project construction would have a less than significant impact on air quality with regard to emissions of criteria pollutants.

Operational Emissions

Operational Air Pollutant Emissions: ROG, NO_X, PM_{10}, and $PM_{2.5}$

Operations of the proposed project would not involve the combustion of fuels, use of electricity, or any other sources that generate more than de minimis emissions of criteria pollutants. As explained, the proposed project involves the construction of a gravity-operated 24-inch sewer pipeline to replace an existing 33-inch sewer pipeline. On this basis, operations of the proposed project would be substantially similar to operations of the existing pipeline and would not result in any substantial

change to the environment, which is the fundamental criteria for significance under CEQA. Additionally, it is worth noting that the impetus for developing the proposed project is excessive maintenance associated with the existing 33-inch sewer pipeline. By replacing this existing pipeline with the proposed project, maintenance requirements would be greatly reduced, meaning that emissions associated with maintenance (i.e., emissions generated by worker vehicles and maintenance equipment) would likewise be reduced. In this way, development of the proposed project would likely result in a net reduction of operational air pollutant emissions as compared to the existing pipeline that it would replace. In any case, periodic maintenance of the pipeline would reasonably generate less emissions than construction of the pipeline, and the construction emissions shown in Table 3 are also below the BAAQMD's operational thresholds for ROG, NO_X, PM_{10}, and $PM_{2.5}$ (construction and operational thresholds for these pollutants are the same). Therefore, operations of the proposed project would not generate substantial air pollutant emissions in excess of BAAQMD thresholds of significance, and this impact would be less than significant.

Operational Carbon Monoxide Hotspot

The proposed project, which involves the construction of a 24-inch sewer pipeline, would not generate substantial CO emissions or CO concentrations from traffic or any other sources capable of causing or contributing to the formation of CO hotspots. Therefore, the proposed project would have a less than significant impact related to CO hotspots.

c) Expose sensitive receptors to substantial pollutant concentrations?

Less than significant impact. A sensitive receptor is defined by the BAAQMD as the following: "Facilities or land uses that include members of the population that are particularly sensitive to the effects of air pollutants, such as children, the elderly, and people with illnesses. Examples include schools, hospitals, and residential areas." Sensitive receptors within 1,000 feet of the project site consist of residential land uses to the north along Redwood Road and other nearby roadways.

Typically, the following four criteria are applied to determine the significance of a project's emissions to sensitive receptors:

> **Criterion 1:** Construction of the proposed project would not result in an exceedance of the health risk significance thresholds.
>
> **Criterion 2:** The cumulative health impact would not result in an exceedance of the cumulative health risk significance thresholds.
>
> **Criterion 3:** Operation of the proposed project would not result in an exceedance of the health risk significance thresholds.
>
> **Criterion 4:** A CO hotspot assessment must demonstrate that the proposed project would not result in the development of a CO hotspot that would cause an exceedance of the CO ambient air quality standards.

The first three criteria involve assessing the potential health impacts to surrounding sensitive receptors resulting from the emissions of toxic air contaminants (TACs), specifically diesel particulate

matter (DPM). DPM has been identified by the ARB as a carcinogenic substance. Major sources of DPM include off-road construction equipment and heavy-duty delivery truck and worker activities.

Four key considerations indicate that the proposed project would not expose sensitive receptors to substantial concentrations of DPM associated with health impacts in excess of the BAAQMD's 10 in one million cancer risk threshold of significance. First, construction of the proposed project would result in maximum DPM emissions that are less than 0.5 pound per day. Second, construction of the proposed project is expected to last no more than six months. As noted earlier, the conservative construction schedule utilized by this analysis involves just 23 total work days. Third, the majority of construction activities would occur on vacant land, hundreds of feet from sensitive receptors. Fourth, operations of the proposed project would not generate DPM emissions except for periodic maintenance activities, and maintenance activities for the proposed project would be less frequent than for the existing pipeline it would replace. Thus, reasonably, construction and operations of the proposed project would neither cause nor materially contribute to cancer risks in excess of 10 in one million at sensitive receptors, and impacts related to the first three criteria would be less than significant.

Regarding Criterion 4: as explained under Impact 2.3(b), the proposed project, which involves the construction of a 24-inch sewer pipeline, would not generate CO emissions from traffic or any other sources capable of causing or contributing to the formation of CO hotspots. Therefore, the proposed project would have a less than significant impact related to CO hotspots.

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

Less than significant impact. Odor impacts on residential areas and other sensitive receptors, such as hospitals, daycare centers, schools, etc. warrant the closest scrutiny, but consideration should also be given to other land uses where people may congregate, such as recreational facilities, worksites, and commercial areas.

Two situations create a potential for odor impact. The first occurs when a new odor source is located near an existing sensitive receptor. The second occurs when a new sensitive receptor locates near an existing source of odor. The second situation does not apply to the proposed project, because the proposed project does not involve the construction of a new sensitive receptor.

Odors can cause a variety of responses. The impact of an odor is dependent on interacting factors such as frequency (how often), intensity (strength), duration (in time), offensiveness (unpleasantness), location, and sensory perception. While offensive odors rarely cause any physical harm, they still can be very unpleasant, leading to considerable distress and often generating citizen complaints to local governments and regulatory agencies.

As stated in the BAAQMD 2017 Air Quality Guidelines, odors are generally regarded as an annoyance rather than a health hazard and the ability to detect odors varies considerably among the populations and overall is subjective. The BAAQMD does not have a recommended odor threshold for construction activities. However, the BAAQMD recommends operational screening criteria that

are based on distance between types of sources known to generate odor and the receptor. For projects within the screening distances, the BAAQMD has the following threshold for project operations:

> An odor source with five or more confirmed complaints per year averaged over 3 years is considered to have a significant impact on receptors within the screening distance shown in Table 3-3 [of the BAAQMD's guidance].

Two circumstances have the potential to cause odor impacts:

1) A source of odors is proposed to be located near existing or planned sensitive receptors, or
2) A sensitive receptor land use is proposed near an existing or planned source of odor.

Projects that would site an odor source or a receptor farther than the applicable screening distance, shown in Table 4 below, would not likely result in a significant odor impact.

Table 4: Odor Screening Distances

Land Use/Type of Operation	Project Screening Distance
Wastewater Treatment Plant	2 miles
Wastewater Pumping Facilities	1 mile
Sanitary Landfill	2 miles
Transfer Station	1 mile
Composting Facility	1 mile
Petroleum Refinery	2 miles
Asphalt Batch Plant	2 miles
Chemical Manufacturing	2 miles
Fiberglass Manufacturing	1 mile
Painting/Coating Operations	1 mile
Rendering Plant	2 miles
Coffee Roaster	1 mile
Food Processing Facility	1 mile
Confined Animal Facility/Feed Lot/Dairy	1 mile
Green Waste and Recycling Operations	1 mile
Source: Bay Area Air Quality Management District (BAAQMD). 2017. Final 2017 Clean Air Plan. April 19. Website: https://www.baaqmd.gov/~/media/files/planning-and-research/plans/2017-clean-air-plan/attachment-a_-proposed-final-cap-vol-1-pdf.pdf?la=en. Accessed August 30, 2022.	

Project Construction

Diesel exhaust and ROGs would be emitted during construction of the proposed project, which are objectionable to some; however, emissions would disperse rapidly from the project site and therefore would not create objectionable odors affecting a substantial number of people. As such, construction odor impacts would be less than significant.

Project Operation

As shown in Table 4, wastewater treatment plants, and pumping facilities are land uses that may be associated with odor complaints. However, the proposed project is not a wastewater treatment plant, and it would not contain pumping facilities. Therefore, these land uses are not applicable to the proposed project, and the proposed project's sewer pipeline is not expected to produce offensive odors that would result in odor complaints. Further, because the proposed project would replace an existing 33-inch sewer pipeline, operations of the proposed project would be substantially similar to operations of the existing pipeline and would not result in any substantial change to the environment, which is the fundamental criteria for significance under CEQA. Therefore, odor impacts associated with operations of the proposed project would be less than significant.

Mitigation Measures

MM AIR-1 Implement BAAQMD Best Management Practices During Construction

The following dust control measures, as put forth by the Bay Area Air Quality Management District (BAAQMD), shall be included in the design of the proposed project and implemented during construction by the construction contractor:

- All exposed non-paved surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and access roads) shall be watered at least two times per day and/or non-toxic soil stabilizers shall be applied to exposed non-paved surfaces.
- All haul trucks transporting soil, sand, or other loose material off-site shall be covered and/or shall maintain at least 2 feet of freeboard.
- All visible mud or dirt tracked out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.
- All vehicle speeds on unpaved roads shall be limited to 15 miles per hour.
- Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes, as required by the California Airborne Toxics Control Measure (ACTM) Title 13, Section 2485 of California Code of Regulations. Clear signage regarding idling restrictions shall be provided for construction workers at all access points.
- All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified mechanic and determined to be running in proper condition prior to operation.
- The prime construction contractor shall post a publicly visible sign with the telephone number and person to contact regarding dust complaints. The City and the construction contractor shall take corrective action within 48 hours. The BAAQMD's phone number shall also be visible to ensure compliance with applicable regulations.

Environmental Issues	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
2.4 Biological Resources *Would the project:*				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or United States Fish and Wildlife Service?	☐	☒	☐	☐
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations, or by the California Department of Fish and Wildlife or United States Fish and Wildlife Service?	☐	☒	☐	☐
c) Have a substantial adverse effect on State or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☐	☐	☒
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of 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?	☐	☐	☐	☒

Environmental Evaluation

The analysis in this section is based on the *Delineation of Potential Jurisdictional Waters of U.S. and Water of the State of California* (June 2022), the *Biological Resources Technical Report* (August 2022), and the *Biological Resources Impacts and Mitigation Report* (May 2023), all prepared by WRA Environmental Consultants (WRA). The reports can be found in their entirety in Appendix B.

Setting

The original Study Area outlined in the 2022 *Biological Resources Technical Report* included approximately 72 acres. The 72-acre Study Area included an evaluation of the Springtown Sewer Trunkline and the Arroyo Las Positas Trail. The Study Area was subsequently reduced in 2023 from 72 to 41.85 acres as the proposed project does not include the construction of the Arroyo Las Positas

Trail. The approximately 41.85-acre Study Area was evaluated based on an approximate 250-foot buffer around trenching work for sewer installation, a 25-foot buffer around the sewer abandonment, and access and staging. The project area is approximately 6.04-acre subset of the Study Area that includes approximately 1.94 acres of ground disturbance through excavation/backfill activities and approximately 4.10 acres for access and staging.

The 41.85-acre Study Area is located in the City of Livermore and portions of unincorporated Alameda County. The dominant land cover type is non-native grassland which composes 34.42 acres of the project site. Other land cover types include developed areas (which includes I-580, gravel and paved roads, and residential development), and aquatic resources. Dominant plant species within the non-native grassland consist of slim oat (*Avena barbata*), ripgut brome (*Bromus diandrus*), soft chess (*B. hordeaceus*), foxtail barley (*Hordeum murinum*), and Mediterranean barley (*H. marinum ssp. gussoneanum*). Aquatic resources within the Study Area include one seasonal wetland swale, two perennial streams (the Arroyo Seco and Arroyo Las Positas), and two areas of willow riparian habitat associated with the Arroyo Seco (Exhibit 4). Most of the site is grazed by livestock with some infrastructure present including cattle pens, soil mounds, agricultural infrastructure, and fencing. The Study Area is approximately 500 feet above sea level and is located within the Arroyo Las Positas watershed.

Would the project:

a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or United States Fish and Wildlife Service?

Less than significant impact with mitigation incorporated.

Special-status Plants

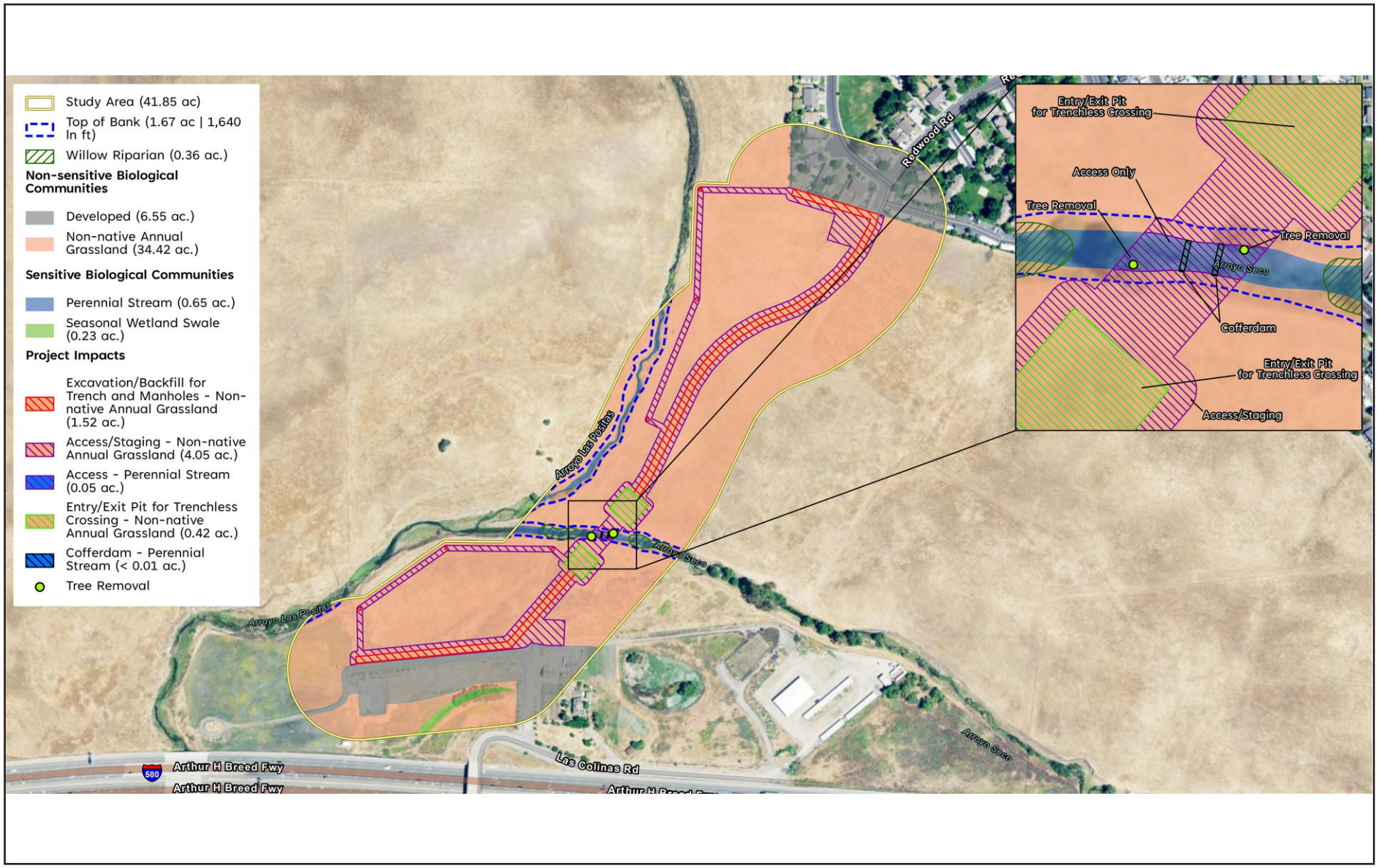
WRA performed protocol-level special-status plant surveys within the project site following regulatory agency and California Native Plant Society (CNPS) survey protocols[5,6,7] on October 7, 2021, April 8, 2022, and May 17, 2022. Surveys were conducted by qualified WRA Botanists proficient in identifying special-status plant species in the Livermore area, including areas nearby, and adjacent to the Study Area. A nine-quadrangle search from the California Natural Diversity Database (CNDDB) and CNPS databases was used to identify special-status plant species with the potential to occur on the project site.

[5] California Department of Fish and Wildlife (CDFW). 2018. Protocols for Surveying and Evaluating Impacts to Rare Native Plant Populations and Natural Communities. Vegetation Classification and Mapping Program State of California, California Natural Resources Agency, Department of Fish and Wildlife, Sacramento, California. June 26, 2023.

[6] United States Department of Agriculture (USDA). 1966. Soil Survey of Alameda Area, California. Soil Conservation Service and Forest Service. In cooperation with the California Agricultural Experiment Station. June 26, 2023.

[7] California Native Plant Society (CNPS). 2001. CNPS Botanical Survey Guidelines. California Native Plant Society, Sacramento, CA. June 26, 2023.

THIS PAGE INTENTIONALLY LEFT BLANK



Source: USDA NAIP Imagery 2020, WRA; Prepared By: njander, 5/8/2023.

FIRSTCARBON SOLUTIONS™

Exhibit 4
Potential Impacts to Biological Communities

17280018 • 06/2023 | 4_Potential_Biological_Impacts.cdr

CITY OF LIVERMORE
SPRINGTOWN TRUNKLINE SEWER REPLACEMENT PROJECT
INITIAL STUDY/MITIGATED NEGATIVE DECLARATION

THIS PAGE INTENTIONALLY LEFT BLANK

The CNDDB and CNPS listed 59 special-status or sensitive plant species that have been recorded within the *Livermore, California*, USGS Topographic Quadrangle Map and the eight surrounding quadrangles (see Appendix B of the Biological Resources Impacts and Mitigation Report). Of the listed special-status species identified, seven were identified as having the potential to occur within the project site. These include fiddleneck (*Amsinckia lunaris*), heartscale (*Atriplex cordulata var. cordulata*), crownscale (*Atriplex coronata var. coronata*), Congdon's tarplant (*Centromadia parryi ssp. congdonii*), Livermore tarplant (*Deinandra bacigalupii*), stinkbells (*Fritillaria agrestis*), and San Joaquin spearscale (*Extriplex joaquinana*).

Bent flowered fiddleneck, heartscale, crownscale, Congdon's tarplant, Livermore tarplant, and stinkbells were not observed during the protocol-level surveys and are assumed absent from the project site. One special-status plant, San Joaquin spearscale (Rank 1B.2) was observed during the April 8 and May 17, 2022, surveys within the project alignment. Per the East Alameda County Conservation Strategy (EACCS), floristic surveys must be completed within the preceding three years prior to commencement of the project. If the project commences before October 2024, no further floristic surveys are necessary. However, if the project occurs after October 2024, follow-up floristic surveys are encouraged.

Based on the results of the 2021 and 2022 protocol-level special-status plant surveys, the proposed project will involve trenching, access, and staging over approximately 0.19 acre of grassland containing San Joaquin spearscale within the Study Area (see Figure 3 of the Biological Resources Impacts and Mitigation Report). The actual impact to San Joaquin spearscale may differ somewhat from the 0.19-acre estimate because this species is an annual herb, so distribution and abundance can vary from year to year. Direct disturbance to San Joaquin spearscale plants would be considered a significant impact. Implementation of MM BIO-1 would reduce impacts to special-status plant species to a less than significant level.

Special-status Wildlife

WRA identified 58 special-status wildlife species documented in the project vicinity (see Appendix B of the Biological Resources Impacts and Mitigation Report). However, 46 of these species are excluded from the site due to an absence of habitat necessary to support their survival or movement. The remaining 12 special-status species were found to have the potential to occur in the project vicinity. These include California red-legged frog (*Rana draytonii*), California tiger salamander (*Ambystoma californiense*), western pond turtle (*Emys marmorata*), American badger (*Taxidea taxus*), burrowing owl (*Athene cunicularia*), grasshopper sparrow (*Ammodramus savannarum*), loggerhead shrike (*Lanius ludovicianus*), northern harrier (*Circus hudsonius*), white-tailed kite (*Elanus leucurus*), yellow warbler (*Setophaga petechia*), western red-bat (*Lasirurs blossevillii*), and hoary bat (*Lasiurus cinereus*). These species are discussed below in further detail.

Burrowing Owl

This species is known to occur in the vicinity with several documented occurrences nearby in the past 20 years. The Study Area contains short grassland vegetation (due to grazing), and potentially suitable ground squirrel burrows were observed within the area during the site visits. However, there are no recent documented occurrences of burrowing owl within 1 mile of the Study Area, and no

indication of use (i.e., pellets, whitewash, or feathers) was observed during site visits. Disking in some areas also reduces suitability of habitat within the Study Area. Given the presence of annual grassland within the site and the presence of ground squirrels, as well as their ability to quickly re-establish burrows after disking, burrowing owl has a moderate potential to occur. If burrowing owls are present during project activities, they could be directly affected by ground disturbance (i.e., removal of occupied burrows) or indirectly affected by increased noise from construction activities. Nest removal or abandonment from increased noise related to the project would be considered a significant impact. However, with implementation of MM BIO-2, impacts to the burrowing owl would be reduced to less than significant.

California Red-legged Frog

The California red-legged frog (CRLF) has been documented in Arroyo Las Positas approximately 0.25 mile north of the project site. The four physical and biological features required for CRLF include: aquatic breeding habitat; nonbreeding aquatic habitat; upland habitat; and dispersal habitat. The waters of Arroyo Seco and Arroyo Las Positas are both perennial streams. An observation of CRLF was recorded on Arroyo Las Positas approximately 800 feet outside of the project site and noted juveniles and adults present in an area directly adjacent to a small seasonal stock pond. The occurrence of the species on this perennial stream in January indicates the stream is most likely used as nonbreeding aquatic habitat while the adjacent stock pond (outside of the Study Area) may serve as breeding habitat. In addition, the United States Fish and Wildlife Service (USFWS) critical habitat description describes uplands within 300 feet of aquatic habitats (nonbreeding and breeding) as being potential upland habitat which may be occupied by CRLF for prolonged periods of time, at all times of year. Therefore, uplands within the Study Area that are also within 300 feet of Arroyo Seco or Arroyo Las Positas may serve as upland habitat for CRLF. Lastly, CRLF can move through grasslands during dispersal events that coincide with rains in the winter and spring months. Grasslands within the project area may serve as dispersal habitats in winter or spring but they do not serve as dispersal habitat in the summer and fall when the project is scheduled to be constructed. The proposed project may result in impacts to approximately 3.38 acres of CRLF habitat (see Figure 5 of the Biological Resources Impacts and Mitigation Report*)*. In addition, construction activities may result in temporary sedimentation in aquatic features. However, with implementation of MM BIO-3 and MM BIO-5, impacts to CRLF would be reduced to less than significant.

California Tiger Salamander

The California tiger salamander (CTS) has been documented within 1 mile of the Study Area. Although the project site does not contain seasonal wetlands that would support CTS breeding, there are several stock ponds within 1 mile of the Study Area that may be suitable. Ground squirrel burrows were present within the site during the site visits, which may be used by CTS as refuge during the dry months. CTS may, therefore, disperse through annual grassland within the project site following rain events and may find refugia in burrows within the site. Disking in portions of the site reduces suitability of upland habitat within the Study Area by eliminating burrow openings and disrupting access to subterranean refugia. However, given the proximity of the site to potential breeding habitats and the presence of grassland with burrows that can support aestivation, annual grassland within the Study Area is considered potential upland habitat for this species. If CTS are present, construction activities including grading, operation of heavy equipment, and staging may

result in mortality or injury of CTS individuals. The proposed project may result in approximately 5.99 acres of impacts to potential CTS upland habitat (see Figure 4 of the Biological Resources Impacts and Mitigation Report). Direct injury or mortality of individuals and loss of habitat are considered potentially significant impacts. However, with implementation of MM BIO-3 and MM BIO-4, impacts to CTS would be reduced to less than significant.

American Badger

The Study Area contains grassland habitat with a prey base (ground squirrels) that may support this species. In addition, the Study Area connects larger areas of open, undeveloped land to the west. However, this species has a relatively large home range, and the proximity of the Study Area to dense urban development and a high level of anthropogenic disturbance (including disking in some areas) reduces suitability. There was no indication of badger use or occupancy in burrows (claw marks, prey remains, etc.) observed within the Study Area at the time of the site visits. Given the presence of grassland within the site where badgers may construct burrows in the future, the proximity to larger tracts of undeveloped land where badgers may migrate from, and the presence of potential prey, this species has a moderate potential to occur. If dens are present, ground disturbance may result in impacts to American badger dens and mortality of individuals, or indirect impacts through increased noise and traffic in the vicinity during construction. These are potentially significant impacts to this species. However, with implementation of MM BIO-6, impacts to the American badger would be reduced to less than significant.

Western Pond Turtle

This species was documented in Arroyo Las Positas approximately 0.1 mile downstream of the Study Area and may use the creek within the Study Area. While access to annual grasslands within the area for breeding may be limited by the very steep banks and incised channel, this may not fully exclude the species from occurring in annual grasslands during nesting periods. Because the species is known to occur in the project vicinity, and potential aquatic as well as annual grassland habitats are present, this species has a moderate potential to occur. If western pond turtle are present within the Study Area during construction, project activities within or adjacent to aquatic habitat may impact western pond turtle and could result in direct mortality of individuals if present, resulting in a significant impact. However, with implementation of MM BIO-7, impacts to western pond turtle would be reduced to less than significant.

Nesting Birds (including Special-status Birds)

Several special-status bird species were determined to have the potential to occur within the Study Area. These include the grasshopper sparrow, loggerhead shrike, northern harrier, white-tailed kite, and yellow warbler. Grasshopper sparrow and northern harrier were observed in the project vicinity in 2022. The Study Area contains grasslands which may be used by these species for foraging and nesting. While ranching activities such as grazing and disking reduce the quantity and quality of habitat, these species may still find small patches of habitat within the Study Area to support nesting. The Study Area also contains willows along Arroyo Seco dense enough to support nesting for the loggerhead shrike, yellow warbler, and white-tailed kite, although habitat quality is reduced due to the high level of anthropogenic disturbance from the adjacent freeway. In addition to the specific special-status bird species discussed in more detail above, the active nests of most resident and

migratory (game and non-game) birds are protected by the Migratory Bird Treaty Act (MBTA) and/or Fish and Game Code; and are therefore categorized as "special-status" wildlife functional group during this time. Project-related activities could impact nesting species if present at the time of construction. Destruction of nests or indirect disturbance that may result in nest abandonment is a potentially significant impact. However, with implementation of MM BIO-8, impacts to the nesting birds would be reduced to less than significant.

Roosting Bats

Tree roosting bat species including western red-bat and hoary bat are known to roost within riparian trees. Trees within the Study Area are located primarily along creeks within riparian areas. Large trees in the site may provide suitable roosting substrates for bats. If bats are roosting and trees are removed, the impact to roosting bats could be considered a significant impact. Implementation of MM BIO-9 would reduce potential impacts to roosting bats to a less than significant level.

b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations, or by the California Department of Fish and Wildlife or United States Fish and Wildlife Service?

Less than significant impact with mitigation incorporated. Sensitive natural communities identified by WRA within the Study Area consist of a 0.23-acre seasonal wetland swale (described in greater detail below in Impact 2.4(c)) and 0.65 acre of non-wetland waters in the form of the Arroyo Seco and Arroyo Las Positas. The Arroyo Seco bisects the center of the Study Area and flows east to west. The Arroyo Las Positas was noted to occur along the west edge of the Study Area and flows north to south. Both perennial streams are shown as dashed blue-line streams on the *Livermore* and *Altamont* USGS 7.5-minute topographic quadrangles. Both the Arroyo Seco and Arroyo Las Positas are deeply incised, have narrow meanders, and contain scattered pockets of riparian and in-stream vegetation. Some vegetation observed along the perennial streams included watercress (*Nasturtium officinal*e; obligate wetland species [OBL]), cattail (*Typha s*p.; OBL), cocklebur (*Xanthium strumarium*; facultative [FAC]), tule (*Schoenoplectus acutus var. occidentalis*; OBL) and red willow along the bank of Arroyo Seco. The perennial streams were identified as being likely subject to the regulatory requirements of the United States Army Corps of Engineers (USACE), Regional Water Quality Control Board (RWQCB), and California Department of Fish and Wildlife (CDFW).

The proposed project would not directly impact riparian vegetation but would impact an area of the Arroyo Seco stream. Impacts to the Arroyo Seco involve direct disturbance through cofferdam installation and eucalyptus tree removal, and access over an approximately 0.05-acre area of the perennial stream. However, this would not affect sensitive riparian habitat such as the red willow habitat within the perennial stream as shown in Exhibit 4. To account for impacts to non-wetland waters through the installation of the cofferdam and eucalyptus tree removal, the project would be required to procure permits from the USACE, RWQCB, and CDFW. With adherence to agency-imposed measures for impacts to aquatic resources and implementation of MM BIO-10, impacts to sensitive natural communities and riparian habitat would be less than significant.

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

No impact. One seasonal wetland swale was identified in the southern portion of the Study Area. The wetland was found to originate from a culvert in the southeastern region of the Study Area. Overstory vegetation in the seasonal wetland swale consists solely of mature red willows with an understory dominated by herbaceous species including Mediterranean barley, common three square, Italian ryegrass (*Festuca perennis*), and curly dock (*Rumex crispus*). All project construction activities would avoid the wetland swale and no portion of the proposed alignment would cross or occur within the area comprising the swale, as shown in Exhibit 4. Construction of the underground pipeline would not impact the seasonal wetland swale through above ground maintenance activities. Therefore, the proposed project would avoid the wetland swale and no impact would occur.

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 wildlife nursery sites?

Less than significant with mitigation incorporated. The Study Area is not a designated wildlife corridor based on the Essential Connectivity Areas geospatial data set, which uses habitat modeling to identify areas of land with value as wildlife corridors.[8] Although the Study Area is connected to a larger tract of lightly developed and undeveloped land to the west and contains perennial streams, project construction is anticipated to occur during the dry season when the stream is unable to function as a corridor. Therefore, the project does not provide corridor functions beyond connecting similar lightly developed land parcels in local surrounding areas. After project completion, the Study Area will function as it does currently which allows movement of wildlife through aquatic and terrestrial habitats. Therefore, no impact would occur to wildlife corridors for terrestrial and aquatic species and no mitigation measures are needed.

A “native wildlife nursery site” must contain the resources necessary for adult wildlife species to breed, give birth, and rear their young. Nursery sites must include elements required by juvenile wildlife species to reach maturity; these include adequate space, refuge, food, and physical conditions in the environment.

The project site does not contain wetlands, significant vegetation, or waters that would support reproduction by amphibians such as the California red-legged frog and California tiger salamander, as documented in the WRA Biological Resources Impacts and Mitigation Report. Thus no nursey sites are present to support amphibians. No colonial roosting sites are known for mammals (e.g., caves or similar structures known to support maternity colonies of bats). Some individual nesting sites for birds or denning mammals (e.g., badgers) may occur in the Study Area. However, if nesting birds are present within the Study Area at the time of project activities, implementation of MM BIO-8 would reduce impacts to nesting birds to a less than significant level. Similarly, MM BIO-6 reduces impacts

[8] California Department of Fish and Wildlife (CDFW) and California Department of Transportation (Caltrans). 2022. California Essential Habitat Connectivity Project: A Strategy for Conserving a Connected California. California Department of Fish and Wildlife, Sacramento, CA. Website: https://www.wildlife.ca.gov/Conservation/Planning/Connectivity/CEHC. Accessed July 2022.

to American badger and their dens to less than significant levels. In addition, implementation of MM BIO-10 and MM BIO-11would protect water quality and the project is not anticipated to cause any change in water quantity, or food production which might affect downstream areas where salmonids may be present. As such, the proposed project would have no effect on the function or productivity of downstream wildlife nursery sites for fish. Therefore, with the implementation of the aforementioned mitigation measures, a less than significant impact would occur to native wildlife nursery sites for any species and no additional mitigation measures are needed.

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

No impact. The City of Livermore Tree Preservation Ordinance Section 12.20 defines "protected trees" based on trunk circumference at breast height (4.5 feet above grade). The definition of protected trees varies depending on several factors including existing land use and property ownership status. To remove a protected tree, a qualified arborist must first survey all trees within the site and the project applicant must obtain a Tree Action Permit. Eucalyptus trees on-site have the potential to be considered protected trees. Through the obtaining of a Tree Action Permit and arborist survey for any proposed tree removal, the proposed project will comply with the City of Livermore Tree Preservation Ordinance. The proposed project will also comply with all local policies and ordinances such as the East Alameda County Conservation Strategy. Therefore, no impact to local policies and ordinances is anticipated and no mitigation is needed.

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?

No impact. The project site is within the boundaries of the East Alameda County Conservation Strategy (EACCS). However, the EACCS is not an adopted habitat conservation plan or natural community conservation plan, but rather acts as a guidance document that provides recommendations for addressing species impacts for the purpose of permitting project specific authorizations needed under the federal and State Endangered Species Acts. Further, the proposed project incorporates avoidance, minimization, and mitigation strategies identified in the EACCS (see Section 4.0 of the Biological Resources Impacts and Mitigation Report). These include the instigation of environmental sensitivity training, environmental tailboard trainings, site activity and vehicle/equipment restrictions, erosion control measures, earthmoving, and trenching standards, etc. Therefore, there is no conflict with any adopted habitat conservation plan or natural community conservation plan and no mitigation measures are required.

Mitigation Measures

MM BIO-1 Special-status Plants

The following measures shall be implemented for special-status plants:

- All project work shall be restricted to designated work areas which have been developed to minimize project impacts to special-status plants based on the 2021–2022 rare plant observations.

- If the project commences after October 2024, follow-up floristic surveys shall take place within the project area. During the floristic survey, a qualified Botanist shall survey the project area for special-status plants during the appropriate blooming season(s) in accordance with current California Department of Fish and Wildlife (CDFW) and California Native Plant Society (CNPS) survey protocols. The location and quantities of all special-status plants observed in the project area shall be recorded.
- The topsoil (i.e., the top 2 inches of soil) shall be removed from areas of substantial soil disturbance (e.g., areas where excavation and trenching occur) where special-status plants were documented during the 2021–2022 surveys or in future floristic surveys. The topsoil shall be stockpiled prior to further excavation. The topsoil shall be replaced in the same area from which it was removed following disturbance. Because annual herbaceous species, such as San Joaquin spearscale, rely mostly on gravitational transport for its seeds (i.e., limited dispersal from source plant), it is assumed that the top 2 inches of topsoil shall contain viable/dormant seeds from individuals that were documented in the 2021–2022 surveys (or future floristic surveys). Replacement of topsoil containing the seeds would allow the species to re-establish following construction disturbance.
- A monitoring plan shall be developed that requires a qualified Botanist or Restoration Ecologist to monitor areas of temporary disturbance to special-status plants to ensure the special-status plant re-establishes in the area following replacement of topsoil, resulting in no loss of the special-status plant habitat compared to the 2021–2022 or future floristic surveys. Monitoring shall occur for a minimum of thre3e years, with the final year demonstrating no net loss of special-status plant population based on area or quantity.

MM BIO-2 Burrowing Owl

- Prior to commencement of construction, a qualified Biologist shall conduct protocol-level burrowing owl surveys in accordance with the California Department of Fish and Wildlife (CDFW) 2012 Staff Report.
- If an active nest is identified near the project site and work cannot feasibly be conducted outside of the burrowing owl nesting season (March 15 to September 1), a no-activity zone shall be established by a qualified Biologist. The no-activity zone shall be large enough to avoid nest abandonment and shall be a minimum 250-foot radius from the nest.
- If burrowing owls are present during the nonbreeding period, a qualified Biologist shall establish a no-activity zone of at least 150 feet from the burrowing owls.
- If work cannot feasibly be avoided in the no-activity zone(s) during the burrowing owl nesting season, an experienced burrowing owl Biologist shall develop a site-specific plan (i.e., a plan that considers the type and extent of the proposed activity, the duration, and timing of the activity, the sensitivity and habituation of

the owls, and the dissimilarity of the proposed activity with background activities) to minimize the potential to affect the reproductive success of the owls.

MM BIO-3 Special-status Amphibians

- An exclusion zone shall be staked or flagged around aquatic habitats that shall be avoided by the proposed project prior to initiating activities.
- A qualified Biologist shall conduct pre-construction surveys prior to initiating activities. If California tiger salamander (CTS) or California red-legged frog (CRLF) individuals are found, work shall not begin until they are moved out of the construction zone to a United States Fish and Wildlife Service (USFWS) and California Department of Fish and Wildlife (CDFW) approved relocation site.
- A USFWS- and CDFW-approved Biologist shall be present for initial ground-disturbing activities.
- No monofilament plastic shall be used for erosion control.
- Construction personnel shall inspect open trenches in the morning and evening for trapped amphibians.
- Work shall be avoided within suitable habitat for CTS and CRLF from October 15 (or the first measurable fall rain of 1 inch or greater) to May 1.

MM BIO-4 California Tiger Salamander Mitigation

Compensatory mitigation shall be provided for the disturbance of potential California tiger salamander (CTS) habitat at a minimum 1:1 ratio; the final ratio shall ultimately be prescribed by the California Department of Fish and Wildlife (CDFW) and United States Fish and Wildlife Service (USFWS). Compensatory mitigation may be in the form of mitigation bank credits, permittee-responsible mitigation, and/or turnkey mitigation.

MM BIO-5 California Red-legged Frog Mitigation

Compensatory mitigation shall be provided for disruption to potential California red-legged frog (CRLF) habitats at a minimum 1:1 ratio; the final ratio shall ultimately be prescribed by the United States Fish and Wildlife Service (USFWS). Compensatory mitigation may be in the form of mitigation bank credits, permittee-responsible mitigation, and/or turnkey mitigation.

MM BIO-6 American Badger

Prior to ground disturbance, the project applicant shall follow the following measures associated with pre-construction survey for American badgers:

- No more than 21 days before the start of ground-disturbing activities, a qualified Biologist shall conduct a pre-construction survey in areas of annual grassland

within 100 feet of the work area to determine whether potentially suitable American badger dens are present.

- If dens are identified during the pre-construction survey, their disturbance, and destruction shall be avoided to the extent feasible.
- If potential dens are located within the proposed work area and cannot be avoided during construction, a qualified Biologist shall determine whether the dens are occupied or were recently occupied using methodology coordinated with the California Department of Fish and Wildlife (CDFW).
- If unoccupied, the qualified Biologist shall collapse these dens by hand in accordance with United States Fish and Wildlife Service (USFWS) procedures.
- If occupied, exclusion zones shall be implemented following standard procedures. The radius of these zones shall be as follows: Potential Den—50 feet; Known Den—100 feet; Natal or Pupping Den—to be determined on a case-by-case basis in coordination with the CDFW.
- If dens cannot be avoided and must be impacted, these shall be determined on a case-by-case basis with the CDFW.

MM BIO-7 Western Pond Turtle

Prior to ground disturbance, the project applicant shall follow the following measures associated with pre-construction survey for western pond turtles:

- Within 48 hours prior to the initiation of construction activities, a qualified Biologist shall survey all work areas within 200 feet of suitable habitat for western pond turtle.
- If western pond turtle individuals are found during the survey, construction work within 50 feet of any observed individuals shall halt. The Biologist shall then assess the location and status of the turtle to determine the best course of action to either allow the animal to leave on its own, or if approved by the California Department of Fish and Wildlife (CDFW), to relocate the animal to suitable habitat outside of the work area. If a turtle nest is encountered, work within 25 feet shall cease and a no disturbance buffer shall be placed around the nest. The Biologist shall then contact the CDFW to determine any follow-up actions. The Biologist shall maintain detailed records of any individuals that are moved (e.g., size, coloration, any distinguishing features, photos) to assist in determining whether translocated animals are returning to their original point of capture.

MM BIO-8 Nesting Birds (including loggerhead shrike, white-tailed kite, and yellow warbler)

- If proposed construction is scheduled during the breeding season (February 1 – August 31), a qualified Biologist shall conduct a pre-construction nesting bird survey in and within 300 feet of the project area.
- The survey shall be conducted no more than 14 days prior to the start of work.
- If the survey indicates the potential presence of nesting birds, the Biologist shall determine an appropriately sized buffer around the nest in which no work shall be

allowed until the young have successfully fledged or the nest is no longer active. The size of the nest buffer shall be determined by the Biologist and shall be based on the nesting species and its sensitivity to disturbance. In general, buffer sizes of up to 300 feet for raptors and 50 to 100 feet for other birds shall be used to prevent disturbance to nesting birds, but these buffers may be increased or decreased, as appropriate, depending on the bird species and the level of disturbance anticipated near the nest.

MM BIO-9 Bats

- Prior to commencement of construction, a qualified Biologist shall conduct a habitat assessment for bats. The habitat assessment shall be conducted at least 30 days prior to the start of construction and shall include a visual inspection of potential roosting tree features within trees scheduled for removal or trimming (e.g., cavities, crevices in wood and bark, exfoliating bark for colonial species, suitable canopy for foliage roosting species). If suitable habitat trees are identified, they shall be flagged or otherwise clearly marked. If no suitable habitat is identified, no further measures are required.
- Any trees with potential bat roosting habitat shall be removed during the non-maternity season from March 1 through April 15 or September 1 through October 15 using a two-phase process. Two-step tree removal shall be conducted over 2 consecutive days, as follows:
  - Day 1: under the supervision of a qualified Biologist, limbs and branches shall be removed by a tree cutter using chainsaws or hand tools. Limbs with cavities, crevices or deep bark fissures shall be avoided. At least 25 percent of the tree limbs and canopy shall be removed in the first cut.
  - On the morning of the following day the remaining tree shall be felled.

MM BIO-10 Riparian Habitat

Removal and trimming of riparian vegetation shall be minimized to the extent feasible.

MM BIO-11 Jurisdictional Waters

- Construction activities shall be timed to minimize impacts to aquatic resources and protect water quality. To the extent possible, construction activities in jurisdictional waters shall occur during the dry season, between April 15 and October 15 (or the first measurable rainfall of 1 inch or greater).
- Significant earthmoving activities shall not be conducted in jurisdictional waters within 24 hours of predicted storms or after major storms (defined as 1 inch of rain or more).
- Work in jurisdictional waters shall occur in isolation from flowing waters. All work in jurisdictional waters shall be either conducted when the area is naturally dewatered or isolated with a cofferdam, sandbags, or equivalent.

- Temporary erosion and sediment control measures shall be implemented, as determined appropriate, to minimize discharge of sediment into aquatic features, in compliance with State and local standards in effect at the time of construction. Such measures may include silt fences, staked straw bales or wattles, sediment/silt basins and traps, geofabric, and sandbag dikes.
- All construction personnel and equipment shall be confined to designated work areas and access corridors.
- Staging and storage areas for equipment, materials, fuels, lubricants, and solvents, shall be confined to upland staging areas where they cannot enter aquatic areas. Stationary equipment such as motors, pumps, generators, and compressors shall be positioned over drip-pans. Vehicles and other equipment shall be refueled and lubricated only within the staging areas. All workers shall be informed of the importance of preventing spills and of the appropriate measures to take should a spill occur.
- Work in jurisdictional waters shall be restricted to the minimum area necessary.
- After project completion, areas of annual grassland disturbed by project activities shall be seeded with a native seed mix to prevent runoff and sedimentation of adjacent waterways.

Environmental Issues	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
2.5 Cultural Resources and Tribal Cultural Resources *Would the project:*				
a) Cause a substantial adverse change in the significance of a historical resource as pursuant to Section 15064.5?	☐	☐	☒	☐
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?	☐	☒	☐	☐
c) Disturb any human remains, including those interred outside of formal cemeteries?	☐	☒	☐	☐
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:				
d) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k), or	☐	☒	☐	☐
e) 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.	☐	☒	☐	☐

Environmental Evaluation

This section describes the existing cultural resources setting and potential effects from project implementation on the project site and its surrounding area. Descriptions and analysis in this section are based on information provided by the California Native American Heritage Commission (NAHC), Northwest Information Center (NWIC), National Register of Historic Places (NRHP), California Register of Historical Resources (CRHR), California Historic Landmarks list, California Points of Historical Interest, Built Environment Resource Directory (BERD), the California Historical Resources Inventory, and a pedestrian survey of the site conducted by FirstCarbon Solutions (FCS). The confidential Section 106 Cultural Resources Assessment (Section 106 CRA) may be requested in writing by those with appropriate credentials.

Northwest Information Center

As part of the June 2004 *Cultural and Paleontological Resources Study for the Livermore High School Project Report*, LSA Associates, Inc. conducted a records search and literature review on May 28, 2004, at the NWIC located at Sonoma State University in Rohnert Park, California. The results of the records search indicated that two informal resources were identified but not recorded within the proposed project. One cultural resource, an abandoned ranch complex identified as NLS-29, is within the area of proposed development. The second cultural resource, identified as NLS-26, is outside the area of proposed development. This resource is described as a complex of structures and associated corrals. Additionally, one area-specific survey was conducted and included the southern section of the proposed project. A residential farm complex was identified adjacent to the proposed project as a result of the survey. The historic-era resource was evaluated and found not eligible for listing on the NRHP.

On July 30, 2020, FCS conducted an updated records search for the project site and a 0.5-mile radius beyond the proposed project at the NWIC. To identify any historic properties or resources, the current inventories of the NRHP, CRHR, CHL list, CPHI list, and the BERD for Alameda County were also reviewed to determine the existence of previously documented local historical resources.

Results from the updated records search indicate that five historic-era resources, consisting of single-family properties and commercial buildings, have been recorded within 0.5 mile of the trail alignment, none of which are located within the alignment boundaries. In addition, 16 area-specific survey reports are on file with the NWIC for the search radius, three of which address sections of the trail alignment, including a Cultural and Paleontological Resources Study for the Livermore High School Project conducted by LSA Associates in 2004, indicating that the immediate area has previously been surveyed for cultural resources.

Native American Heritage Commission

As part of the LSA Associates, Inc. 2004 report, NAHC outreach was conducted on May 27, 2004. The results of the Sacred Lands File search determined that no known Native American sites might be affected by the proposed project. On November 8, 2022, FCS sent an updated letter to the NAHC in an effort to determine whether any sacred sites are listed on its Sacred Lands File for the Area of Potential Effect (APE). On December 5, 2022, a response was received, indicating that the Sacred Lands File search produced a negative result. To ensure that Native American knowledge and concerns over potential unrecorded TCRs that may be affected by the proposed project would be addressed, the NAHC included a list of 14 tribal representatives available for consultation. On December 15, 2022, a letter containing project information and request for any additional information was sent to each tribal representative. Each tribal representative received follow-up letters on December 27, 2022, as well as a phone call on January 4, 2022. On January 9, 2023, the Confederation Villages of Lisjan responded stating that they have no further information but requested to be contacted if there are any findings at the project site. No additional responses have been received to date. Tribal consultation efforts conducted on December 21, 2022, by the City of Livermore failed to identify additional significant TCRs This section will be updated as information is provided and supplemented by Section 106 Tribal Consultation performed by the USACE.

Pedestrian Survey

On June 3, 2004, LSA Associates, Inc. conducted a pedestrian field survey for the proposed area of development. The survey was conducted using 20-meter zigzag transects. Visibility throughout the APE was poor and limited to approximately 5 percent due to extremely dense vegetation. Areas of exposed bare ground were examined for possible archaeological deposits. Two historic-era resources that were identified as part of the Wiberg et al. 1998 report was also present during the 2004 survey and contained the remains of the ranch complexes, NLS-29, and NLS-26. These resources are near the Arroyo Las Positas Creek and the Arroyo Seco Creek. The Livermore General Plan Update has designated the creeks as culturally sensitive areas.

On November 9, 2022, FCS Senior Archaeologist Dr. Dana DePietro conducted a pedestrian survey for unrecorded cultural resources along the project site alignment. The survey began at the northwest alignment terminus, moved south along the western side of the project site to the southwest alignment terminus, then returned north along the entire eastern side of the proposed project, effectively covering the entire project site using a 10-meter wide transects whenever possible.

Soil visibility across the project site ranged from moderate to poor (60-40% visibility) due to vegetation and ground cover interspersing across the site. Soils consisted of dark brown loam (Munsell 10YR 3/1) interspersed with small (3 to 6 centimeters) waterworn stones composed of schists, quartz, and chert. Soil deposition and stratigraphy was clearly observable in the high banks of the Arroyo Secco, which were over 4 meters in height.

Survey conditions were documented using digital photographs and field notes. During the survey, Dr. DePietro examined all areas of the exposed ground surface for prehistoric artifacts (e.g., fire-affected rock, milling tools, flaked stone tools, toolmaking debris, ceramics), soil discoloration and depressions that might indicate the presence of a cultural midden, faunal and human osteological remains, and features indicative of the former presence of structures or buildings (e.g., postholes, standing exterior walls, foundations) or historic debris (e.g., glass, metal, ceramics).

The location of site NLS-29, a historic-era ranch complex informally recorded in the 2004 LSA report, was located; however, all traces of the complex have been removed in the intervening years since the LSA report was written. Site NLS-26, a second recorded farm complex located across the Altamont creek from the project site alignment was also located. The buildings noted in the LSA report appear to have been removed, but the trees and garbage are still present. This second site is located across the Arroyo Las Positas Creek near the project boundaries and will remain unaffected by the proposed project. A third historic ranch, identified as the Juanita Vidalin House or Angelo Schenone House in the NWIC records search, lies immediately adjacent to the project boundaries. This ranch was evaluated and found to be ineligible for inclusion on the CRHR. It will similarly be unaffected by the proposed project.

Particular attention was paid to sections of the project site alignment running parallel and near the Arroyo Seco. Streams and rivers typically have higher potential for cultural sensitivity as they were attractive locations for prehistoric human settlement. While no prehistoric archaeological sites have been recorded within the proposed project, as part of the 2004 LSA report eight prehistoric sites

have been identified along the adjacent Arroyo Las Positas Creek, seven of which are situated immediately adjacent to the creek. No prehistoric cultural resources or raw materials commonly used in the manufacture of tools (e.g., obsidian, Franciscan chert) were observed over the course of the survey.

Buried Site Potential

In addition to the pedestrian survey, the potential for yet identified cultural resources in the vicinity was reviewed against geologic and topographic geographic information system data for the general area and information from other nearby projects. The proposed project was evaluated against a set of criteria identified by a geoarchaeological overview of the Central Valley that was prepared for the California Department of Transportation (Caltrans) Districts 6 and 9. This study mapped the "archaeological sensitivity," or potential to support the presence of buried prehistoric archaeological deposits, throughout the Central Valley based on geology and environmental parameters including distance to water and landform slope. The methodology used in the study is applicable to other parts of California and concluded that sites consisting of flat, Holocene-era deposits near water resources had a moderate to high probability of containing subsurface archaeological deposits when compared to earlier Pleistocene deposits situated on slopes or further away from drainages, lakes, and rivers.

The project site is situated on undeveloped land. According to the 1972 geological map of Helley et al. the project site is entirely situated upon Late Cenozoic (Plio-Pleistocene) sedimentary deposits. A review of the California Department of Conservation's geologic data indicates that the subject parcel is within a geologic complex comprised of marine and nonmarine (continental) sedimentary rock dating to the Pleistocene-Holocene (Unit Q). It is comprised of unconsolidated and semi-consolidated alluvium, lake, playa, and terrace deposits. The Coast Range province lies between the Pacific Ocean and Great Valley (Sacramento to San Joaquin valleys) provinces and stretches from the Oregon border to the Santa Ynez Mountains near Santa Barbara. The northern and southern Coast Ranges are separated by a depression containing the San Francisco Bay.

Additionally, the project site intersects three soil series, and they are as follows: Clear Lake clay, 0 to 2 percent slopes (Map Unit CdA); Linne clay loam, 3 to 15 percent slopes (Map Unit LaC); and Pescadero clay loam, 0 to 6 percent slopes (Map Unit Pd). All three soil series are not known to contain buried A horizons. The Clear Lake series comprised 27.3 percent of the 0.5-mile research area and is primarily basin alluvium derived from igneous, metamorphic, and sedimentary rock. The A horizon extends 6 to 15 inches below the surface followed by B and C horizons. The Linne series comprises 10.9 percent of the 0.5-mile research area and is primarily residuum weathered from sandstone and shale. The USDA indicates the soil to be a clay loam to 36 inches below the surface and then bedrock, however, UC Davis indicates that there should exist a series of A sub horizons to 74 inches below the surface followed by a C horizon to 130 inches. The Pescadero series comprises 15.4 percent of the 0.5-mile research area and is primarily alluvium derived from sandstone and shale. The A horizon extends 2 to 5 inches below the surface followed by a series B sub horizon. The project alignment is within the California Coast Ranges Geomorphic Province.

Applying the criteria set forth in Meyer et al., all Holocene-era deposits have the potential to contain archaeological deposits, which increases with the ease of the slope and proximity to water

resources. The project site is situated on Plio-Pleistocene sedimentary deposits and there is a low probability of buried A horizons; however, the proposed project is near the Arroyo Las Positas Creek, and crosses the Arroyo Seco, as well as the presence of eight prehistoric resources adjacent to the Arroyo Las Positas Creek indicates moderate to high potential for unanticipated buried cultural resources to be impacted by project construction.

Cultural Resources

Would the project:

a) Cause a substantial adverse change in the significance of a historical resource as pursuant to Section 15064.5?

Less than significant impact. CEQA Guidelines Section 15064.5 defines "historic resources" as resources listed in the CRHR, a local register, determined significant by the lead agency, or determined to be eligible by the California Historical Resources Commission for listing in the CRHR. The criteria for eligibility are generally set by the National Historic Preservation Act of 1966, which established the NRHP, and which recognizes properties that are significant at the national, State, and local levels. To be eligible for listing in the NRHP and CRHR, a district, site, building, structure, or object must possess integrity of location, design, setting, materials, workmanship, feeling, and association relative to American history, architecture, archaeology, engineering, or culture. In addition, unless the property possesses exceptional significance, it must be at least 50 years old to be eligible.

The May 28, 2004, records search results at the NWIC identified one historic-era resource, an abandoned ranch complex NLS-29, within the area of proposed development. Two informal resources were identified but not recorded within the proposed project. The second historic-era resource, identified as NLS-26, is located outside of the proposed development and is described as a complex of structures and associated corrals. The two historic-era resources that were identified as part of the records search were also present during the 2004 survey and contained the remains of the ranch complexes, NLS-29, and NLS-26. The NLS-29 historic-era resource was evaluated and found not eligible for listing on the NRHP.

The July 30, 2020, updated record search results indicated that five historic-era resources, consisting of single-family properties and commercial buildings have been recorded within a 0.5-mile of the trail alignment, none of which are located within the alignment boundaries. The results of the 2022 located the NLS-29 site, which is the historic-era ranch complex that was informally recorded in 2004. However, all traces of the complex have been removed in the intervening years since 2004. As for the second historic-era resource, site NLS-26, farm complex located near the Altamont creek from the project alignment boundaries was also located during the survey. The buildings noted in the 2004 survey appear to have been removed, but trees and garbage were present. A third historic ranch, identified as the Juanita Vidalin House or Angelo Schenone House in the NWIC records search, lies near the project boundaires. This ranch was evaluated and found to be ineligible for inclusion on the CRHR. It will similarly be unaffected by the proposed project. As such, the proposed project will not result in an adverse affect to built environment historical resources, and no mitigation is required. Impacts to historical resources would be less than siginificant.

b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?

Less than significant impact with mitigation incorporated. Section 15064.5 of the CEQA Guidelines defines significant archaeological resources as resources that meet the criteria for historical resources, as discussed above, or resources that constitute unique archaeological resources. A project-related significant adverse effect could occur if a project were to affect archaeological resources that fall under these categories.

The results of 2004 and 2020 record searches conducted at the NWIC identified two ranch complexes (NLS-29 (within the project site) and NLS-26 (within a 0.5-mile of the project site)) and five historic-era resources within the 0.5-mile search radius of the project site. There is no recorded prehistoric resource within the project site. However, eight prehistoric resources have been identified along the Arroyo Las Positas Creek.

As previously mentioned, the 2004 pedestrian survey did identify the presence and the remains of the NLS-29 and NLS-26 ranch complexes. These resources are near the Arroyo Las Positas Creek and the Arroyo Seco Creek. The Livermore General Plan Update (The City of Livermore 2002) has designated the creeks as culturally sensitive areas. As part of the 2022 pedestrian survey, particular attention was paid to sections of the project site alignment running parallel and near the Arroyo Seco. Streams and rivers typically have higher potential for cultural sensitivity as they were attractive locations for prehistoric human settlement. While no prehistoric archaeological sites have been recorded within the proposed project, as part of the 2004 LSA report eight prehistoric sites have been identified along the adjacent Arroyo Las Positas Creek, seven of which are situated immediately adjacent to the creek. However, none were identified during the pedestrian survey.

The presence of five historic resources within a 0.5-mile of the project site and eight prehistoric resources adjacent to the Arroyo Las Positas Creek increases the potential for significant subsurface prehistoric and historic-era features to be encountered during ground disturbance. Archaeological resources can include but are not limited to stone, bone, wood or shell artifacts or features, including hearths and structural elements. FCS concurs with the mitigation outlined in the LSA Associates, Inc. 2018 *Livermore Active Transportation Plan Initial Study/Mitigated Negative Declaration on the Catholic Diocese Property*, as well as the additional mitigation called for in the *Cultural and Paleontological Resources Study for the Livermore High School Project,* conducted by LSA Associates, Inc. in June 2004. Damage or destruction of these resources would have potentially significant impact. Implementation of MM CUL-1 and MM CUL-2 would ensure that this potential impact is reduced to a less than significant level.

c) Disturb any human remains, including those interred outside of formal cemeteries?

Less than significant impact with mitigation incorporated. No human remains or cemeteries are known to exist within or near the project site. Although human remains within the project site are unlikely, there is always the possibility that construction activities associated with the proposed project could potentially damage or destroy previously undiscovered human remains. This would be a potentially significant impact.

In the event of the accidental discovery or recognition of any human remains, CEQA Guidelines Section 15064.5, Health and Safety Code Section 7050.5, and Public Resources Code Sections 5097.94 and 5097.98 must be followed. MM CUL-2 further specifies the procedures to follow in the event human remains are uncovered. Along with compliance with these guidelines and statutes, implementation of this mitigation would reduce potential impacts related to human remains to a less than significant level.

Tribal Cultural Resources

Would the proposed 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:

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

Less than significant with mitigation incorporated. The 2004 and 2020 record searches conducted at the NWIC, which included a search of the CRHR and local registers of historic resources, and the 2022 NAHC Sacred Lands File search failed to identify any listed Tribal Cultural Resources (TCRs) that may be adversely affected by the proposed project. The NAHC SLF results included a list of 14 tribal representatives that may offer additional information regarding the proposed project. On December 15, 2022, a letter containing project information and request for any additional information was sent to each tribal representative. Each tribal representative received follow-up letters on December 27, 2022, as well as a phone call on January 4, 2022. On January 9, 2023, the Confederation Villages of Lisjan responded stating that they have no further information but requested to be contacted if there are any findings at the project site. No additional information pertaining to TCRs was received. However, given the proposed project involves excavation, it is possible that undiscovered TCRs could be encountered during project construction; therefore impacts to TRCs cold be potentially signfincant. Implementation of MM CUL-1, and MM CUL-2 would reduce potential impacts to a less than significant level.

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

Less than significant with mitigation incorporated. Tribal consultation efforts conducted on December 21, 2022, by the City of Livermore failed to identify additional significant TCRs meeting the criteria set forth in subdivison (c) of Public Resources Code Section 5024.1. As such, no additional significant TCRs will be adversely affected by the proposed project. Should any undiscovered TCRs be encountered during project construction, implementation of MM CUL-1 and MM CUL-2 will reduce potential impacts to a less than significant level.

Mitigation Measures

MM CUL-1 All construction personnel directly involved with project-related ground disturbance shall attend a "tailgate" Worker Environmental Awareness Program (WEAP) training for archaeological resources. The training shall include visual aids, a discussion of applicable laws and statutes relating to archaeological resources, types of resources that may found within the project site, and detail mandatory procedures to be followed in the event such resources are encountered. The training shall be conducted by an Archaeologist who meets the Secretary of the Interior's Professional Qualification Standards for archaeology. In addition, an Archaeologist who meets the Secretary of the Interior's Professional Qualification Standards for archaeology, shall be present during all ground disturbance activities, which includes but is not limited to, clearing, grubbing, trenching, and grading.

In the event that significant cultural resources are discovered during construction activities, operations shall stop within a 100-foot radius of the find and an Archaeologist who meets the Secretary of Interior's Professional Qualification Standards for archaeology shall be consulted to determine whether the resource requires further study. The lead agency shall include a standard inadvertent discovery clause in every construction contract to inform contractors of this requirement. Potentially significant cultural resources consist of but are not limited to stone, bone, fossils, wood, or shell artifacts or features, including hearths, structural remains, or historic dumpsites. The qualified Archaeologist shall make recommendations to the lead agency concerning appropriate measures that shall be implemented to protect the discovered resources, including but not limited to excavation of the finds and evaluation of the finds in accordance with CEQA Guidelines, Section 15064.5. Any previously undiscovered resources found during construction within the project area should be recorded on appropriate DPR forms and evaluated for significance in terms of CEQA Guidelines.

MM CUL-2 In the event of the accidental discovery or recognition of any human remains, CEQA Guidelines Section 15064.5; Health and Safety Code Section 7050.5; Public Resources Code Section 5097.94, and Section 5097.98 must be followed. If during the course of project development there is accidental discovery or recognition of any human remains, the following steps shall be taken:

1. There shall be no further excavation or disturbance within 100 feet of the remains until the County Coroner is contacted to determine whether the remains are Native American and if an investigation of the cause of death is required. If the coroner determines the remains to be Native American, the coroner shall contact the Native American Heritage Commission (NAHC) within 24 hours, and the NAHC shall identify the person or persons it believes to be the most likely descendant of the deceased Native American. The most likely descendant may make recommendations to the landowner or the person responsible for the excavation work within 48 hours, for means of treating or disposing of, with

appropriate dignity, the human remains and any associated grave goods as provided in Public Resources Code Section 5097.98.

2. Where the following conditions occur, the landowner or his or her authorized representative shall rebury the Native American human remains and associated grave goods with appropriate dignity either in accordance with the recommendations of the most likely descendant or on the project site in a location not subject to further subsurface disturbance:
   - The NAHC is unable to identify a most likely descendant or the most likely descendant failed to make a recommendation within 48 hours after being given access to the site.
   - The descendant identified fails to make a recommendation.
   - The landowner or his authorized representative rejects the recommendation of the descendant, and mediation by the NAHC fails to provide measures acceptable to the landowner.

Additionally, California Public Resources Code Section 15064.5 requires the following relative to Native American Remains:

- When an initial study identifies the existence of, or the probable likelihood of, Native American Remains within a project site, a lead agency shall work with the appropriate Native Americans as identified by the NAHC as provided in Public Resources Code Section 5097.98. The applicant may develop a plan for treating or disposing of, with appropriate dignity, the human remains and any items associated with Native American Burials with the appropriate Native Americans as identified by the NAHC.

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

Environmental Evaluation

Setting

Energy use, especially through fossil fuel consumption and combustion, relates directly to environmental quality since it can adversely affect air quality and generate GHG emissions that contribute to climate change. Electrical power is generated through a variety of sources, including fossil fuel combustion, hydropower, wind, solar, biofuels, and others. Natural gas is widely used to heat buildings, prepare food in restaurants and residences, and fuel vehicles, among other uses. Fuel use for transportation is related to the fuel efficiency of cars, trucks, and public transportation; choice of different travel modes such as auto, carpool, and public transit; and miles traveled by these modes, and generally based on petroleum-based fuels such as diesel and gasoline. Electric vehicles may not have any direct emissions but do have indirect emissions via the source of electricity generated to power the vehicle. Construction and routine operation and maintenance of transportation infrastructure also consume energy.

Would the project:

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

Less than significant impact. This impact discussion focuses on determining whether the proposed project would result in the wasteful, inefficient, or unnecessary consumption of energy resources, following the guidance provided in Appendix F of the CEQA Guidelines as well as the analytical precedent set by *League to Save Lake Tahoe Mountain etc. v. County of Placer* (2022) Cal.App.5th 63, 164-168.

According to Appendix F of the CEQA Guidelines, the goal of conserving energy is translated to include decreasing overall per capita energy consumption; decreasing reliance on fossil fuels such as coal, natural gas, and oil; and increasing reliance on renewable energy sources. In *League to Save Lake Tahoe Mountain etc. v. County of Placer* (2022) Cal.App.5th at pp. 164-168), the Appellate Court concluded that the analysis of wasteful, inefficient, and unnecessary energy consumption was not

adequate because it did not consider whether additional renewable energy features could have been added to the project.

For purposes of this analysis, the proposed project would be considered to result in a potentially significant impact if it would result in wasteful, inefficient, or unnecessary consumption of energy resources. Considering the guidance provided by Appendix F of the CEQA Guidelines and the Appellate Court decision in *League to Save Lake Tahoe Mountain etc. v. County of Placer* (2022) 75 Cal.App.5th at pp. 164-168, the proposed project would be considered to result in wasteful, inefficient, or unnecessary consumption of energy resources if it would conflict with the following energy conservation goals:

- Decreasing overall per capita energy consumption;
- Decreasing reliance on fossil fuels such as coal, natural gas, or oil; and
- Increasing reliance on renewable energy sources.

Reasonably, the proposed project's construction and operations of a 24-inch, gravity-fed sewer pipeline to replace an existing 33-inch sewer pipeline would have limited relevance to these goals. As such, the proposed project would not conflict with these goals. An evaluation of the proposed project's construction and operational impacts regarding energy is contained below:

Construction Impacts

During construction, the proposed project would result in energy consumption through the combustion of fossil fuels in construction vehicles, worker commute vehicles, and construction equipment, and the use of electricity for temporary buildings, lighting, and other energy needs. Fossil fuel-powered vehicles and equipment would be used during all construction phases. Limitations on engine idling and requirements that equipment be properly maintained would result in fuel savings. California Code of Regulations Title 13, Sections 2449(d)(3) and 2485, limit idling from both on-road and off-road diesel-powered equipment and are enforced by the ARB. Overall, construction equipment is estimated to consume a total of 1,810 gallons of diesel fuel over the entire construction duration (Appendix A).

Fuel use associated with construction vehicle trips generated by the proposed project was also estimated; trips include construction worker trips, haul truck trips for material transport, and vendor trips for construction material deliveries. Fuel use from these vehicles traveling to the proposed project was based on (1) the projected number of trips the proposed project would generate during construction, (2) average trip distances by trip type, and (3) fuel efficiencies estimated in the ARB Emissions Factors mobile source emission model (EMFAC). The specific parameters used to estimate fuel usage are included in Appendix A. In total, the proposed project is estimated to generate approximately 6,834 VMT and consume a combined 711 gallons of gasoline and diesel for vehicle travel during construction.

The proposed project's construction is not anticipated to result in unusually high energy use. Limitations on idling of vehicles and equipment and requirements that equipment be properly maintained would result in fuel savings. Similarly, compliance with State regulations would limit idling from both on-road and off-road diesel-powered equipment and are enforced by the ARB.

Additionally, the overall construction schedule and process is already designed to be efficient to avoid excess monetary costs. For example, equipment and fuel are not typically used wastefully due to the added expense associated with renting the equipment, maintaining it, and fueling it. Therefore, the opportunities for future efficiency gains during construction are limited. Therefore, it is anticipated that the construction phase of the proposed project would not result in wasteful, inefficient, and unnecessary consumption of energy. Construction-related energy impacts would be less than significant.

Operational Impacts

As previously explained, the proposed project involves the construction of a gravity-operated 24-inch sewer pipeline to replace an existing 33-inch sewer pipeline. It would not contain any pumps or other facilities that require electricity or fuel to operate. Periodic maintenance of the pipeline would involve energy consumption related to worker vehicles and equipment, similar to the existing pipeline. On this basis, operations of the proposed project would be substantially similar to operations of the existing pipeline and would not result in any substantial change to the environment, which is the fundamental criteria for significance under CEQA.

Conclusion

As explained above, neither construction nor operations of the proposed project would result in wasteful, inefficient, or unnecessary consumption of energy resources and impacts are therefore less than significant.

b) Conflict with or obstruct a State or local plan for renewable energy or energy efficiency?

Less than significant impact.

Construction

As discussed under Impact 2.6(a), the proposed project would result in energy consumption through the combustion of fossil fuels in construction vehicles, worker commute vehicles, and construction equipment, and the use of electricity for temporary buildings, lighting, and other sources. California Code of Regulations Title 13, Sections 2449(d)(3) and 2485, limit idling from both on-road and off-road diesel-powered equipment and are enforced by the ARB. The proposed project would comply with these regulations. Thus, it is anticipated that construction of the proposed plan would not conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing energy use or increasing the use of renewable energy. Therefore, construction-related energy efficiency and renewable energy standards consistency impacts would be less than significant.

Operation

The proposed project involves construction of a 24-inch, gravity-fed sewer pipeline that would not consume energy via the combustion of fossil fuels or use of electricity. Periodic maintenance activities related to the proposed project would comply with the regulations noted above that limit unnecessary idling from diesel-powered vehicles and equipment. Therefore, operational energy efficiency and renewable energy standards consistency impacts would be less than significant.

Mitigation Measures

None required.

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

Environmental Evaluation

The analysis in this section is based on the Geotechnical Exploration prepared by ENGEO. The complete report is provided in Appendix C.

Would the project:

a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury or death involving:

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

No impact. The Geotechnical Exploration indicated that the sewer alignment does not overlap with a designated Alquist-Priolo Earthquake Fault Zone. This condition precludes the possibility of the proposed sewer pipeline being susceptible to fault rupture. No impact would occur.

ii) Strong seismic ground shaking?

Less than significant impact. The Geotechnical Exploration indicated that the sewer alignment may be susceptible to strong ground shaking from seismic activity in the region. However, the Geotechnical Exploration noted that buried facilities such as pipelines are expected to move in-phase with surrounding soil and any seismic forces on the pipeline would be nominal. Impacts would be less than significant.

iii) Seismic-related ground failure, including liquefaction?

Less than significant impact. According to the Geotechnical Evaluation, the area north of the Arroyo Seco drainage is located outside of a mapped liquefaction hazard zone; however, the portion of the alignment south of the Arroyo Seco drainage overlaps with a very high susceptibility liquefaction hazard zone near Arroyo Seco and a high susceptibility zone further south near Las Colinas Road. Soil borings were conducted along the proposed sewer alignment as part of the Geotechnical Exploration and the results indicated that likelihood of liquefaction-induced surface rupture or lateral spreading is low due to the subsurface conditions and dense nature of the soils present (Appendix C). The proposed project would incorporate standard engineering and construction requirements related to seismicity and liquefaction as well as all recommendations set forth in Geotechnical Exploration. Implementation of these practices and requirements would minimize potential impacts of liquefaction on-site. Therefore, impacts related to liquefaction would be less than significant.

iv) Landslides?

No impact. The Geotechnical Exploration indicated that the sewer alignment does not overlap with an earthquake-induced landslide zone. Furthermore, the proposed pipeline would be located underground and not susceptible to landslides. This condition precludes the possibility of the proposed sewer pipeline being susceptible to landslides. No impact would occur.

b) Result in substantial soil erosion or the loss of topsoil?

Less than significant impact with mitigation incorporated. The proposed project would involve ground-disturbing activities such as trenching that have the potential to cause erosion. Accordingly, the proposed project would be required to prepare and implement a Storm Water Pollution Prevention Plan (SWPPP) during construction in accordance with federal and State requirements. The SWPPP would identify structural and nonstructural BMPs intended to prevent erosion during construction. In addition, the SWPPP must include a chemical monitoring program for "non-visible" pollutants to be implemented if there is a failure of BMPs, and (if applicable) a sediment monitoring plan if the site discharges directly to a water body listed on the 303(d) list for sediment. These requirements are reflected in MM HYD-1. With the implementation of MM HYD-1, the impact of soil erosion and loss of topsoil would be less than significant.

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?

Less than significant impact. According to the Geotechnical Evaluation, the area north of the Arroyo Seco drainage is located outside of a mapped liquefaction hazard zone; however, the portion of the alignment south of the Arroyo Seco drainage overlaps with a very high susceptibility liquefaction hazard zone near Arroyo Seco and a high susceptibility zone further south near Las Colinas Road. Soil borings were conducted along the proposed sewer alignment as part of the Geotechnical Exploration and the results indicated that likelihood of liquefaction-induced surface rupture or lateral spreading is low due to the subsurface conditions and dense nature of the soils present (Appendix C). The proposed project would incorporate standard engineering and construction requirements related to seismicity and liquefaction as well as all recommendations set forth in Geotechnical Exploration. Implementation of these practices and requirements would minimize potential impacts of liquefaction on-site. Therefore, impacts related to liquefaction would be less than significant.

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

Less than significant impact. The Geotechnical Exploration indicated that the soils along the sewer alignment had high clay content. The Geotechnical Exploration indicated that standard soil engineering practices such as encapsulating the granular bedding in non-woven fabric, the use of slurry cutoff plugs encapsulating the pipe, or placement of flowable fill underneath the pipeline would serve to abate any hazards from expansive soils. Impacts would be less than significant.

e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?

No impact. The proposed project consists of the installation of a 2,990-lineal-foot, 24-inch diameter underground sewer pipeline between Las Colinas Road and Redwood Drive in the Springtown neighborhood. In addition, an existing nearby 33-inch diameter underground sewer pipeline would

be abandoned in place. No septic or alternative wastewater systems would be employed. No impact would occur.

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

Less than significant impact with mitigation incorporated. As part of the 2004 *Cultural and Paleontological Resources Study for the Livermore High School Project,* authored by LSA Associates, Inc., a records search was conducted for the proposed project. The results of this analysis determined that the project area entirely consists of Late Cenozoic (Plio-Pleistocene) sedimentary deposits. These deposits regionally include Irvington Gravels, the Livermore Gravels, and the Tassajara Formation that can be up to 5,000 feet thick. Sedimentary rock deposits of the Late Cenozoic age are known to yield significant vertebrate fossils. The records search from the University of California Museum of Paleontology shows that 14 vertebrate fossil localities from similarly aged sediments are within the Livermore Valley. Five of the fossil localities are located on or adjacent to Las Positas Creek and are within a 5-mile radius of the project area.

Vertebrate fossils from sedimentary deposits may include mammoths, saber-toothed cats, dire wolves, bear, rodents, reptiles, and birds. There are numerous fossil localities that have been identified in the same geological deposits as those within and near the project area. Therefore, the sedimentary deposits within and adjacent to the project area have a high potential to yield similar paleontological resources. No paleontological resources were identified within or adjacent to the project area, however it is highly possible that construction activities associated with the project could encounter previously undiscovered paleontological resources. Damage or destruction of these resources would be a potentially significant impact. Implementation of MM GEO-1 would establish a procedure for handling paleontological resources that may be discovered during project construction. This mitigation would reduce impacts associated with paleontological resources to a less than significant level.

Mitigation Measures

Implement Mitigation Measure GEO-1 and:

MM GEO-1 Due to the potentially fossiliferous nature of soils within the project area, all soil disturbance shall be monitored by a qualified Paleontologist. A monitoring plan in conjunction with a field survey should be prepared prior to ground-disturbing activities to determine the level of paleontological monitoring required. In the event that fossils or fossil-bearing deposits are discovered during construction activities, excavations within a 50-feet radius of the find shall be temporarily halted or diverted. Paleontological monitors must be empowered to halt construction activities at the location of the discovery to review possible paleontological material and to protect the resource while the finds are being evaluated. This monitoring shall continue until, in the Paleontologist's judgment, paleontological resources are not likely to be encountered. If such paleontological resources are found to be significant, they should be avoided by project activities. If avoidance is not feasible, adverse effects to such resources should be mitigated. The applicant shall include a

standard inadvertent discovery clause in every construction contract to inform contractors of this requirement. The Paleontologist shall document the discovery as needed in accordance with Society of Vertebrate Paleontology standards and assess the significance of the find under the criteria set forth in CEQA Guidelines Section 15064.5. The Paleontologist shall notify the appropriate agencies to determine procedures that would be followed before construction activities are allowed to resume at the location of the find. If the applicant determines that avoidance is not feasible, the Paleontologist shall prepare an excavation plan for mitigating the effect of construction activities on the discovery. The plan shall be submitted to the City of Livermore for review and approval prior to implementation, and the applicant shall adhere to the recommendations in the plan.

Environmental Issues	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
2.8 Greenhouse Gas Emissions *Would the project:*				
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	☒	☐
b) Conflict with any applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☒	☐

Environmental Evaluation

Setting

City of Livermore GHG Inventory

A community-wide baseline (2005) GHG emissions inventory was conducted for the City of Livermore as part of the development of its Livermore Climate Action Plan (CAP).[9] This inventory is shown in Table 5. The City is currently updating its CAP to demonstrate emission reductions consistent with future Statewide GHG reduction targets.

Table 5: City of Livermore Community 2005 GHG Inventory

Sector	Metric Tons CO_2e/Year	Percentage of Total
Transportation	147,327	35.8%
Water Conveyance	5,246	1.3%
Wastewater Treatment	826	0.2%
Solid Waste Generation	32,783	8.0%
Residential Energy	121,572	29.5%
Commercial/Industrial Energy	104,183	25.3%
Total	**411,937**	**100.0%**
Source: City of Livermore. November 2012. Livermore Climate Action Plan.		

Project Site

The project site does not contain any facilities that directly generate GHG emissions. Minimal GHG emissions are associated with periodic maintenance of the 33-inch sewer pipeline that would be

[9] City of Livermore. November 2012. Livermore Climate Action Plan.

replaced by the proposed project. Maintenance-related emissions include those generated by maintenance worker vehicles and equipment.

Updated BAAQMD GHG Thresholds

On April 20, 2022, the BAAQMD Board of Directors held a public meeting and adopted the CEQA Thresholds for Evaluating the Significance of Climate Impacts From Land Use Projects and Plans, which changed the previous quantitative thresholds to a more qualitative threshold based on certain objectives.[10] However, the proposed project is neither a land use project nor a plan. Therefore, the BAAQMD's updated GHG thresholds are not applicable for measuring the significance of the proposed project's GHG-related impacts.

Would the project:

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

Less than significant impact. GHG emissions would result from construction of the proposed project. As discussed further below, both construction and operations of the proposed project would result in minimal GHG emissions.

Construction

The proposed project would generate GHG emissions during construction activities, resulting from emission sources such as construction equipment, haul trucks, and construction worker vehicles. Construction emissions were modeled using CalEEMod Version 2020.4.0. Construction of the proposed project is estimated to result in 24 MT CO_2e. Modeling data is included in Appendix A. Amortized over 30 years, this figure corresponds with annual emissions of less than 1 MT CO_2e. For comparison, as shown in Table 5, the City's CAP estimated in 2005 that wastewater treatment results in approximately 826 MT CO_2e per year, 0.2 percent of the City's total annual GHG inventory.

Operation

As previously explained, the proposed project involves the construction of a gravity-operated 24-inch sewer pipeline to replace an existing 33-inch sewer pipeline. It would not contain any pumps or other facilities that require fuel or electricity to operate, which could result in direct or indirect emissions of GHGs. Periodic maintenance of the pipeline would generate GHG emissions related to the use of worker vehicles and equipment, similar to the existing pipeline. On this basis, operations of the proposed project would be substantially similar to operations of the existing pipeline and would not result in any substantial change to the environment, which is the fundamental criteria for significance under CEQA.

Additionally, it is worth noting that the impetus for developing the proposed project is excessive maintenance associated with the existing 33-inch sewer pipeline. By replacing this existing pipeline with the proposed project, maintenance requirements would be greatly reduced, meaning that GHG

[10] Bay Area Air Quality Management District (BAAQMD). CEQA Thresholds and Guidelines Update. Website: https://www.baaqmd.gov/plans-and-climate/california-environmental-quality-act-ceqa/updated-ceqa-guidelines. Accessed May 20, 2022.

emissions associated with maintenance (i.e., GHG emissions generated by worker vehicles and maintenance equipment) would likewise be reduced. In this way, development of the proposed project could result in a net reduction of GHG emissions as compared to the existing pipeline that it would replace. In any case, GHG emissions resultant from the proposed project would not have a significant impact on the environment. The project's construction and operation impacts related to the generation of GHG emissions would be less than significant.

b) Conflict with any applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

Less than significant impact. The following discusses project consistency with applicable plans adopted for the purpose of reducing GHG emissions, which includes the ARB's Scoping Plan.

Livermore CAP

The City's 2005 CAP concerned the reduction of GHGs by 15 percent below 2008 levels by 2020, consistent with AB 32. None of the implementation strategies contained in this CAP would apply to the proposed project.

ARB Scoping Plan

The ARB Scoping Plan is the State's strategy to achieve the GHG emissions reduction goals under AB 32 and SB 32, as well as a long-term strategy to achieve the State's overall carbon neutrality goals for 2050 under Executive Order S-03-05. It is applicable to State agencies but is not directly applicable to cities/counties and individual projects (i.e., the Scoping Plan does not require the City to adopt policies, programs, or regulations to reduce GHG emissions). However, new regulations adopted by the State agencies outlined in the Scoping Plan result in GHG emissions reductions at the local level. As a result, local jurisdictions benefit from reductions in transportation emissions rates, increases in water efficiency in the building and landscape codes, and other Statewide actions that affect a local jurisdiction's emissions inventory from the top down.

Transportation Sector

Passenger Vehicles

Statewide strategies to reduce GHG emissions from passenger vehicles and the transportation sector in general include the Low Carbon Fuel Standard (LCFS) and changes in the corporate average fuel economy standards (e.g., Pavley I and Pavley California Advanced Clean Cars Program).[11] Vehicle-related GHG emissions associated with construction and operational maintenance of the proposed project would benefit from the implementation of these strategies.

Energy/Commercial-Residential Sectors

Energy use generated by projects represents the second largest source of emissions after the transportation sector. However, as explained, the proposed 24-inch sewer pipeline would be gravity-operated. Its operations would not consume energy that directly or indirectly results in the generation of GHG emissions.

[11] California Air Resources Board (ARB). 2015. Low Carbon Fuel Standard Regulation. Website: http://www.arb.ca.gov/regact/2015/lcfs2015/lcfs2015.htm. Accessed November 3, 2022.

Metropolitan Transportation Commission Plan Bay Area

The proposed project does not involve land use development and therefore would not conflict with the land use concept plan in Plan Bay Area 2050.

Senate Bill 32 2017 Scoping Plan Update

The 2017 Climate Change Scoping Plan Update addressing the SB 32 targets was adopted on December 14, 2017. Table 6 provides an analysis of the proposed project's consistency with the 2017 Scoping Plan Update measures. As shown in Table 6, these measures generally do not apply to the proposed project. Therefore, the proposed project would not conflict with the 2017 Scoping Plan Update.

Table 6: Consistency with SB 32 2017 Scoping Plan Update

2017 Scoping Plan Update Reduction Measure	Project Consistency
SB 350 50 percent Renewable Mandate. Utilities subject to the legislation will be required to increase their renewable energy mix from 33 percent in 2020 to 50 percent in 2030.	**Not applicable.** This measure applies to utilities. Besides periodic maintenance activities, operations of the proposed project would not consume electricity.
SB 350 Double Building Energy Efficiency by 2030. This is equivalent to a 20 percent reduction from 2014 building energy usage compared to current projected 2030 levels.	**Not applicable**. The proposed project does not involve the construction of buildings or any other facilities subject to this measure.
Low Carbon Fuel Standard. This measure requires fuel providers to meet an 18 percent reduction in carbon content by 2030.	**Not applicable.** This is a Statewide measure that cannot be implemented by a project applicant or lead agency. However, maintenance vehicles servicing the proposed project would benefit from these standards.
Mobile Source Strategy (Cleaner Technology and Fuels Scenario). Vehicle manufacturers will be required to meet existing regulations mandated by the LEV III and Heavy-Duty Vehicle programs. The strategy includes a goal of having 4.2 million Zero-Emission Vehicles (ZEVs) on the road by 2030 and increasing numbers of ZEV trucks and buses.	**Not applicable.** This measure applies to vehicle manufacturers. However, maintenance vehicles servicing the proposed project could benefit from this goal over time as fleets transition to ZEVs.
Sustainable Freight Action Plan The plan's target is to improve freight system efficiency by 25 percent, by increasing the value of goods and services produced from the freight sector, relative to the amount of carbon that it produces by 2030. This would be achieved by deploying over 100,000 freight vehicles and equipment capable of zero-emission operation and maximize near zero-emission freight vehicles and equipment powered by renewable energy by 2030.	**Not applicable.** This measure applies to owners and operators of trucks and freight operations.
Short-Lived Climate Pollutant (SLCP) Reduction Strategy. The strategy requires the reduction of SLCPs by 40 percent from 2013 levels by 2030 and	**Not applicable.** The proposed project would not include major sources of black carbon or other SLCPs. Wastewater treatment-related strategies contained in the SLCP Reduction Strategy are not applicable to

2017 Scoping Plan Update Reduction Measure	Project Consistency
the reduction of black carbon by 50 percent from 2013 levels by 2030.	the proposed project, which proposes a replacement sewer pipeline and not a treatment facility.
SB 375 Sustainable Communities Strategies. Requires Regional Transportation Plans to include a Sustainable Communities Strategy for reduction of per capita vehicle miles traveled.	**Not applicable.** The proposed project does not include the development of a Regional Transportation Plan (RTP).
Post-2020 Cap-and-Trade Program. The Post 2020 Cap-and-Trade Program continues the existing program for another 10 years. The Cap-and-Trade Program applies to large industrial sources such as power plants, refineries, and cement manufacturers.	**Not applicable.** The proposed project is not one targeted by the cap-and-trade system regulations, and, therefore, this measure does not apply to the proposed project. However, the post-2020 Cap-and-Trade Program indirectly affects people and entities who use the products and services produced by the regulated industrial sources when increased cost of products or services (such as electricity and fuel) are transferred to the consumers.
Natural and Working Lands Action Plan. The ARB is working in coordination with several other agencies at the federal, State, and local levels, stakeholders, and with the public, to develop measures as outlined in the Scoping Plan Update and the governor's Executive Order B-30-15 to reduce GHG emissions and to cultivate net carbon sequestration potential for California's natural and working land.	**Not Applicable**. This measure applies to ARB and not to individual development projects.
Source: California Air Resources Board (ARB). 2017. California's 2017 Climate Change Scoping Plan.	

As discussed above, the proposed project would not conflict with any plan, policy, or regulation adopted for the purpose of reducing GHG emissions. Therefore, this impact would be less than significant.

Mitigation Measures

None required.

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

Environmental Evaluation

Would the project:

a) 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 minor routine transport and handling of minimal quantities of hazardous substances such as diesel fuels and lubricants. Handling and transportation of these materials could result in the exposure of workers or residents to hazardous materials. However, the project would not create a significant hazard to the public or the

environment, because these materials are not acutely hazardous and project construction would comply with applicable federal, State, and local laws pertaining to the safe handling and transport of hazardous materials. Impacts would be less than significant.

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?

Less than significant impact. Project construction would involve the minor routine transport and handling of minimal quantities of hazardous substances such as diesel fuels and lubricants. Handling and transportation of these materials could result in the exposure of workers or residents to hazardous materials. However, the proposed project would not result in the reasonably foreseeable upset or accident conditions, because these materials are not acutely hazardous and project construction would comply with applicable federal, State, and local laws pertaining to the safe handling and transport of hazardous materials. Impacts would be less than significant.

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

No Impact. The sewer alignment crosses through the site of a proposed, but unbuilt, Catholic High School. Given that the proposed sewer would convey non-hazardous effluent via an underground pipeline, it would not expose the proposed high school to hazardous materials, substances, or waste. No impact would occur.

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?

No Impact. A query of the GeoTracker database[12] revealed that the project site is not located on any hazardous materials sites listed on the Cortese List (Government Code § 65962.5). Furthermore, the project site has historically supported grazing activities and, thus, would not be expected to have been used for any hazardous materials land use activities. No impact would occur.

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

No impact. Livermore Municipal Airport is located approximately 3 miles west of the sewer alignment. This distance precludes the possibility of the proposed project exposing persons residing or working within 2 miles of an airport to aviation hazards. No impact would occur.

[12] California State Water Resources Control Board (State Water Board). 2023. GeoTracker. Website: https://geotracker.waterboards.ca.gov/. Accessed September 11, 2023.

f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

No impact. The proposed project consists of the installation of a 2,990-lineal-foot, 24-inch diameter underground sewer pipeline between Las Colinas Road and Redwood Drive in the Springtown neighborhood. In addition, an existing nearby 33-inch diameter underground sewer pipeline would be abandoned in place. The proposed project would not make any modifications to the circulation network that could impair emergency access. No impact would occur.

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

No impact. Tri-Valley Hazard Mitigation Figure 14-1 indicates that the project site is not within a moderate, high, or very high wildfire hazard severity zone. The proposed project consists of the installation of a 2,990-lineal-foot, 24-inch diameter underground sewer pipeline between Las Colinas Road and Redwood Drive in the Springtown neighborhood. In addition, an existing nearby 33-inch diameter underground sewer pipeline would be abandoned in place. Because of the attributes of the underground pipeline, the proposed project would not increase exposure of persons or structures to wildland fire risks. No impact would occur.

Mitigation Measures

None.

Environmental Issues	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
2.10 Hydrology and Water Quality *Would the project:*				
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?	☐	☒	☐	☐
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	☐	☐	☐	☒
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:	☐	☒	☐	☐
(i) result in substantial erosion or siltation on- or off-site;	☐	☐	☐	☒
(ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;	☐	☐	☐	☒
(iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or	☐	☐	☐	☒
(iv) impede or redirect flood flows?	☐	☐	☐	☒
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	☐	☐	☐	☒
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	☐	☐	☐	☒

Environmental Evaluation

Would the project:

a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?

Less than significant impact with mitigation incorporated. The proposed project would involve ground-disturbing activities such as trenching that have the potential to cause erosion or pollutants to enter downstream waterways. Accordingly, the proposed project would be required to prepare

and implement a SWPPP during construction in accordance with federal and State requirements. The SWPPP would identify structural and nonstructural BMPs intended to prevent erosion during construction. In addition, the SWPPP must include a chemical monitoring program for "non-visible" pollutants to be implemented if there is a failure of BMPs, and (if applicable) a sediment monitoring plan if the site discharges directly to a water body listed on the 303(d) list for sediment. These requirements are reflected in MM HYD-1. With the implementation of MM HYD-1, impacts on water quality would be less than significant.

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

No impact. The proposed project consists of the installation of a 2,990-lineal-foot, 24-inch diameter underground sewer pipeline between Las Colinas Road and Redwood Drive in the Springtown neighborhood. A sewer pipeline conveys effluent and, thus, the proposed project would not increase demand for water, including groundwater, nor would it interfere with groundwater recharge. No impact would occur.

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

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

Less than significant impact with mitigation incorporated. The proposed project would involve ground-disturbing activities such as trenching that have the potential to cause erosion. Accordingly, the proposed project would be required to prepare and implement a SWPPP during construction in accordance with federal and State requirements. The SWPPP would identify structural and nonstructural BMPs intended to prevent erosion during construction. In addition, the SWPPP must include a chemical monitoring program for "non-visible" pollutants to be implemented if there is a failure of BMPs, and (if applicable) a sediment monitoring plan if the site discharges directly to a water body listed on the 303(d) list for sediment. These requirements are reflected in MM HYD-1. With the implementation of MM HYD-1, the impact of soil erosion and loss of topsoil would be less than significant.

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

No impact. The proposed project consists of the installation of a 2,990-lineal-foot, 24-inch diameter underground sewer pipeline between Las Colinas Road and Redwood Drive in the Springtown neighborhood. Following pipeline installation, the impacted area would be restored and no permanent changes to the drainage pattern would occur such that a substantial increase in surface runoff would result. No impact would occur.

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

No impact. The proposed project consists of the installation of a 2,990-lineal-foot, 24-inch diameter underground sewer pipeline between Las Colinas Road and Redwood Drive in the Springtown neighborhood. Following pipeline installation, the impacted area would be restored and no permanent changes to the drainage pattern would occur such that a substantial increase in surface runoff would result. No impact would occur.

(iv) impede or redirect flood flows?

No impact. The proposed project consists of the installation of a 2,990-lineal-foot, 24-inch diameter underground sewer pipeline between Las Colinas Road and Redwood Drive in the Springtown neighborhood. Following pipeline installation, the impacted area would be restored and no permanent changes to the drainage pattern would occur such that flood flows would be impeded or redirected. No impact would occur.

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

No impact. The proposed project consists of the installation of a 2,990-lineal-foot, 24-inch diameter underground sewer pipeline between Las Colinas Road and Redwood Drive in the Springtown neighborhood. The Arroyo Seco crossing would occur beneath the creek bed and, thus, not alter the 100-year flood plain associated with this waterway. The project site is more than 20 miles from the Pacific Ocean and, thus, is not susceptible to tsunami inundation. Finally, there are no large inland bodies of water near the sewer alignment that are susceptible to a seiche. No impact would occur.

e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

No Impact. The proposed project consists of the installation of a 2,990-lineal-foot, 24-inch diameter underground sewer pipeline between Las Colinas Road and Redwood Drive in the Springtown neighborhood. The proposed project would not increase demand for water, including groundwater, or result in releases of pollutants into water bodies. No impact would occur.

Mitigation Measures

MM HYD-1 Prior to issuance of construction permits for the proposed project, the City of Livermore shall verify that the applicant has prepared a Storm Water Pollution Prevention Plan (SWPPP) in accordance with the requirements of the Statewide Construction General Permit. The SWPPP shall be designed to address the following objectives: (1) all pollutants and their sources, including sources of sediment associated with construction, construction site erosion, and all other activities associated with construction activity are controlled; (2) where not otherwise required to be under a Regional Water Quality Control Board (RWQCB) permit, all non-stormwater discharges (e.g., chemicals) are identified and either eliminated,

controlled, or treated; (3) site Best Management Practices (BMPs) are effective and result in the reduction or elimination of pollutants in stormwater discharges and authorized non-stormwater discharges from construction activity; (4) stabilization BMPs installed to reduce or eliminate pollutants after construction are completed; and (5) coconut coir matting or tackified hydroseeding compounds shall be used in place of plastic monofilament netting (erosion control matting) or similar material containing netting. The SWPPP shall be prepared by a qualified SWPPP developer. The SWPPP shall include the minimum BMPs required for the identified Risk Level. BMP implementation shall be consistent with the BMP requirements in the most recent version of the California Stormwater Quality Association (CASQA) Stormwater Best Management Handbook–Construction or the California Department of Transportation (Caltrans) Stormwater Quality Handbook Construction Site BMPs Manual.

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

Environmental Evaluation

Would the project:

a) Physically divide an established community?

No impact. The proposed sewer alignment would traverse grazing land and cross the Arroyo Seco, a perineal stream. There are no dwelling units within the sewer alignment. The new sewer pipeline would be located underground and, thus, operational activities would not have the potential to divide an established community. No impact would occur.

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

No Impact. The proposed project consists of the installation of a 2,990-lineal-foot, 24-inch diameter underground sewer pipeline between Las Colinas Road and Redwood Drive in the Springtown neighborhood. In addition, an existing nearby 33-inch diameter underground sewer pipeline would be abandoned in place. Utility infrastructure is allowed in all General Plan land uses designations and zoning districts; thus, it is inherently compatible with land use plans and policies. No impact would occur.

Mitigation Measures

None.

Environmental Issues	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
2.12 Mineral Resources *Would the project:*				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the State?	☐	☐	☐	☒
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?	☐	☐	☐	☒

Environmental Evaluation

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?

No impact. The project site is not within a State-designated mineral resource zone as mapped by the California Department of Conservation.[13] This condition precludes the possibility of the proposed project to result in the loss of a mineral resource of Statewide importance. No impact would occur.

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?

No impact. The project site is not within a locally designated mineral resource zone. This condition precludes the possibility of the proposed project to result in the loss of a mineral resource of local importance. No impact would occur.

Mitigation Measures

None.

[13] California Department of Conservation. 2023. DOC Maps: Mines and Mineral Resources. Website: https://maps.conservation.ca.gov/mineralresources/. Accessed September 11 ,2023.

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

Environmental Evaluation

Setting

The following analysis is based on noise modeling prepared by FCS technicians. Noise modeling calculation spreadsheets are included in Appendix A. Existing noise sources in the project vicinity include traffic from I-580 and other roadways to the north of the project site. The project site itself, which consists mainly of vacant land, does not contain substantial (if any) anthropogenic noise sources. According to the Noise Element of the Livermore General Plan, the project site and nearby residential land uses along Redwood Road, Autumn Oak Drive, and Springtown Boulevard are within the 60 A-weighted decibel (dBA) community Noise Equivalent Level (CNEL) contour corridor associated with I-580. In other words, the project site and these nearby residential land uses experience existing noise levels of up to 60 dBA CNEL due to their proximity to I-580.[14]

Would the project result in:

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

Less than significant impact.

[14] City of Livermore. 2013. Noise Element to the City of Livermore General Plan.

Construction noise impacts

A significant impact from project construction activities would occur if the proposed project would generate a substantial temporary increase in ambient noise levels in the project vicinity in excess of applicable standards. The City has not adopted construction-related noise thresholds of significance for CEQA consideration. Construction of the proposed project would occur during hours in which Policy P4 under Objective N-1.5 of the General Plan exempts construction activities from the General Plan's exterior noise standards. Construction of the proposed project also would not occur during the prohibited hours established by Section 9.36.080 of the City's Municipal Code. While this demonstrates the proposed project's consistency with the City's relevant General Plan and Municipal Code standards concerning construction noise, it does not address whether construction of the proposed project would expose sensitive receptors to a substantial temporary increase in noise levels. This is because the Municipal Code does not contain quantitative standards that would apply to the proposed project's construction, and the proposed project would also be exempt from the General Plan's standards. Given these factors, the following analysis adopts the Federal Transit Administration's (FTA) "Detailed Analysis Construction Noise Criteria" as thresholds of significance to assess the effect of the proposed project's construction-related noise impacts at nearby sensitive receptors. For residential uses, which are the only noise-sensitive land use types within 1,000 feet of the proposed project, the FTA's criteria are an 80 dBA equivalent continuous sound level ($L_{eq\text{-}8hr}$) daytime limit, a 70 dBA nighttime limit, and a 75 dBA day/night average sound level (L_{dn}) 30-day average.[15] Because construction would not occur during nighttime hours, this analysis adopts the 80 dBA $L_{eq\text{-}8hr}$ daytime limit to evaluate the significance of the proposed project's construction-related noise impacts at nearby residential uses.

It has been assumed that the proposed project would be constructed over a total of 23 workdays. This is a conservative schedule that relies on the most aggressive construction assumptions for the proposed project. First, the site preparation phase would consist of installing temporary construction fences around the project site and clearing vegetation from the work area. After this, pipeline installation would commence. Up to 300 feet of pipeline may be constructed per day, on average. This process would involve trenching for the new pipeline, installing the new pipeline, and then backfilling the trench. Once the new pipeline has been installed and certified, flow would be transferred from the existing pipeline to the new pipeline. Then, the old pipeline would be filled with concrete and its manholes would be filled with soil.

Given the length of the proposed pipeline—nearly 3,000 linear feet—most construction work would occur hundreds of feet from the nearest residential uses near Redwood Road and Autumn Oak Drive. At these distances, there would be no potential for the proposed project's construction activities to expose these residential uses to noise levels in excess of the 80 dBA $L_{eq\text{-}8hr}$ criteria. However, a portion of the proposed pipeline, where it "cuts over" to connect with the existing pipeline, would be constructed within 50 feet of these residential uses. Construction activities at this location would have the greatest potential to expose nearby residential uses to noise levels in excess of the 80 dBA $L_{eq\text{-}8hr}$ criteria and, as such, are the focus of the following analysis.

[15] Federal Transit Administration (FTA). 2018. Transit Noise and Vibration Impact Assessment Manual.

Pipeline construction in this area would last approximately three days and would require earthmoving equipment such as a backhoe, an excavator, a loader, and a ground compactor. The operations of these vehicles would be intermittent, not continuous, for any 8-hour period. Pipe bedding material would be imported via several haul truck trips per day, but these intermittent trips would have a lesser effect on eight-hour time averaged noise levels, as measured per the threshold of significance. Overall, pipeline construction in this area utilizing the aforementioned construction vehicles is estimated to generate noise levels up to approximately 76 dBA $L_{eq\text{-}8hr}$ at residential uses near Redwood Road and Autumn Oak Drive, which is below the 80 dBA $L_{eq\text{-}8hr}$ threshold of significance. Other construction activities would require fewer construction vehicles, quieter construction vehicles, and/or would take place at a greater distance from noise-sensitive receptors. Accordingly, noise impacts associated with other construction activities would be less than the noise level estimated by this analysis. Therefore, project construction activities would not generate a substantial temporary increase in ambient noise levels in the project vicinity in excess of applicable standards. Therefore, the impact would be less than significant. Calculation sheets for this analysis can be found in Appendix A.

Mobile source operational noise impacts

A significant impact from project mobile sources would occur if the project would generate a substantial permanent increase in ambient noise levels in the project vicinity in excess of applicable standards. Mobile sources of operational noise include sources such as vehicles and traffic. The proposed project involves the construction of a gravity-operated 24-inch sewer pipeline to replace an existing 33-inch sewer pipeline. On this basis, operations of the proposed project would be substantially similar to operations of the existing pipeline and would not result in any substantial change to the environment, which is the fundamental criteria for significance under CEQA. Additionally, it is worth noting that the impetus for developing the proposed project is excessive maintenance associated with the existing 33-inch sewer pipeline. By replacing this existing pipeline with the proposed project, maintenance requirements would be greatly reduced, meaning that maintenance worker vehicle trips to and from the project site would likewise be reduced. In this way, development of the proposed project would likely result in a net reduction of mobile source operational noise as compared to the existing pipeline that it would replace. Therefore, the proposed project's mobile noise sources would not generate a substantial permanent increase in ambient noise levels above applicable standards. Therefore, impacts from mobile sources of operational noise would be less than significant.

Stationary source operational noise impacts

A significant impact from project stationary sources would occur if the project would generate a substantial permanent increase in ambient noise levels in the project vicinity in excess of applicable standards. The proposed project involves the construction of a gravity-operated 24-inch sewer pipeline to replace an existing 33-inch sewer pipeline. On this basis, operations of the proposed project would be substantially similar to operations of the existing pipeline and would not result in any substantial change to the environment, which is the fundamental criteria for significance under CEQA. The proposed pipeline itself would not generate substantial, if any, audible noise. Additionally, it is worth noting that the impetus for developing the proposed project is excessive maintenance associated with the existing 33-inch sewer pipeline. By replacing this existing pipeline with the

proposed project, maintenance requirements would be greatly reduced, meaning that potential noise-generating maintenance activities at the project site would likewise be reduced. In this way, development of the proposed project would likely result in a net reduction of stationary source operational noise as compared to the existing pipeline that it would replace. Therefore, the proposed project's stationary sources would not generate a substantial permanent increase in ambient noise levels above applicable standards; and the proposed project's impact from stationary sources of operational noise, such as maintenance tools, would be less than significant.

b) Generation of excessive groundborne vibration or groundborne noise levels?

Less than significant impact. A significant impact would occur if the proposed project would generate excessive groundborne vibration or groundborne noise levels as measured at nearby receptors. There are no federal, State, or City standards that would regulate the proposed project's vibration impacts from temporary construction activities or long-term operations. Therefore, in order to assess the effect of project-related groundborne vibration, the following analysis adopts the FTA's vibration impact criteria as thresholds of significance for building/structural damage. The FTA construction vibration damage criteria are as follows:

- 0.5 inch per second peak particle velocity (PPV) for "reinforced-concrete, steel or timber" buildings.
- 0.3 inch per second PPV for "engineered concrete and masonry" buildings.
- 0.2 inch per second PPV for "non-engineered timber and masonry" buildings.
- 0.12 inch per second PPV for "buildings extremely susceptible to vibration damage."[16]

Based on a review of surrounding structures, there are no "buildings extremely susceptible to vibration damage" in the vicinity of the proposed project site. However, some nearby structures may meet the FTA criteria for "non-engineered timber and masonry buildings." As such, the following analysis assesses the proposed project's potential to expose surrounding structures to groundborne vibration levels in excess of 0.2 inch per second PPV, which is the FTA's vibration impact criteria for these types of structures.

Groundborne vibrations consist of rapidly fluctuating motions within the ground that have an average motion of zero. Vibrating objects in contact with the ground can radiate vibration waves through various soil and rock strata to the foundations of nearby buildings. In extreme cases, excessive groundborne vibration has the potential to cause structural damage to buildings. Common sources of groundborne vibration include trains, construction activities, and certain industrial operations. Vibration from traffic on smooth roadways is rarely perceptible, even from larger vehicles such as buses or trucks. The proposed project's construction and operational groundborne vibration impacts are analyzed separately below.

[16] Federal Transit Administration (FTA). 2018. Transit Noise and Vibration Impact Assessment Manual.

Short-term construction vibration impacts

As discussed, construction of the proposed project would require a variety of large earthmoving vehicles such as a backhoe, an excavator, a loader, and a compactor. These types of earthmoving vehicles can generate groundborne vibration levels up to 0.089 inch per second PPV (at a reference distance of 25 feet).[17] Groundborne vibration levels up to 0.2 inch per second PPV may be generated within approximately 12 feet of their construction activities. However, there are no adjacent structures that would be located within a 12-foot radius of these vehicles' construction activities. Therefore, there are no adjacent structures that would be exposed to groundborne vibration levels in excess of the FTA's 0.2 inch per second PPV impact criteria for "non-engineered timber and masonry buildings." As a result, the proposed project's potential to generate excessive construction-related groundborne vibration levels would be less than significant.

Operational vibration impacts

The proposed project involves the construction of a gravity-operated 24-inch sewer pipeline to replace an existing 33-inch sewer pipeline. On this basis, operations of the proposed project would be substantially similar to operations of the existing pipeline and would not result in any substantial change to the environment, which is the fundamental criteria for significance under CEQA. The proposed pipeline itself would not generate substantial, if any, groundborne vibration. Additionally, it is worth noting that the impetus for developing the proposed project is excessive maintenance associated with the existing 33-inch sewer pipeline. By replacing this existing pipeline with the proposed project, maintenance requirements would be greatly reduced, meaning that potential vibration-generating maintenance activities at the project site would likewise be reduced. In this way, development of the proposed project would likely result in a net reduction of any maintenance-related groundborne vibration as compared to the existing pipeline that it would replace. Therefore, the proposed project's impact from operational sources of vibration, such as maintenance vehicles and construction equipment, would be less than significant.

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

No impact. The proposed project involves the construction of a gravity-operated 24-inch sewer pipeline and would not expose people residing or working in the project area to excessive noise levels from aircraft. No impact would occur.

Mitigation Measures

None required.

[17] Federal Transit Administration (FTA). 2018. Transit Noise and Vibration Impact Assessment Manual.

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

Environmental Evaluation

Would the project:

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

No impact. The existing 33-inch sewer pipeline would be abandoned in place and would be replaced by a new 2,990 lineal-foot, 24-inch diameter gravity sewer pipeline. As such, the project would downsize sewer capacity for the Springtown sewershed, which would act as a limit on the amount of new population growth that can occur within this area. Thus, the proposed project would not result in substantial unplanned population growth from the removal of a barrier to growth. No impact would occur.

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

No impact. The sewer alignment contains grazing land and Arroyo Seco. There are no dwelling units within the sewer alignment. This condition precludes the possibility of the displacement of persons or dwelling units. No impact would occur.

Mitigation Measures

None.

Environmental Issues	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
2.15 Public Services *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:*				
a) Fire protection?	☐	☐	☐	☒
b) Police protection?	☐	☐	☐	☒
c) Schools?	☐	☐	☐	☒
d) Parks?	☐	☐	☐	☒
e) Other public facilities?	☐	☐	☐	☒

Environmental Evaluation

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:

a) Fire protection?

No impact. The proposed project consists of the installation of a 2,990-lineal-foot, 24-inch diameter underground sewer pipeline between Las Colinas Road and Redwood Drive in the Springtown neighborhood. In addition, an existing nearby 33-inch diameter underground sewer pipeline would be abandoned in place. The proposed project would not increase demand for fire protection because it would not result in direct or indirect population growth. No impact would occur.

b) Police protection?

No impact. The proposed project consists of the installation of a 2,990-lineal-foot, 24-inch diameter underground sewer pipeline between Las Colinas Road and Redwood Drive in the Springtown neighborhood. In addition, an existing nearby 33-inch diameter underground sewer pipeline would be abandoned in place. The proposed project would not increase demand for police protection because it would not result in direct or indirect population growth. No impact would occur.

c) Schools?

No impact. The proposed project consists of the installation of a 2,990-lineal-foot, 24-inch diameter underground sewer pipeline between Las Colinas Road and Redwood Drive in the Springtown neighborhood. In addition, an existing nearby 33-inch diameter underground sewer pipeline would

be abandoned in place. The proposed project would not increase demand for schools because it would not result in direct or indirect population growth. No impact would occur.

d) Parks?

No impact. The proposed project consists of the installation of a 2,990-lineal-foot, 24-inch diameter underground sewer pipeline between Las Colinas Road and Redwood Drive in the Springtown neighborhood. In addition, an existing nearby 33-inch diameter underground sewer pipeline would be abandoned in place. The proposed project would not increase demand for parks because it would not result in direct or indirect population growth. No impact would occur.

e) Other public facilities?

No impact. The proposed project consists of the installation of a 2,990-lineal-foot, 24-inch diameter underground sewer pipeline between Las Colinas Road and Redwood Drive in the Springtown neighborhood. In addition, an existing nearby 33-inch diameter underground sewer pipeline would be abandoned in place. The proposed project would not increase demand for libraries, community centers, or other public facilities because it would not result in direct or indirect population growth. No impact would occur.

Mitigation Measures

None.

Environmental Issues	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
2.16 Recreation				
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☐	☒
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?	☐	☐	☐	☒

Environmental Evaluation

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 consists of the installation of a 2,990-lineal-foot, 24-inch diameter underground sewer pipeline between Las Colinas Road and Redwood Drive in the Springtown neighborhood. In addition, an existing nearby 33-inch diameter underground sewer pipeline would be abandoned in place. The proposed project would not increase the use of recreational facilities because it would not result in direct or indirect population growth. No impact would occur.

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

No impact. The proposed project consists of the installation of a 2,990-lineal-foot, 24-inch diameter underground sewer pipeline between Las Colinas Road and Redwood Drive in the Springtown neighborhood. In addition, an existing nearby 33-inch diameter underground sewer pipeline would be abandoned in place. The proposed project would not increase demand for parks or recreational facilities because it would not result in direct or indirect population growth. No impact would occur.

Mitigation Measures

None.

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

Environmental Evaluation

Would the project:

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

No impact. The proposed project consists of the installation of a 2,990-lineal-foot, 24-inch diameter underground sewer pipeline between Las Colinas Road and Redwood Drive in the Springtown neighborhood. In addition, an existing nearby 33-inch diameter underground sewer pipeline would be abandoned in place. The proposed project would result in temporary construction-related vehicle trips associated with workers, materials transport, equipment transport, and similar activities. These trips would not be expected to exceed 100 per day and, thus, would have a *de minimis* impact on the circulation system. Given that the proposed project would merely replace an existing sewer line, the operation of the new sewer pipeline would not generate new daily or peak-hour trips. For these reasons, the proposed project would not conflict with any circulation program, plan, ordinance, or policy. No impact would occur.

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

No impact. The proposed project consists of the installation of a 2,990-lineal-foot, 24-inch diameter underground sewer pipeline between Las Colinas Road and Redwood Drive in the Springtown neighborhood. In addition, an existing nearby 33-inch diameter underground sewer pipeline would be abandoned in place. Given that the proposed project would merely replace an existing sewer line, there would be no net increase in daily vehicle trips or VMT. No impact would occur.

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

No impact. The proposed project consists of the installation of a 2,990-lineal-foot, 24-inch diameter underground sewer pipeline between Las Colinas Road and Redwood Drive in the Springtown neighborhood. In addition, an existing nearby 33-inch diameter underground sewer pipeline would be abandoned in place. The proposed project would not make any modifications to the circulation network that could potentially increase roadway safety hazards. No impact would occur.

d) Result in inadequate emergency access?

No impact. The proposed project consists of the installation of a 2,990-lineal-foot, 24-inch diameter underground sewer pipeline between Las Colinas Road and Redwood Drive in the Springtown neighborhood. In addition, an existing nearby 33-inch diameter underground sewer pipeline would be abandoned in place. The proposed project would not make any modifications to the circulation network that could impair emergency access. No impact would occur.

Mitigation Measures

None.

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

Environmental Evaluation

Would the project:

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

Less than significant impact. The proposed project consists of the installation of a 2,990-lineal-foot, 24-inch diameter underground sewer pipeline between Las Colinas Road and Redwood Drive in the Springtown neighborhood. In addition, an existing nearby 33-inch diameter underground sewer pipeline would be abandoned in place. The environmental impacts of project activities are evaluated herein. Additional impacts beyond those already evaluated as part of this Draft IS/MND are not anticipated. Additionally, the proposed project would not require or result in the construction of new or expanded utility infrastructure elsewhere. Therefore, impacts would be less than significant.

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

No impact. The proposed project consists of the installation of a 2,990-lineal-foot, 24-inch diameter underground sewer pipeline between Las Colinas Road and Redwood Drive in the Springtown neighborhood. In addition, an existing nearby 33-inch diameter underground sewer pipeline would be abandoned in place. The proposed project would not develop new residential or nonresidential uses that would cause an increase in demand for water. No impact would occur.

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

No impact. The proposed project consists of the installation of a 2,990-lineal-foot, 24-inch diameter underground sewer pipeline between Las Colinas Road and Redwood Drive in the Springtown neighborhood. In addition, an existing nearby 33-inch diameter underground sewer pipeline would be abandoned in place. As such, the project would downsize sewer capacity for the Springtown sewershed, which would reduce the potential for effluent to be generated from this area. This would reduce Springtown's sewage budget, which in turn would reduce the need for wastewater treatment. As such, no additional wastewater treatment capacity would be required. No impact would occur.

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

Less than significant impact. The proposed project consists of the installation of a 2,990-lineal-foot, 24-inch diameter underground sewer pipeline between Las Colinas Road and Redwood Drive in the Springtown neighborhood. In addition, an existing nearby 33-inch diameter underground sewer pipeline would be abandoned in place. Construction activities would generate solid waste, which is estimated to be no more than 40 cubic yards. The Vasco Road Sanitary Landfill has 5.6 million cubic yards of remaining capacity[18] and, thus, has sufficient capacity to accommodate the construction solid waste. Operational activities would not generate solid waste. Impacts would be less than significant.

e) Comply with federal, State, and local management and reduction statutes and regulations related to solid waste?

Less than significant impact. The proposed project consists of the installation of a 2,990-lineal-foot, 24-inch diameter underground sewer pipeline between Las Colinas Road and Redwood Drive in the Springtown neighborhood. In addition, an existing nearby 33-inch diameter underground sewer pipeline would be abandoned in place. Construction activities would generate solid waste, which is estimated to be no more than 40 cubic yards. The Vasco Road Sanitary Landfill offers construction

[18] California Department of Resources Recycling and Recovery (CalRecycle). 2023. Website: https://www2.calrecycle.ca.gov/SolidWaste/Site/Search. Accessed September 11 ,2023.

waste recycling and, therefore, the proposed project would comply with this requirement. Impacts would be less than significant.

Mitigation Measures

None.

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

Environmental Evaluation

Would the project:

a) Substantially impair an adopted emergency response plan or emergency evacuation plan?

No impact. Tri-Valley Hazard Mitigation Figure 14-1 indicates that the project site is not within a moderate, high, or very high wildfire hazard severity zone. The proposed project consists of the installation of a 2,990-lineal-foot, 24-inch diameter underground sewer pipeline between Las Colinas Road and Redwood Drive in the Springtown neighborhood. In addition, an existing nearby 33-inch diameter underground sewer pipeline would be abandoned in place. The proposed project would not make any modifications to the circulation network that could impair emergency response or evacuation. No impact would occur.

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

No impact. Tri-Valley Hazard Mitigation Figure 14-1 indicates that the project site is not within a moderate, high, or very high wildfire hazard severity zone. The proposed project consists of the installation of a 2,990-lineal-foot, 24-inch diameter underground sewer pipeline between Las Colinas

Road and Redwood Drive in the Springtown neighborhood. In addition, an existing nearby 33-inch diameter underground sewer pipeline would be abandoned in place. The proposed project would not increase exposure of persons or structures to wildland fire risks. No impact would occur.

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

No impact. Tri-Valley Hazard Mitigation Figure 14-1 indicates that the project site is not within a moderate, high, or very high wildfire hazard severity zone. The proposed project consists of the installation of a 2,990-lineal-foot, 24-inch diameter underground sewer pipeline between Las Colinas Road and Redwood Drive in the Springtown neighborhood. In addition, an existing nearby 33-inch diameter underground sewer pipeline would be abandoned in place. The proposed project would not increase exposure of persons or structures to wildland fire risks and, thus, would not require the installation of infrastructure such as roads, fuel breaks, emergency water sources, etc. No impact would occur.

d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?

No impact. Tri-Valley Hazard Mitigation Figure 14-1 indicates that the project site is not within a moderate, high, or very high wildfire hazard severity zone. The proposed project consists of the installation of a 2,990-lineal-foot, 24-inch diameter underground sewer pipeline between Las Colinas Road and Redwood Drive in the Springtown neighborhood. In addition, an existing nearby 33-inch diameter underground sewer pipeline would be abandoned in place. The proposed project would not increase exposure of persons or structures to wildland fire risks and, thus, would also not increase exposure to after-the-fact hazards. No impact would occur.

Mitigation Measures

None.

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

Environmental Evaluation

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

Less than significant impact with mitigation incorporated. The proposed project consists of the installation of a 2,990-lineal-foot, 24-inch diameter underground sewer pipeline between Las Colinas Road and Redwood Drive in the Springtown neighborhood. In addition, an existing nearby 33-inch diameter underground sewer pipeline would be abandoned in place. The proposed sewer alignment does not impact any known cultural or TCRs and, thus, would not eliminate important examples of major periods of California history or prehistory. The proposed project's biological resource impacts would be temporary and disturbed areas would be restored to pre-project conditions. With implementation of MM BIO-1 to MM BIO-11, impacts would be less than significant.

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

Less than significant impact. The proposed project consists of the installation of a 2,990-lineal-foot, 24-inch diameter underground sewer pipeline between Las Colinas Road and Redwood Drive in the Springtown neighborhood. In addition, an existing nearby 33-inch diameter underground sewer pipeline would be abandoned in place. The proposed project would not have cumulatively considerable impacts because of its limited area of disturbance and its characteristics (i.e., downsizing an existing sewer line). Impacts would be less than significant.

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

Less than significant impact. The proposed project consists of the installation of a 2,990-lineal-foot, 24-inch diameter underground sewer pipeline between Las Colinas Road and Redwood Drive in the Springtown neighborhood. In addition, an existing nearby 33-inch diameter underground sewer pipeline would be abandoned in place. The proposed project would not have substantial adverse effects on human beings because of its limited area of disturbance and its characteristics (i.e., downsizing an existing sewer line). Impacts would be less than significant.

Mitigation Measures

None.

THIS PAGE INTENTIONALLY LEFT BLANK

SECTION 3: LIST OF PREPARERS

FirstCarbon Solutions
2999 Oak Road, Suite 250
Walnut Creek, CA 94597
925.357.2562

Project Director ..... Mary Bean
Project Manager ..... Grant Gruber
Legal Counsel ..... Megan Starr, JD
Director of Cultural Resources ..... Dana DePietro, PhD, RPA
Director of Noise and Air Quality ..... Phil Ault, LEED® AP
Publications Manager ..... Susie Harris
Publications Coordinator ..... Alec Harris
Document Specialist ..... Melissa Ramirez
GIS/Graphics ..... Karlee McCracken
GIS/Graphics ..... Sebastian Macias

THIS PAGE INTENTIONALLY LEFT BLANK