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PROPOSED MITIGATED  
NEGATIVE DECLARATION / INITIAL STUDY

PREPARED FOR

SONOMA COUNTY  
PUBLIC INFRASTRUCTURE

***ARNOLD DRIVE BIKE LANE PROJECT***

C18122

**June 2024**



Prepared by  
Sonoma County Permit and Resource Management Department  
Environmental Review Division  
2550 Ventura Avenue  
Santa Rosa, California 95403

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# ***Proposed Mitigated Negative Declaration***

**Sonoma County Permit and Resource Management Department**  
2550 Ventura Avenue, Santa Rosa, CA 95403  
(707) 565-1900 FAX (707) 565-1103

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Publication Date:	June 4, 2024
Public Review Period:	June 4 thru July 3, 2024
State Clearinghouse Number:	TBD
Permit Sonoma File Number:	TBD
Prepared by:	Chris Seppeler
Phone:	(707) 565-1900

Pursuant to Section 15071 of the State CEQA Guidelines, this proposed Mitigated Negative Declaration and the attached Expanded Initial Study, including the identified mitigation measures and monitoring program, constitute the environmental review conducted by the County of Sonoma as lead agency for the proposed project described below:

**Project Name:** Arnold Drive Bike Lane Project

**Project Proponent:** County of Sonoma Public Infrastructure

**Lead Agency:** County of Sonoma

**Project Location/Address:** Arnold Drive from Country Club Drive to Madrone Road in unincorporated Sonoma County

**Decision Making Body:** Sonoma County Board of Supervisors

**Project Description:** The proposed project improvements include alterations along an approximately two-mile segment of Arnold Drive for the addition of Class II bicycle lanes on each side of the road. The project would require select areas of road widening, paving, signage/stripping improvements, storm drainage improvements, culvert extensions, frontage property improvements, and utility relocations. **See Item III in attached Expanded Initial Study.**

**Initial Study:** **See attached.** For more information, please contact Chris Seppeler, Senior Environmental Specialist, at (707) 565-8353.

**Mitigation Measures:** Included in attached Initial Study. The County has agreed to implement all mitigation measures.

**ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:**

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is determined to be “Less than Significant with Mitigation” as indicated in the attached Initial Study and in the summary table below.

**Table 1. Summary of Topic Areas Requiring Mitigation**

<b>Topic Area</b>	<b>Abbreviation*</b>	<b>Yes</b>	<b>No</b>
Aesthetics	VIS	X	
Agricultural & Forestry Resources	AG		X
Air Quality	AIR	X	
Biological Resources	BIO	X	
Cultural Resources	CUL	X	
Energy	ENERGY		X
Geology and Soils	GEO	X	
Greenhouse Gas Emissions	GHG		X
Hazards and Hazardous Materials	HAZ	X	
Hydrology and Water Quality	HYDRO	X	
Land Use and Planning	LU		X
Mineral Resources	MIN		X
Noise	NOISE	X	
Population and Housing	POP	X	
Public Services	PS		X
Recreation	REC		X
Transportation	TRAF	X	
Tribal Cultural Resources	TCR	X	
Utilities and Service Systems	UTL		X
Wildfire	WF	X	
Mandatory Findings of Significance	MFS	X	

## RESPONSIBLE AND TRUSTEE AGENCIES

Table 2 lists other public agencies whose approval is required for the project, or who have jurisdiction over resources potentially affected by the project.

**Table 2. Agencies and Permits Required**

<b>Agency</b>	<b>Activity</b>	<b>Authorization</b>
United States Army Corps of Engineers	Culvert extensions	Clean Water Act, Section 404 Nationwide Permit
Regional Water Quality Control Board (SF Bay)	Culvert extensions and fill of ephemeral drainages	Clean Water Act, Section 401 Water Quality Certification
California Department of Fish and Wildlife	Culvert extensions and fill of ephemeral drainages	Fish and Game Code, Section 1602 Notification of Lake or Streambed Alteration
State Water Resources Control Board	Ground disturbance exceeding 1 acre in size	State Water Resources Control Board Order No. 2009-0009-DWQ, Waste Discharge Requirements for Discharges of Storm Water Runoff Associated with Construction and Land Disturbance Activities, as amended by Order No. 2012-0006



# ***Expanded Initial Study***

## **Sonoma County Permit and Resource Management Department**

2550 Ventura Avenue, Santa Rosa, CA 95403  
(707) 565-1900 FAX (707) 565-1103

### **I. INTRODUCTION:**

The County of Sonoma is proposing to implement the Arnold Drive Bike Lane Project (“project”), which would add Class II bicycle lanes along an approximately two-mile segment of Arnold Drive from Country Club Drive to Madrone Road in unincorporated Sonoma County (see Figure 1). The project would require select areas of road widening, paving, signage/stripping improvements, storm drainage improvements, culvert extensions, frontage property improvements, and utility relocations.

The purpose of the project is to improve safety and mobility for nonmotorized transportation users. The Comprehensive Planning Division of the Sonoma County Permit and Resource Management Department reviewed the project and found it to be consistent with the goals, objectives, and policies of the Circulation and Transit Element of the County’s General Plan. The project aligns with County goals encouraging safe bicycle ridership and infrastructure, supporting zero emission transportation options, and aligning with the Countywide Bicycle and Pedestrian Master Plan. The Sonoma County Bicycle and Pedestrian Advisory Committee has also provided a determination of project consistency with the Countywide Bicycle and Pedestrian Master Plan.

This report is the Initial Study required by the California Environmental Quality Act (CEQA). The report was prepared by the Sonoma County Permit and Resource Management Department (Permit Sonoma) with support from its consultant team. Technical studies provided by qualified consultants are attached to this Expanded Initial Study to support the conclusions. Other reports, documents, maps and studies referred to in this document are available for review at the Permit Sonoma office or on the County’s website at: <https://tinyurl.com/Arnold-Drive>. Please contact Chris Seppeler, Senior Environmental Specialist, at (707) 565-8353, for more information.

### **II. EXISTING FACILITY**

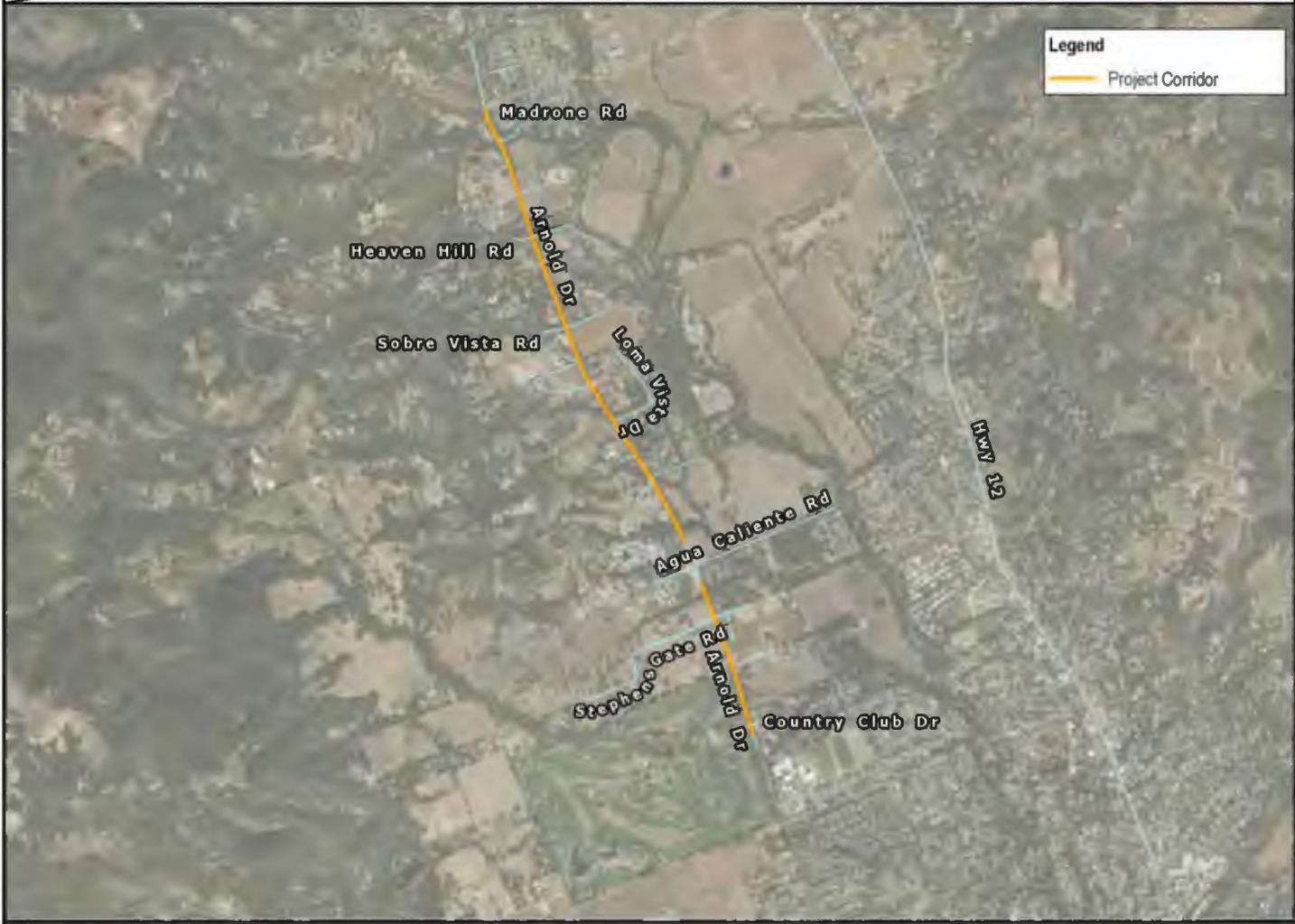
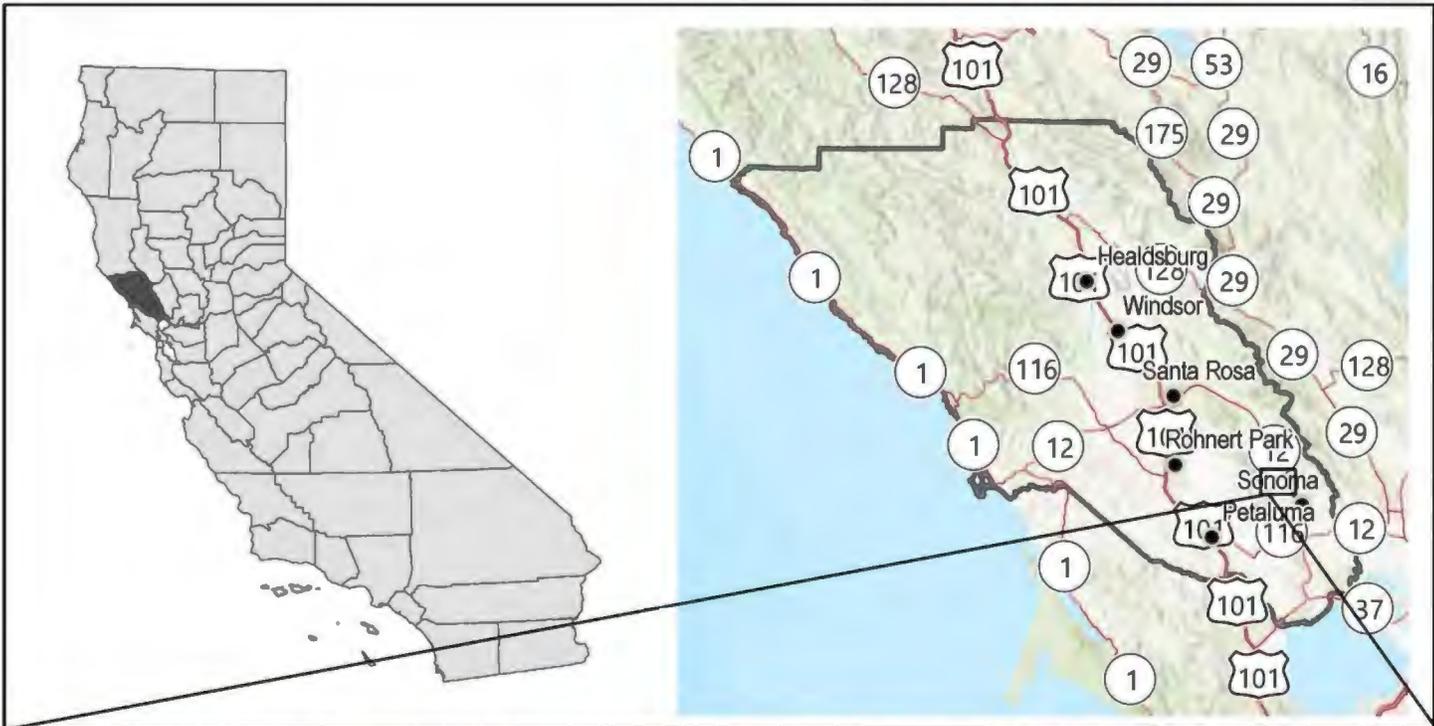
Arnold Drive is identified as an Urban Minor Arterial and a Scenic Corridor in the Sonoma County General Plan. Arnold Drive in the project area lacks bicycle infrastructure, creating disconnected facilities and an intimidating experience for people bicycling who are forced onto the pavement adjacent to high-volume, high-speed vehicle traffic. Traffic volumes along the project corridor average 10,000 to 13,000 vehicles per day with a posted speed limit of 45 miles per hour (mph).

The width of Arnold Drive in the project area varies between 25-feet and 40-feet, which includes a 12-foot travel lane in each direction and remaining shoulder width, along with roadside stormwater ditches and adjacent trees, vegetation, and private driveways. Stormwater along the project corridor sheet flows into roadside ditches, and multiple culvert structures accommodate watercourse crossings beneath Arnold Drive. Surrounding land uses include residential and agricultural properties, as well as St. Andrew Presbyterian Church, Hanna Center and Sonoma Golf Club.

### **III. SETTING**

Figure OSRC-5i of the Sonoma County General Plan designates Arnold Drive between Highway 12 and Highway 116 as a Scenic Corridor. The General Plan and Countywide Bicycle and Pedestrian Master Plan identify a proposed Class II bikeway along Arnold Drive in the project area. Farmland mapping designates several areas adjacent to the project corridor as unique farmland, farmland of local importance, and farmland of statewide importance.

Sonoma Creek flows parallel to the project corridor approximately 0.25-miles to 0.5-miles east of Arnold



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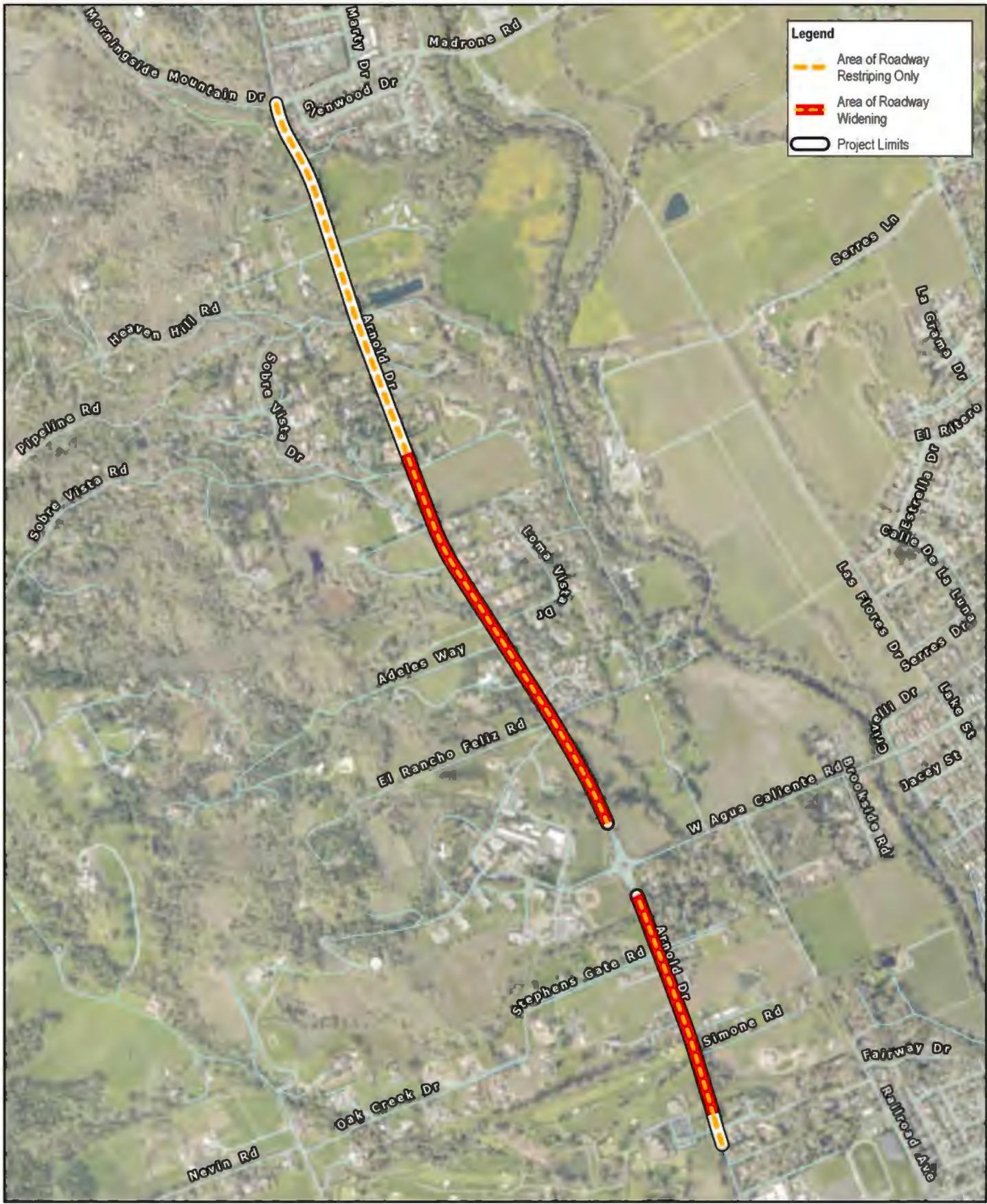


County of Sonoma  
 Arnold Drive  
 Bike Lane Project

Project No. 12556796  
 Revision No. -  
 Date Feb 2024

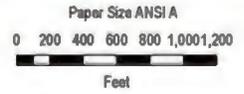
Vicinity Map

FIGURE 1



**Legend**

-  Area of Roadway Restriping Only
-  Area of Roadway Widening
-  Project Limits



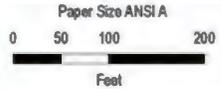
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**Project Limits**

**FIGURE 2**



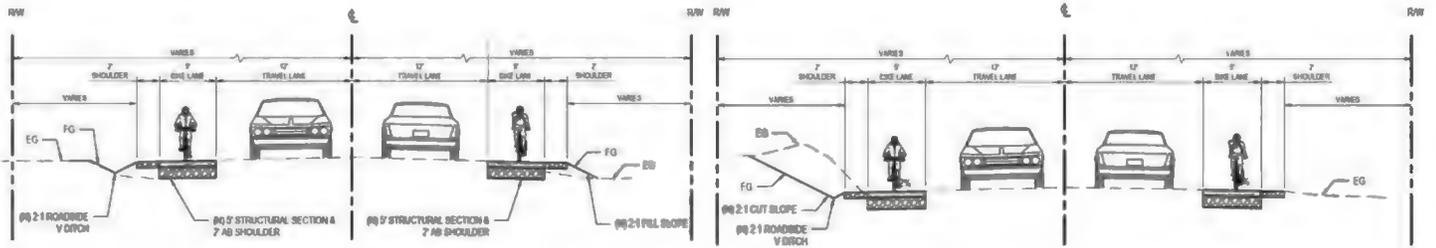
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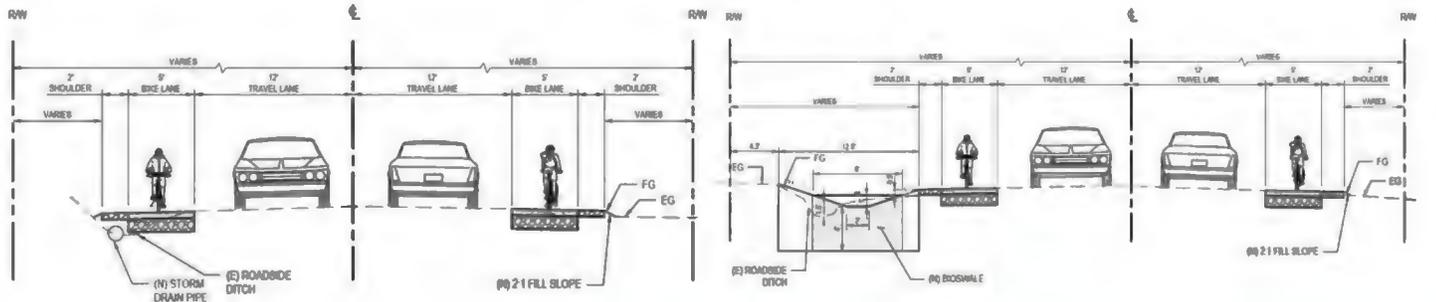
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**Areas of Roadway Widening  
 and Culvert Extensions**

**FIGURE 3**



## Typical Roadway Sections



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County of Sonoma  
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Typical Roadway Sections  
and Visual Simulation

FIGURE 4

**Culvert Extension 1**



**Culvert Extension 2**



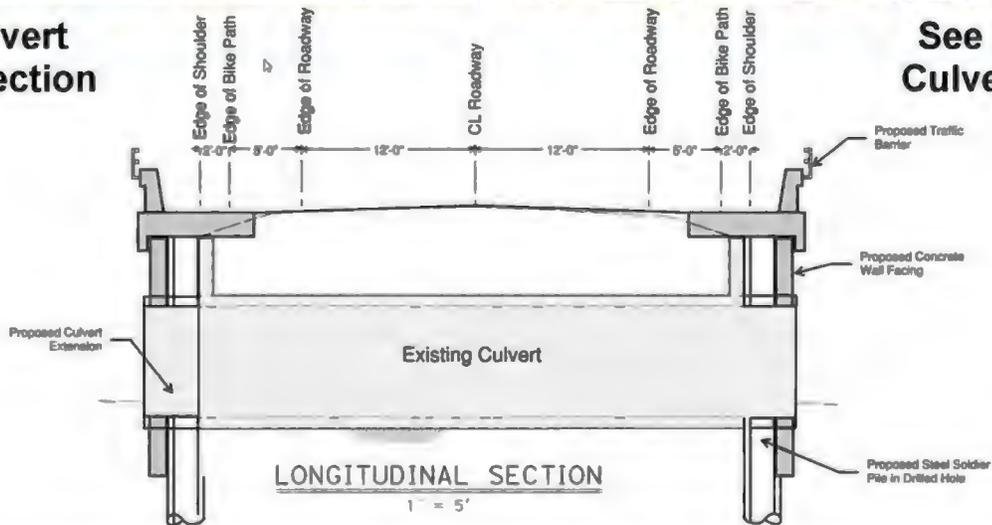
**Culvert Extension 3**



**Culvert Extension 4**



**Typical Culvert Extension Section**



**See Figure 3 for Culvert Locations**

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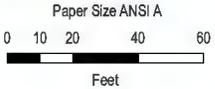
Storm Water  
Culvert Extensions

**FIGURE 5**

Tree ID	Species	Common Name	Height(ft)	Radius
26	Quercus lobata	Valley Oak	55	38
17	Quercus agrifolia	Coast Live Oak	15	9
12	Quercus lobata	Valley Oak	41	45

**Legend**

-  Tree to be Removed
-  Centerline
-  Property Boundaries
-  Public ROW
-  Roadway Widening Area



Map Projection: Lambert Conformal Conic  
Horizontal Datum: North American 1983  
Grid: NAD 1983 StatePlane California II FIPS 0402 Feet

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Arnold Drive  
Bike Lane Project

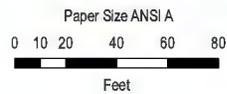
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**Tree Removal  
and Revegetation Plan**

**FIGURE 6-1**

Tree ID	Species	Common Name	Height(ft)	Radius
81	Umbellularia californica	Bay Laurel	20	9
80	Umbellularia californica	Bay Laurel	31	13

- Legend**
-  Tree to be Removed
  -  Tree to be Planted
  -  Tree Planting Area
  -  Centerline
  -  Property Boundaries
  -  Public ROW
  -  Roadway Widening Area



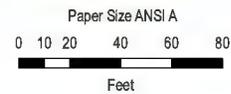
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**Tree Removal  
and Revegetation Plan**

**FIGURE 6-2**



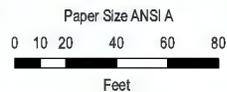
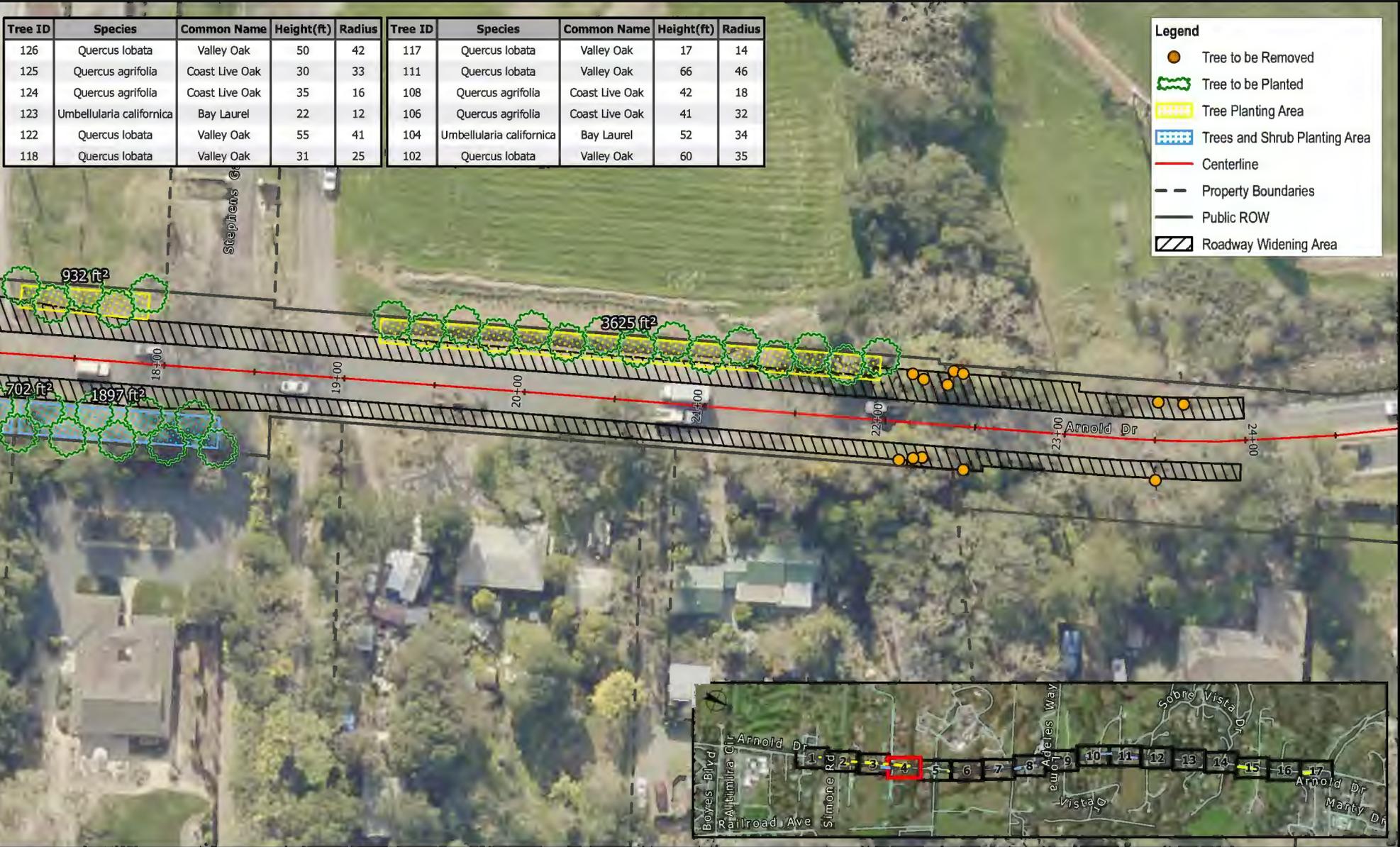
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**Tree Removal  
and Revegetation Plan**

**FIGURE 6-3**



Map Projection: Lambert Conformal Conic  
Horizontal Datum: North American 1983  
Grid: NAD 1983 StatePlane California II FIPS 0402 Feet



County of Sonoma  
Arnold Drive  
Bike Lane Project

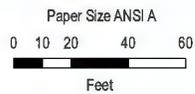
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**Tree Removal  
and Revegetation Plan**

**FIGURE 6-4**



- Legend**
- Tree to be Removed
  - Tree to be Planted
  - Tree Planting Area
  - Centerline
  - Property Boundaries
  - Public ROW
  - Roadway Widening Area



Map Projection: Lambert Conformal Conic  
 Horizontal Datum: North American 1983  
 Grid: NAD 1983 StatePlane California II FIPS 0402 Feet

County of Sonoma  
 Arnold Drive  
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**Tree Removal  
 and Revegetation Plan**

**FIGURE 6-5**

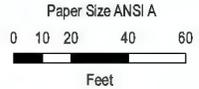
Tree ID	Species	Common Name	Height(ft)	Radius
288	Quercus lobata	Valley Oak	31	18
287	Quercus lobata	Valley Oak	28	20
286	Quercus lobata	Valley Oak	29	13
285	Quercus agrifolia	Coast Live Oak	28	24
284	Quercus lobata	Valley Oak	27	16
283	Quercus lobata	Valley Oak	31	23
282	Quercus agrifolia	Coast Live Oak	28	19
281	Quercus agrifolia	Coast Live Oak	25	15

Tree ID	Species	Common Name	Height(ft)	Radius
280	Quercus agrifolia	Coast Live Oak	29	19
279	Quercus agrifolia	Coast Live Oak	29	16
163	Quercus agrifolia	Coast Live Oak	19	13
162	Quercus agrifolia	Coast Live Oak	18	10
161	Quercus agrifolia	Coast Live Oak	37	28
160	Quercus agrifolia	Coast Live Oak	18	28
159	Quercus lobata	Valley Oak	28	28
158	Quercus agrifolia	Coast Live Oak	24	7

Tree ID	Species	Common Name	Height(ft)	Radius
157	Quercus agrifolia	Coast Live Oak	24	10
142	Quercus lobata	Valley Oak	22	16
139	Eucalyptus species	Eucalyptus	122	26
134	Fraxinus latifolia	Oregon Ash	19	15
501	NA	NA	0	0
500	Stump	NA	0	0

**Legend**

- Tree to be Removed
- Tree to be Planted
- Tree Planting Area
- Centerline
- Public ROW
- Roadway Widening Area



Map Projection: Lambert Conformal Conic  
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County of Sonoma  
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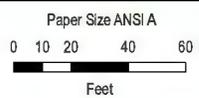
**Tree Removal  
 and Revegetation Plan**

**FIGURE 6-6**

Tree ID	Species	Common Name	Height(ft)	Radius	Tree ID	Species	Common Name	Height(ft)	Radius	Tree ID	Species	Common Name	Height(ft)	Radius
408	Quercus agrifolia	Coast Live Oak	19	14	177	Quercus lobata	Valley Oak	32	31	169	Quercus agrifolia	Coast Live Oak	24	13
407	Quercus agrifolia	Coast Live Oak	28	15	176	Quercus agrifolia	Coast Live Oak	34	24	168	Quercus lobata	Valley Oak	37	26
406	Quercus agrifolia	Coast Live Oak	18	10	175	Quercus agrifolia	Coast Live Oak	16	12	167	Quercus agrifolia	Coast Live Oak	17	10
405	Aesculus californica	Buckeye	18	21	174	Quercus agrifolia	Coast Live Oak	15	6	166	Quercus lobata	Valley Oak	31	25
404	Quercus lobata	Valley Oak	35	17	173	Quercus agrifolia	Coast Live Oak	27	9	165	Quercus agrifolia	Coast Live Oak	21	22
290	Quercus agrifolia	Coast Live Oak	19	14	172	Quercus lobata	Valley Oak	24	33	164	Quercus agrifolia	Coast Live Oak	17	6
289	Quercus lobata	Valley Oak	27	12	171	Quercus lobata	Valley Oak	34	31	501	NA	NA	0	0
180	Quercus agrifolia	Coast Live Oak	33	29	170	Quercus lobata	Valley Oak	18	6					

**Legend**

- Tree to be Removed
- Tree to be Planted
- ▨ Trees and Shrub Planting Area
- Centerline
- - - Property Boundaries
- Public ROW
- ▨ Roadway Widening Area



Map Projection: Lambert Conformal Conic  
 Horizontal Datum: North American 1983  
 Grid: NAD 1983 StatePlane California II FIPS 0402 Feet

County of Sonoma  
 Arnold Drive  
 Bike Lane Project

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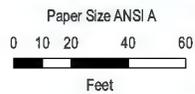
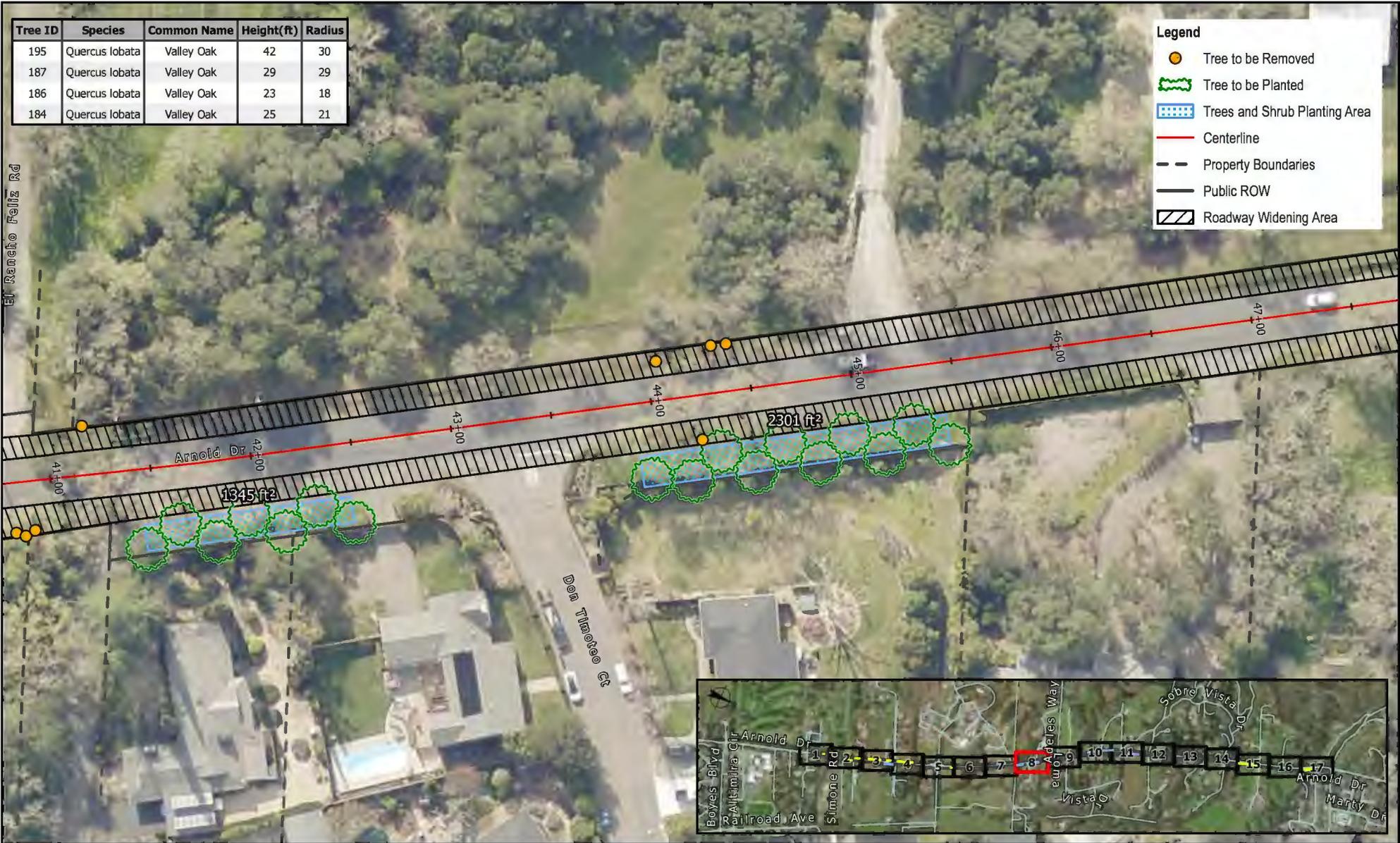
**Tree Removal  
 and Revegetation Plan**

**FIGURE 6-7**

Tree ID	Species	Common Name	Height(ft)	Radius
195	Quercus lobata	Valley Oak	42	30
187	Quercus lobata	Valley Oak	29	29
186	Quercus lobata	Valley Oak	23	18
184	Quercus lobata	Valley Oak	25	21

**Legend**

-  Tree to be Removed
-  Tree to be Planted
-  Trees and Shrub Planting Area
-  Centerline
-  Property Boundaries
-  Public ROW
-  Roadway Widening Area



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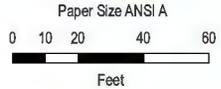
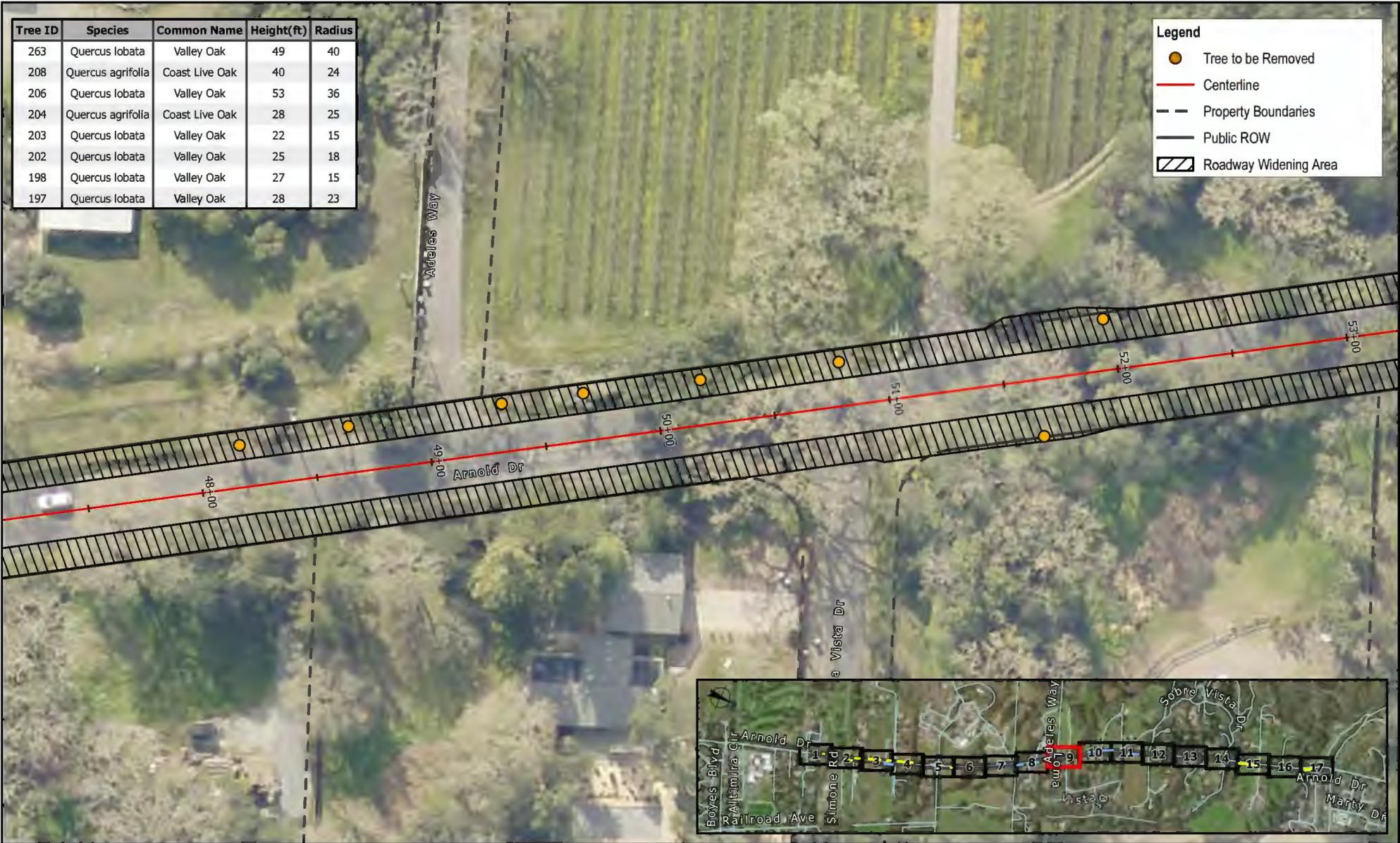
**Tree Removal  
 and Revegetation Plan**

**FIGURE 6-8**

Tree ID	Species	Common Name	Height(ft)	Radius
263	Quercus lobata	Valley Oak	49	40
208	Quercus agrifolia	Coast Live Oak	40	24
206	Quercus lobata	Valley Oak	53	36
204	Quercus agrifolia	Coast Live Oak	28	25
203	Quercus lobata	Valley Oak	22	15
202	Quercus lobata	Valley Oak	25	18
198	Quercus lobata	Valley Oak	27	15
197	Quercus lobata	Valley Oak	28	23

**Legend**

-  Tree to be Removed
-  Centerline
-  Property Boundaries
-  Public ROW
-  Roadway Widening Area



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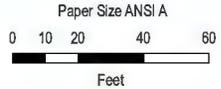
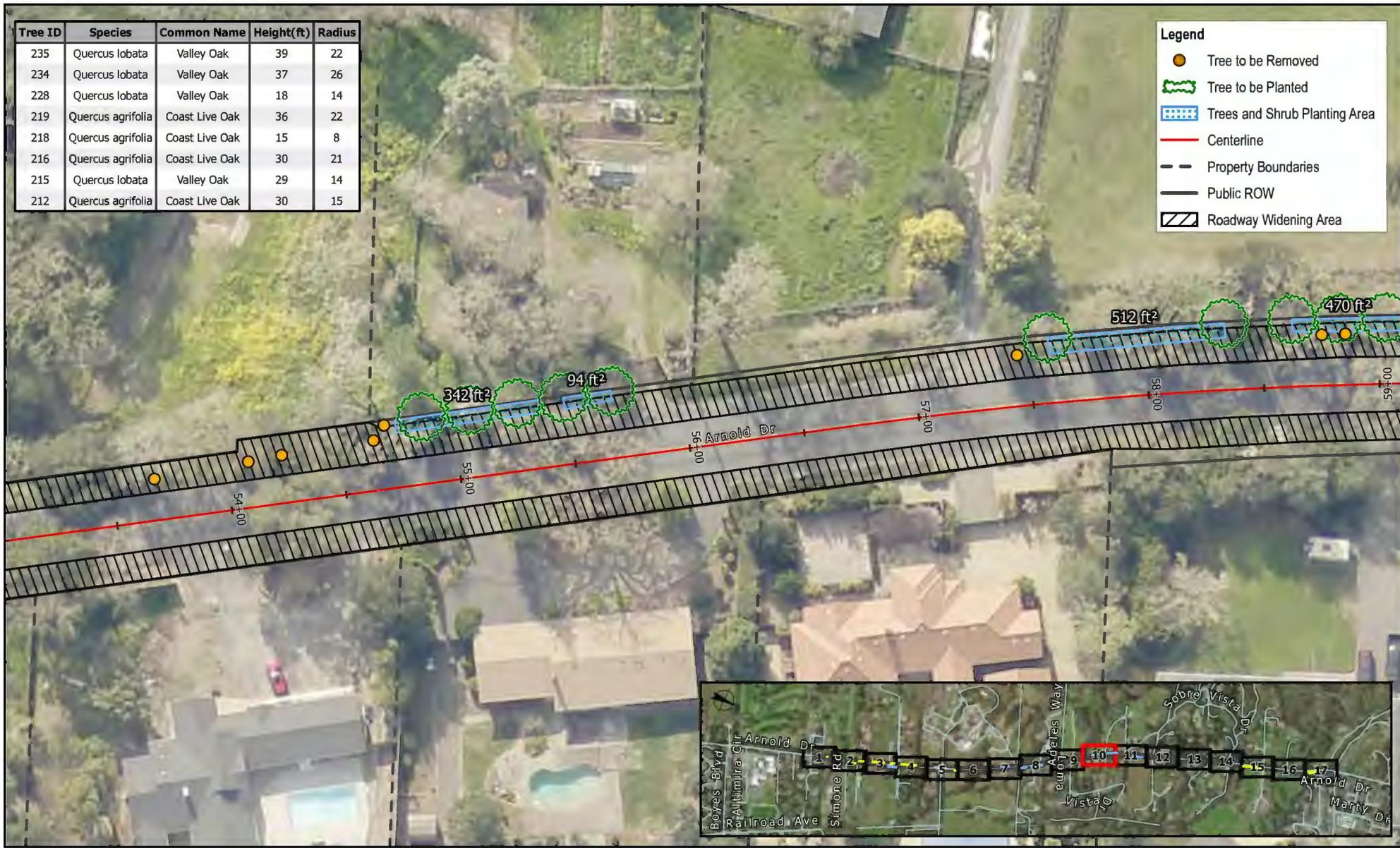
**Tree Removal  
 and Revegetation Plan**

**FIGURE 6-9**

Tree ID	Species	Common Name	Height(ft)	Radius
235	Quercus lobata	Valley Oak	39	22
234	Quercus lobata	Valley Oak	37	26
228	Quercus lobata	Valley Oak	18	14
219	Quercus agrifolia	Coast Live Oak	36	22
218	Quercus agrifolia	Coast Live Oak	15	8
216	Quercus agrifolia	Coast Live Oak	30	21
215	Quercus lobata	Valley Oak	29	14
212	Quercus agrifolia	Coast Live Oak	30	15

**Legend**

- Tree to be Removed
- Tree to be Planted
- Trees and Shrub Planting Area
- Centerline
- Property Boundaries
- Public ROW
- Roadway Widening Area



Map Projection: Lambert Conformal Conic  
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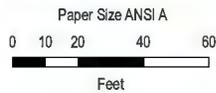
**Tree Removal  
 and Revegetation Plan**

**FIGURE 6-10**

Tree ID	Species	Common Name	Height(ft)	Radius
312	Eucalyptus species	Eucalyptus	71	55
250	Quercus lobata	Valley Oak	50	30
249	Quercus lobata	Valley Oak	32	20
243	Quercus lobata	Valley Oak	61	40
242	Quercus lobata	Valley Oak	35	26
240	Quercus lobata	Valley Oak	34	25
239	Quercus agrifolia	Coast Live Oak	35	30
238	Quercus agrifolia	Coast Live Oak	16	5
237	Quercus agrifolia	Coast Live Oak	16	7

**Legend**

- Tree to be Removed
- Tree to be Planted
- Trees and Shrub Planting Area
- Centerline
- Property Boundaries
- Public ROW
- Roadway Widening Area



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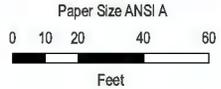
**Tree Removal  
 and Revegetation Plan**

**FIGURE 6-11**

Tree ID	Species	Common Name	Height(ft)	Radius
359	Eucalyptus species	Eucalyptus	70	34
295	Eucalyptus species	Eucalyptus	81	42

**Legend**

-  Tree to be Removed
-  Centerline
-  Property Boundaries
-  Public ROW
-  Roadway Widening Area



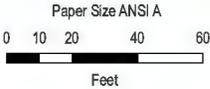
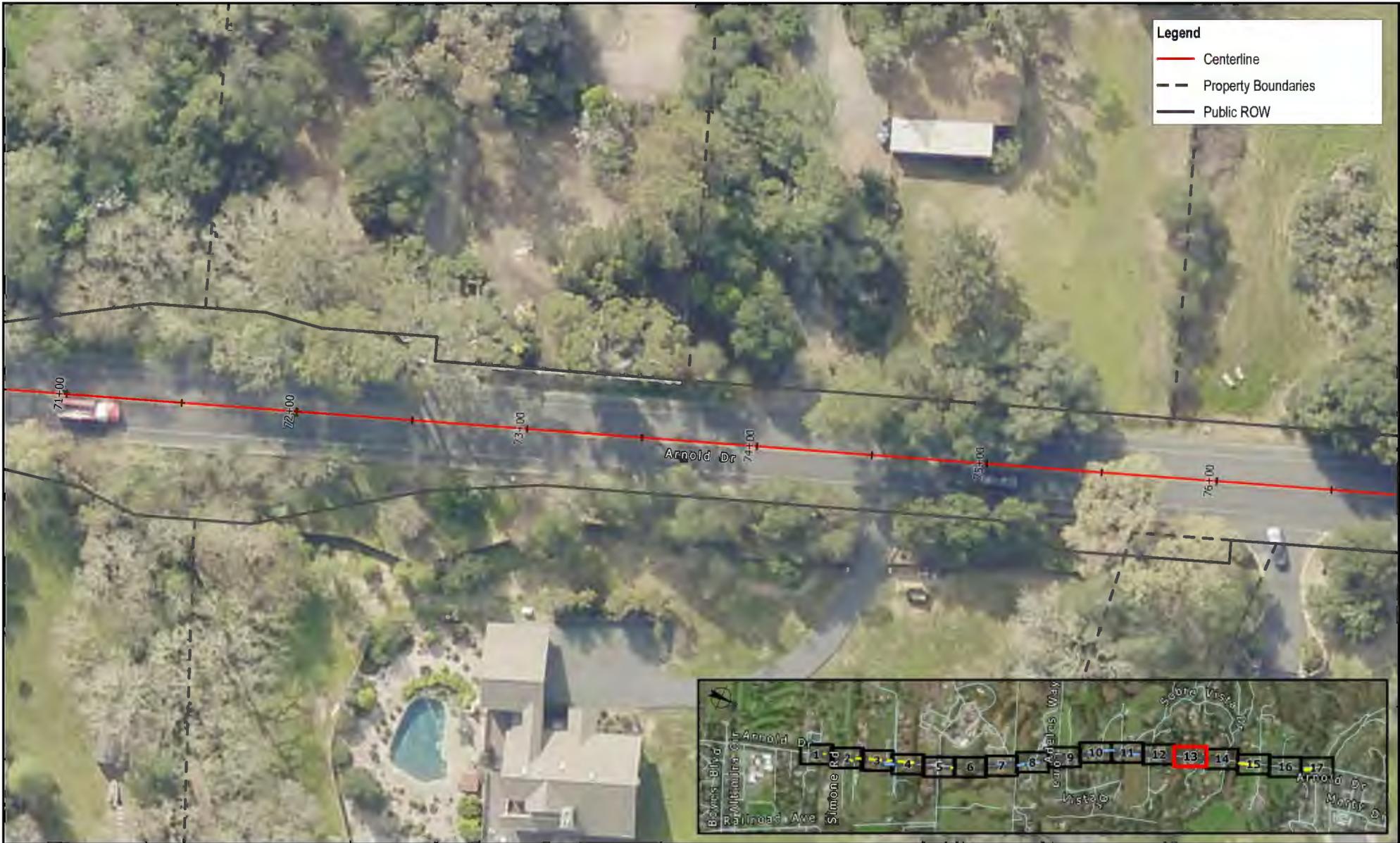
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County of Sonoma  
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**Tree Removal  
and Revegetation Plan**

**FIGURE 6-12**



Map Projection: Lambert Conformal Conic  
 Horizontal Datum: North American 1983  
 Grid: NAD 1983 StatePlane California II FIPS 0402 Feet



County of Sonoma  
 Arnold Drive  
 Bike Lane Project

Project No. 12556796  
 Revision No. C  
 Date May 2024

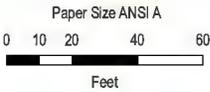
**Tree Removal  
 and Revegetation Plan**

**FIGURE 6-13**



**Legend**

- Centerline
- - - Property Boundaries
- Public ROW



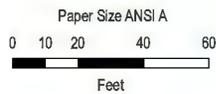
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 Grid: NAD 1983 StatePlane California II FIPS 0402 Feet

County of Sonoma  
 Arnold Drive  
 Bike Lane Project

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 Revision No. C  
 Date May 2024

**Tree Removal  
 and Revegetation Plan**

**FIGURE 6-14**



Map Projection: Lambert Conformal Conic  
 Horizontal Datum: North American 1983  
 Grid: NAD 1983 StatePlane California II FIPS 0402 Feet

County of Sonoma  
 Arnold Drive  
 Bike Lane Project

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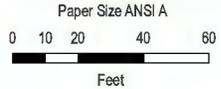
**Tree Removal  
 and Revegetation Plan**

**FIGURE 6-15**



**Legend**

- Centerline
- - - Property Boundaries
- Public ROW



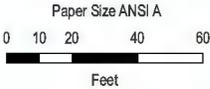
Map Projection: Lambert Conformal Conic  
 Horizontal Datum: North American 1983  
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County of Sonoma  
 Arnold Drive  
 Bike Lane Project

Project No. 12556796  
 Revision No. C  
 Date May 2024

**Tree Removal  
 and Revegetation Plan**

**FIGURE 6-16**



Map Projection: Lambert Conformal Conic  
Horizontal Datum: North American 1983  
Grid: NAD 1983 StatePlane California II FIPS 0402 Feet

County of Sonoma  
Arnold Drive  
Bike Lane Project

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Revision No. C  
Date May 2024

**Tree Removal  
and Revegetation Plan**

**FIGURE 6-17**

Sonoma Creek flows parallel to the project corridor approximately 0.25-miles to 0.5-miles east of Arnold Drive, and the project corridor crosses 13 ephemeral and intermittent watercourses that hydrologically connect to Sonoma Creek. Each watercourse is ephemeral and typically dry during summer and early fall months. According to Federal Emergency Management Agency (FEMA) Flood Map 06097C0910E, Panel 910, a designated 100-year floodzone has been identified with no base flood elevations determined along a watercourse crossing beneath Arnold Drive near Loma Vista Drive.

#### **IV. PROJECT DESCRIPTION**

The proposed project would add Class II bicycle lanes along an approximately two-mile segment of Arnold Drive from Country Club Drive to Madrone Road. The project would require select areas of road widening, paving, signage/stripping improvements, storm drainage improvements, culvert extensions, frontage property improvements, and utility relocations (see Figures 2 through 5).

##### **Roadway Improvements**

The project would accommodate a twelve-foot travel lane, a five-foot wide Class II bike lane, and a two-foot rocked shoulder on both sides of Arnold Drive in the project area. The project is not anticipated to require widening of Arnold Drive between Madrone Road and an area just north of Sobre Vista Road. However, new widened roadway sections would be required along Arnold Drive between Sobre Vista Road and an area north of Aqua Caliente Road, as well as along Arnold Drive between an area just south of Agua Caliente Road and Golf Course Drive. Where widening is required, a new roadway section would be constructed on each side of Arnold Drive. The project would connect to existing shared facilities at the northern end of the project limits near Madrone Road, and would conform to existing striping at the traffic circle at Aqua Caliente Road. At the southern end of the project limits near Country Club Drive, the project would connect to existing on-street bicycle lanes.

##### **Storm Water Facilities**

Storm water would be managed by reconstructed and realigned roadside ditches, storm drain pipes under driveways, culvert crossing extensions, and potential vegetated stormwater low impact development facilities. Roadside drainage ditches adjacent to the certain sections of Arnold Drive would be shifted laterally and accommodated in new vegetated swales, and where space is limited, a piped storm drain system may be implemented. Vegetated low impact development treatment areas would be implemented into the design in coordination with the San Francisco Bay Regional Water Quality Control Board, where feasible.

Four existing box culverts and headwalls would be extended using cantilevered soldier pile wall structures designed to limit horizontal movement. This structure type would consist of a 12-inch thick reinforced concrete wall facing to retain the existing roadway. The wall facing would be restrained by steel soldier piles placed in drilled holes that would extend below the bottom of the wall facing. The wall facing would extend below the bottom of the culvert to provide scour protection. In areas where the retained height of wall would be 3-feet or less, a segmental block retaining wall is proposed.

##### **Utility Relocations**

Existing underground utilities, such as sewer, water, and gas, are anticipated to remain in their current locations. Manholes and utility covers would be raised to the new finished grade. Approximately 11 existing PG&E and AT&T overhead utility poles would be relocated along the new edge of pavement within County right-of-way. Several fire hydrants may also potentially require relocation.

##### **Construction**

Construction of the project is anticipated to begin in either 2024 or 2025 and anticipated to be completed within an approximately 6 to 9 month timeframe. Construction activities (including equipment start-up, operation, servicing, and deliveries) would be restricted to the hours of 7:00 a.m. and 7:00 p.m. on weekdays and 9:00 a.m. and 5:00 p.m. on Saturdays. No construction would occur on Sundays or holidays. Based on the type and extent of work to be performed, nighttime construction is not anticipated, and would only be performed under the approval of the County's Resident Engineer.

Prior to construction, the contractor would mobilize resources to staging areas. This would include transport of construction vehicles and equipment, as well as delivery and storage of construction

materials. The contractor may also secure a job site trailer and portable sanitary facilities at certain areas. Several staging areas may be used to store construction materials and equipment during construction. Construction staging within and adjacent to County of Sonoma rights-of-way would likely occur along various portions of the alignment in areas where work was occurring. This type of staging would generally include short-term staging of construction equipment and materials.

Construction of the project would involve demolition, clearing, excavation, grading, trenching, paving, and roadway construction. The overall construction area for the project would be approximately 3.8 acres in size. A variety of construction equipment would be used to build the project. This would include, but not necessarily be limited to, excavators, backhoes, front end loaders, scrapers, graders, concrete saws, small cranes, jackhammers, chainsaws, rough terrain fork lifts, rollers, asphalt road pavers, compactors, air compressors, generator sets, and pneumatic tools. A variety of trucks including cement mixers, haul trucks, and water trucks would also be required.

A Tree Inventory Study was completed for the project to identify the species, size, health, and structural condition of trees along Arnold Drive in the project area (Horticultural Associates, 2023). The Tree Inventory Study evaluated 510 trees located along the project corridor that are within 10-feet of the pavement edge on both sides of Arnold Drive that have a trunk diameter of 6-inches or greater. In some areas, trees located beyond the 10-foot distance were inventoried where modification of culverts is being proposed. Based on a review of the project boundary and roadway widening areas, 425 of the identified trees along the project corridor would be preserved, which corresponds to 83 percent of the trees immediately adjacent to Arnold Drive in the project area. Up to approximately 85 trees would be potentially impacted due to roadway widening, culvert extensions, and drainage improvements. Of the 85 potentially impacted trees, 75 are native oak trees, including 36 coast live oaks and 39 valley oaks.

Figures 6-1 through 6-17 provide information on the location of the trees that may potentially be impacted, including the species, height, and diameter of the trees, as well as a preliminary revegetation plan. Trees that are damaged or removed would be replaced in-kind with native trees (coast live oaks and valley oaks) and California native and regionally appropriate shrub species, including but not limited to, toyon, ceanothus, snowberry, manzanita, and scrub oak, all of which would be planted as close as feasible to the area in which an existing tree is removed.

Site preparation, including demolition, clearing and grading of the project site as necessary would include the removal and off-haul of materials. This would include, but not necessarily be limited to, vegetation, concrete, asphalt and fill, and certain existing utilities that would be removed and replaced. In areas to be widened, vegetation and debris would be cleared, and any unstable soils would be excavated and replaced with properly compacted fill to raise levels to finished grade.

Import of construction materials would include, but not necessarily be limited to, concrete, fill, material for bioretention areas, asphalt concrete, utility pipes, catch basins. Project construction is anticipated to require approximately 150 cubic yards (CY) of off-haul and approximately 250 CY of in-haul. The number of construction-related vehicles traveling to and from the project site would vary on a daily basis. For the purposes of evaluation, it is anticipated up to 24 haul truck round trips could occur on a peak day. In addition to haul trucks, it is anticipated that construction crew trips could require up to 16 round trips per day. Therefore, on the busiest days of construction, up to approximately 40 vehicle round trips could occur.

Vegetation removed from the project site would be off-hauled for recycling or composting. Construction debris would be recycled where feasible. Materials found unsuitable for reuse or recycling would be disposed of at a regional landfill, such as the Central Disposal site in Petaluma, the Redwood Sanitary Landfill in the City of Novato, Potrero Hills Landfill in Suisun City, Vasco Road Landfill in the City of Livermore, and/or the Keller Canyon Landfill in the City of Pittsburg.

### **Right of Way and Easements**

The project is not anticipated to require right-of-way acquisition. Slope easements and temporary construction easements would be required from approximately 11 properties along the project corridor.

**Maintenance and Operation**

Following construction, routine operation and maintenance would be required as part of the project. This would include periodic street sweeping, roadway repairs, and maintenance of storm water facilities. Vehicle trips associated with operation and maintenance within the project corridor currently occur under existing conditions. The project would not directly result in new daily vehicle trips on local roadways.

## V. ISSUES RAISED BY THE PUBLIC OR AGENCIES

### Agency Referral

A referral packet was circulated to inform and solicit comments from selected relevant local and state agencies and to special districts and special interest groups that were anticipated to take interest in the project. As of the date of this Expanded Initial Study, the project planner has received responses to the project referral from:

- Mark Feichtmeir
- Brad Danitz
- Patrick J. McKenna
- Les Boschke
- Dan Aires
- Hanna Center

### Tribal Consultation Under AB52

In compliance with PRC Section 21080.3.1(b), the County provided formal notification of the proposed project to California Native American tribal representatives. The County sent letters to the following Native American Tribes on June 13, 2023:

- Lytton Rancheria of California
- Federated Indians of Graton Rancheria
- Cloverdale Rancheria of Pomo Indians
- Dry Creek Rancheria Band of Pomo Indians
- Kashia Pomos Stewarts Point Rancheria
- Middletown Rancheria Band of Pomo Indians
- Mishewal Wappo Tribe of Alexander Valley
- Guidiville Indian Rancheria
- Muwekma Ohlone Tribe San Francisco Bay Area
- Pinoleville Pomo Nation
- Robinson Rancheria of Pomo

On July 5, 2023, the Lytton Rancheria responded acknowledging receipt of the referral, and confirming that the Lytton Rancheria is not requesting consultation.

### Public Comments

A community meeting was held for the project on April 24, 2023, where the public was invited to provide comments on the project. Key issues raised by the public as areas of potential environmental concern included drainage and tree removal. There was substantial support for the project, citing the need for more bike lanes County-wide.

## VI. OTHER RELATED PROJECTS

No other related projects have been identified.

## VII. EVALUATION OF ENVIRONMENTAL IMPACTS

This section analyzes the potential environmental impacts of this project based on the criteria set forth in the State CEQA Guidelines and the County's implementing ordinances and guidelines. For each item, one of four responses is given:

**No Impact: The project would not have the impact described.** The project may have a beneficial effect, but there is no potential for the project to create or incrementally add to the impact described.

**Less Than Significant Impact:** The project would have the impact described, but the impact would not be significant. Mitigation is not required, although the County may choose to modify the project to avoid the impacts.

**Potentially Significant Unless Mitigated:** The project would have the impact described, and the impact could be significant. One or more mitigation measures have been identified that will reduce the impact to a less than significant level.

**Potentially Significant Impact:** The project would have the impact described, and the impact could be significant. The impact cannot be reduced to less than significant by incorporating mitigation measures. An environmental impact report must be prepared for the project.

Each question was answered by evaluating the project as proposed, that is, without considering the effect of any added mitigation measures. The Initial Study includes a discussion of the potential impacts and identifies mitigation measures to substantially reduce those impacts to a level of insignificance where feasible. All references and sources used in this Initial Study are listed in the Reference section at the end of this report and are incorporated herein by reference.

The Sonoma County Department of Transportation and Public Works has agreed to accept all mitigation measures listed in this Initial Study as conditions of approval for the proposed project, and to obtain all necessary permits, notify all contractors, agents and employees involved in project implementation.

# 1. AESTHETICS:

Would the project:

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

Comment:

The Sonoma County General Plan divides scenic resources into three categories: 1) Community Separators, 2) Scenic Landscape Units, and 3) Scenic Highway Corridors. Figure OSRC-5i of the County's General Plan designates the approximately 9-mile stretch of Arnold Drive between Highway 12 and Highway 116 as a Scenic Corridor. Section 2.3 of the County's General Plan Open Space and Resource Conservation Element addresses the County's policies for Scenic Corridors, noting that many residents of Sonoma County highly value the variety and beauty of the County's many landscapes as viewed from rural roadways, and that preserving such landscapes is important to the character of the County.

Below is a list of the goals, objectives, and policies of the Sonoma County General Plan that apply to Scenic Corridors, along with an analysis of project consistency for each.

**Goal OSRC-3:** Identify and preserve roadside landscapes that have a high visual quality as they contribute to the living environment of local residents and to the County's tourism economy.

*Project Analysis:* Arnold Drive within the project area includes the existing developed road (Arnold Drive), adjacent mixed oak woodland, eucalyptus groves, low density residential development, agricultural ponds, vineyards, and watercourses with associated riparian habitat. Native oak trees are identified in the County General Plan as trees that should be preserved and regenerated, and such trees add to the quality of the Arnold Drive Scenic Corridor.

*As part of this Initial Study, a Tree Inventory Study was completed to identify the species, size, health, and structural condition of trees along the Arnold Drive Scenic Corridor in the project area (Horticultural Associates, 2023). The Tree Inventory Study evaluated 510 trees located along the project corridor that are within 10-feet of the pavement edge on both sides of Arnold Drive that have a trunk diameter of 6-inches or greater. In some areas, trees located beyond the 10-foot distance were inventoried where modification of culverts is being proposed. Native trees in the project area are primarily Coast Live Oak and Valley Oak, with small quantities of other natives including Buckeye, Bay Laurel, Madrone, and Big Leaf Maple. Non-native trees in the project area include Italian Cypress, Empress Tree, Olive, Eucalyptus, Wild Plum, and Green Wattle.*

*The Tree Inventory Study included a preliminary assessment of potential impacts for each tree based on a preliminary project boundary associated with the roadway widening for the addition of the proposed Class II bike lanes along Arnold Drive in the project area. For discussion of potential impacts to scenic roadside landscapes, please see the analysis below relative to General Plan Policy OSRC-3h.*

**Obj. OSRC-3.1:** Designate the Scenic Corridors on Figures OSRC-5a through OSRC-5i of the General Plan along roadways that cross highly scenic areas, provide visual links to major recreation areas, give access to historic areas, or serve as scenic entranceways to cities.

*Analysis:* Figure OSRC-5i of the County's General Plan designates the approximately 9-mile stretch of Arnold Drive between Highway 12 and Highway 116 as a Scenic Corridor.

**Obj. OSRC-3.2:** Provide guidelines so future land uses, development and roadway construction are compatible with the preservation of scenic values along designated Scenic Corridors.

*Analysis:* The County's guidelines for scenic resource considerations are summarized in General Plan Policies OSRC-3a through OSRC-3i below.

**Policy OSRC-3a:** Apply the Scenic Resources combining district to those portions of properties within Scenic Corridor setbacks.

*Analysis:* This General Plan Policy is not applicable to the project, because Arnold Drive is a public road right-of-way that does not have an assigned land use and zoning designation and is not subject to overlaid combining districts.

**Policy OSRC-3b:** For development on parcels located both within Scenic Landscape Units and adjacent to Scenic Corridors, apply the more restrictive siting and setback policies to preserve visual quality.

*Analysis:* This General Plan Policy is not applicable to the project, because Arnold Drive is a public road right-of-way that does not have an assigned land use and zoning designation. In addition, the project does not include new structures within Scenic Landscape Units.

**Policy OSRC-3c:** Establish a rural Scenic Corridor setback of 30 percent of the depth of the lot to a maximum of 200 feet from the centerline of the road unless a different setback is provided in the Land Use Policies for the Planning Areas.

*Analysis:* This General Plan Policy is not applicable to the project, because Arnold Drive is a public road right-of-way that does not have an assigned land use and zoning designation with designated setbacks.

**Policy OSRC-3d:** Establish a building setback of 20 feet along the Highway 101 Scenic Corridor in Urban Service Areas to be reserved for landscaping. Where a sound barrier or other sound mitigating structure must be located along a Scenic Corridor, ensure that the landscaped area is visible from the highway. Cooperate with State agencies to achieve compatible goals with regard to visual quality along Scenic Corridors.

*Analysis:* This General Plan Policy is not applicable to the project, as the project is not located along the Highway 101 Scenic Corridor.

**Policy OSRC-3e:** In conjunction with Section 2.5 "Policy for Urban Design", incorporate design criteria for Scenic Corridors in urban areas.

*Analysis:* This General Plan Policy is not directly applicable to the project. Arnold Drive is located adjacent to the Sonoma Valley Urban Service Area, but Arnold Drive is a public road right-of-way that does not have an assigned land use and zoning designation, and the project does not involve urban level development.

**Policy OSRC-3f:** Refer building permits within the setback along historic Bohemian Highway between Occidental and Freestone and along Bodega Highway between Bodega and Freestone to the Sonoma County Landmarks Commission for review and recommendations.

*Analysis: This General Plan Policy is not applicable to the project, as the project is not located along the Bohemian Highway.*

**Policy OSRC-3g:** Avoid freeway oriented billboards along designated Scenic Corridors. Establish design criteria for consideration of new freestanding outdoor advertising structures or signs along designated Scenic Corridors to retain visual quality. Consider amortization of existing signs subject to the limitations of State law as a condition of approval for discretionary permits.

*Analysis: The project is consistent with this General Plan Policy, as it does not include advertising structures or signs along Arnold Drive.*

**Policy OSRC-3h:** Design public works projects to minimize tree damage and removal along Scenic Corridors. Where trees must be removed, design replanting programs so as to accommodate ultimate planned highway improvements. Require revegetation following grading and road cuts.

*Analysis: The proposed project would include improvements along an approximately 2-mile segment of Arnold Drive between Madrone Road and Golf Course Drive. Along an approximately 3,000 linear foot (0.57 mile) segment of Arnold Drive between Madrone Road and Sobre Vista Road, the proposed project would include new roadway striping for the addition of bike lanes. Along this segment of Arnold Drive, the project is not anticipated to include roadway widening and thus is not anticipated to require removal of trees, with the exception of select pruning of overhanging tree limbs may potentially occur for safety purposes.*

*Along Arnold Drive between Sobre Vista Road and an area just north of Agua Caliente Road, widened roadway areas would be established flush with the existing roadway surface, and storm water improvements, such as extended box culverts and stormwater treatments, would be designed and installed to conform to existing grades. Retaining walls would be designed to have a consistent visual appearance and would not obstruct views from sensitive viewpoints. Similar improvements would be made along Arnold Drive between an area south of Agua Caliente Road to Golf Course Drive. The project would not require any modifications to the traffic circle at Agua Caliente Road.*

*To provide space for the roadway widening and storm water improvements, the project would require the removal of select trees along approximately 1.1 miles of Arnold Drive. The stretch of Arnold Drive where tree removals would be required equates to approximately 12 percent of the overall 9-mile stretch of the Arnold Drive Scenic Corridor.*

*A Tree Inventory Study was completed for the project to identify the species, size, health, and structural condition of trees along the Arnold Drive Scenic Corridor in the project area (Horticultural Associates, 2023). The Tree Inventory Study evaluated 510 trees located along the project corridor that are within 10-feet of the pavement edge on both sides of Arnold Drive that have a trunk diameter of 6-inches or greater. In some areas, trees located beyond the 10-foot distance were inventoried where modification of culverts is being proposed.*

*Based on a review of the project boundary and roadway widening areas, 425 of the identified trees along the project corridor would be preserved, which corresponds to 83 percent of the trees immediately adjacent to Arnold Drive in the project area. Up to approximately 85 trees would be potentially impacted due to roadway widening, culvert extensions, and drainage improvements, 33 of which are located on the east side of Arnold Drive, and 52 of which are located on the west side of Arnold Drive.*

*Of the 85 potentially impacted trees, 75 are native oak trees, including 36 coast live oaks and 39 valley oaks. Of the 75 oak trees to be potentially impacted, 26 are located in different areas of the corridor on the east side of Arnold Drive, and 49 are located across the corridor on the west side of Arnold Drive. Please refer to Figures 6-1 through 6-17 for information on the location of the trees that may potentially be impacted, including the species types, height, and diameter of the trees, as well as a preliminary revegetation plan.*

*Although the majority of existing trees along Arnold Drive in the project area would be preserved, the impact to select native oak trees along the Arnold Drive Scenic Corridor is a potentially significant impact. Mitigation Measure AES-1 requires compliance with General Plan Policy OSRC-3h, including coordination with a certified arborist to minimize tree damage and removal, implementation of tree protection specifications during construction, and implementation of a replanting program to ensure that any impacted trees are replaced with native tree species planted as close as feasible to removed trees consistent with Sonoma County General Plan policies. Policy OSRC-3h of the General Plan is considered a mitigating policy, and with implementation of Mitigation Measure AES-1, the project would not conflict with Policy OSRC-3h.*

*With implementation of Mitigation Measure AES-1, additional coordination with a certified arborist would occur for further preservation of trees, where feasible, through contoured grading, retaining structures, and similar measures. Additionally, any removed trees would be replaced in-kind with native tree and shrub species as close as feasible to the area in which an existing tree is removed.*

Policy OSRC-3i: Recognize Highway 116 from Highway 1 to the southern edge of Sebastopol as an official State Scenic Highway. The unique scenic qualities of this portion of Highway 116 shall be protected as generally outlined in the 116 Scenic Highway Corridor Study, September 1988. Consider requesting official State Scenic Highway designations for Highways 1 and 37. Upon the request of local residents, the County may pursue similar State status for other Scenic Corridors.

*Analysis: This General Plan Policy is not applicable to the project, as the project is not located along the Highway 116.*

As described above, the impact to trees along the Arnold Drive Scenic Corridor is a potentially significant impact. Mitigation Measure AES-1 requires compliance with General Plan Policy OSRC-3h, including coordination with a certified arborist to minimize tree damage and removal, implementation of tree protection specifications during construction, and implementation of a replanting program to ensure that any impacted trees are replaced with native tree species planted as close as feasible to removed trees consistent with Sonoma County General Plan policies. Policy OSRC-3h of the General Plan is considered a mitigating policy, and with implementation of Mitigation Measure AES-1, the project would not conflict with Policy OSRC-3h, and the impact on the Arnold Drive Scenic Corridor would be reduced to a less-than-significant level. The project does not include new structures within any Scenic Landscape Units on private property adjacent to Arnold Drive and would not obstruct views of the surrounding Sonoma-Napa Mountains that provide a backdrop to the Sonoma Valley. The proposed project does not include the installation of streetlights or other new lighting along the project corridor. The impact would be less than significant with mitigation incorporated.

Significance Level: Less than Significant with Mitigation Incorporated

Mitigation:

**Mitigation Measure AES-1: Tree Protection and Replacement along Arnold Drive**

The following measures shall be implemented to minimize visual impacts related to tree and vegetation removal along the Arnold Drive Scenic Corridor:

- The amount of tree and vegetation removal necessary to construct the project shall be minimized to the extent possible. The County shall retain a certified arborist to develop project-specific tree preservation solutions such as retaining structures, as well as trenching and pruning techniques to minimize the potential for tree impacts and tree loss as a result of the project. Such measures shall be established in a defined tree protection program specification for the project and implemented during construction. Measures shall include tree protection zones, tree protection fencing, tree pruning treatments, grading and trenching controls, and drainage considerations. Measures may include, but are not limited to, the following:
  - Pruning to remove damaged limbs or wood
  - Bark scoring to remove damaged bark and promote callous formation
  - Alleviation of compaction by lightly scarifying the soil surface
  - Installation of a specific mulching material
  - Supplemental irrigation during the growing season
  - Treatment with specific amendments intended to promote health, vigor, or root growth
  - Vertical mulching or soil fracturing to promote root growth
  - Periodic post-construction monitoring
  - Tree replacement
  
- The Contractor shall install temporary plastic mesh-type construction fencing between the construction zone and naturally vegetated areas and trees that are not to be disturbed. The areas to require such fencing shall be determined in consultation with Permit Sonoma and a certified arborist shown on plans when final design of the project is complete. The fencing shall be maintained throughout the construction period and removed following construction.
  
- When excavating within the root zones of trees to be retained, care shall be taken to minimize damage to the tree root system. Hand digging around roots shall be conducted wherever feasible. If required, excavation near trees using heavy equipment shall be carried out by pulling the bucket or blade away from the tree parallel to the roots to minimize cracking and damaging of roots left in the soil. As roots are exposed during excavation, those that are one inch or greater shall be cut cleanly at the surface of the excavation using hand tools.
  
- Pruning shall be completed to the minimum degree necessary to accommodate construction vehicles. Pruning shall be conducted in a manner that helps preserve tree health under the direction of a certified arborist or qualified horticulturist.
  
- Trees that are damaged or removed shall be replaced in-kind with native tree and shrub species planted as close as feasible to the area in which an existing tree is removed. This shall include coast live oak and valley oak species, as well as California native and regionally appropriate shrub species, including but not limited to, toyon, ceanothus, snowberry, manzanita, and scrub oak. The County shall coordinate tree replacements at a 3:1 ratio within County right-of-way, as well as possibly on adjacent private properties, with coordination and consent from adjacent property owners, or other nearby off-site locations. For tree removals occurring within riparian areas, the County shall coordinate tree replacements at a minimum 3:1 ratio, or at the ratio determined through regulatory agency permits, and as further specified in Mitigation Measure BIO-6, Revegetation of Riparian Habitat. Trees planted shall be monitored by the County for at least 5 years after project completion to ensure that the replacement plantings have developed and survive at an 80% success ratio.

**b) Substantially damage scenic resources, including, but not limited to trees, rock outcroppings, and historic buildings within a state scenic highway?**

Comment:

*Construction and Operation*

Arnold Drive in the project area is not a designated or eligible state scenic highway (Caltrans 2023). No impact would result.

Significance Level: No Impact

- 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?**

Comment:

*Visual Assessment Guidelines Analysis*

The County's Visual Assessment Guidelines are typically used as an administrative procedure for the assessment of visual impacts of community development projects from public viewing points on properties with assigned land use and zoning designations. Arnold Drive is a public road right-of-way that does not have an assigned land use and zoning designation. The County's Visual Assessment Guidelines were not developed for the purpose of assessing improvements to existing roadways, however, for informational purposes, a review using concepts outlined in the Visual Assessment Guidelines is being provided for the project. In keeping with the County's Guidelines, project impacts have been analyzed by considering public viewing points, which include public roads, public trails, and public parks. Viewing points from private properties are not used when applying the County's Guidelines, and also are not considered in CEQA analyses.

Site Sensitivity

Using the County's Guidelines, the visual sensitivity of a project site may be given a rating of low, moderate, high or maximum. The County's General Plan designates Arnold Drive as a scenic corridor, and several areas adjacent to the Arnold Drive in the project area are designated as Scenic Landscape Units. The project corridor is essentially flat, with long range intermittent views of natural ridgelines and the Sonoma Mountain foothills partially obstructed by existing vegetation. Trees along Arnold Drive add to the visual variation of the corridor. Native trees located along Arnold Drive are primarily coast live oak and valley oak, as well as buckeye, bay laurel, madrone, and big leaf maple. Non-native trees along Arnold Drive in the project area include Italian cypress, empress tree, olive, eucalyptus, wild plum, and green wattle.

Land uses along Arnold Drive in the project area include residential and agricultural properties, St. Andrew Presbyterian Church, Hanna Center and Sonoma Golf Club. Utilizing the County's Visual Assessment Guidelines, the project corridor would have a "High" visual sensitivity, which is a category applied to locations where scenic or natural resources are protected, such as General Plan designated scenic corridors and scenic landscape units.

Visual Dominance

Based on the County's Visual Assessment Guidelines, the visual dominance of a project is determined by comparing the contrast of the following elements and characteristics of a project within its surroundings and giving a rating of inevent, subordinate, co-dominant, or dominant:

- *Form:* shape, geometry, complexity
- *Line:* the edge of the shape, boldness, complexity of silhouette, orientation
- *Color:* reflectivity, hue (actual color), value (dark or light)
- *Texture:* surface characteristics, randomness, grain (fine or coarse)
- *Night Lighting*

The proposed project would include the addition of Class II bicycle lanes on each side of Arnold Drive in the project area as well as signage/stripping, culvert extensions, new paving, storm drainage improvements, and utility relocations. The proposed project elements include widened roadway areas for the addition of the bicycle lanes, which would be asphalted and flush with the existing roadway surface, along with storm water improvements, such as extended box culverts and stormwater treatments, that would be designed to conform to the existing grade. Retaining walls for box culvert extensions would be designed to have a consistent visual appearance and would not obstruct views from sensitive viewpoints. The proposed project does not include the installation of streetlights or other new lighting along the project corridor. Based on the above criteria, the proposed project elements would generally repeat the form, line, color, and texture of its surroundings along Arnold Drive in the project area. The project elements would have a "Subordinate" visual dominance, which is applied when project elements would be minimally visible from public view with weak element contrasts.

As described above, the visual sensitivity of the project corridor is "High" and the visual dominance of the proposed project in terms of its form, line, color, texture, and lighting is "Subordinate." By comparing these two elements in accordance with the County's Visual Assessment Guidelines, the impact of the proposed project is less than significant.

**Table 4. Thresholds of Significance for Visual Impact Analysis  
PRMD Visual Assessment Guidelines**

Sensitivity	Visual Dominance			
	<i>Dominant</i>	<i>Co-Dominant</i>	<i>Subordinate</i>	<i>Inevident</i>
<b>Maximum</b>	Significant	Significant	Significant	Less than significant
<b>High</b>	Significant	Significant	Less than significant	Less than significant
<b>Moderate</b>	Significant	Less than significant	Less than significant	Less than significant
<b>Low</b>	Less than significant	Less than significant	Less than significant	Less than significant

*Construction Activity*

Construction activities along Arnold Drive would result in temporary changes in the visual character of the project area. During construction, anticipated to take approximately 6 to 9 months, motorists and adjacent residents would see heavy construction equipment, temporary traffic control features (such as signage and orange cones), construction materials, and construction workers. Neighbors (people with views to the road) and roadway users (people with views from the road) would be slightly affected by the proposed project. The construction disturbance would be temporary in nature, and disturbed areas would be restored following construction. Therefore, the temporary construction impact would be less than significant.

*Tree Removals*

Arnold Drive within the project area includes the existing developed road (Arnold Drive), adjacent mixed oak woodland, eucalyptus groves, low density residential development, agricultural ponds, vineyards, and watercourses with associated riparian habitat. The visual character of the project corridor would remain a moderately trafficked roadway. Enhancing bicycle access would improve public access through the area while maintaining the rural/natural aesthetic and safety improvements to better manage the levels of bicycle traffic. However, as discussed in Impact (a) above, the proposed project would require removal of trees along a portion of Arnold Drive within the project limits, including native coast live oak and valley oak. Native oak trees are identified in the County General Plan as trees that should be preserved and regenerated, and such trees add to the visual character of the Arnold Drive scenic corridor. The impact to trees along Arnold Drive is a potentially significant impact.

Mitigation Measure AES-1 requires compliance with General Plan Policy OSRC-3h, including coordination with a certified arborist to minimize tree damage and removal, implementing tree protection specifications during construction, and implementing a replanting program to ensure that any impacted trees are replaced with native tree species planted as close as feasible to removed trees consistent with Sonoma County General Plan policies. Policy OSRC-3h of the General Plan is considered a mitigating policy, and with implementation of Mitigation Measure AES-1, the impact on the visual character of Arnold Drive would be reduced to a less-than-significant level.

Significance Level: Less than Significant with Mitigation Incorporated

Mitigation:

**Mitigation Measure AES-1: Tree Protection and Replacement along Arnold Drive**  
(see Impact 1.a above for a summary of this mitigation measure)

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

Comment:

*Construction and Operation*

Based on the type and extent of work to be performed, nighttime construction is not proposed for the project and would only be performed under the approval of the County's Resident Engineer. Any such work would be conditionally required to avoid glare that would be a hazard to vehicles and to avoid light trespass onto adjacent residential uses through means and methods to light a work area while limiting light spill onto adjoining property. Following construction, the proposed project does not include the installation of streetlights or other new lighting along the project corridor. No new permanent lighting would result that would create a new source of light or glare. The overall impact would be less than significant.

Significance Level: Less than Significant

## 2. AGRICULTURE AND FOREST RESOURCES:

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

**Would the project:**

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

Comment:

*Construction and Operation*

Several properties located adjacent to Arnold Drive in the project area have been designated as Unique Farmland, Farmland of Local Importance, and Farmland of Statewide Importance. In order to construct culvert extensions, the proposed project is anticipated to require temporary construction easements at three properties with farmland designations [APNs 133-111-008 (Farmland of Local and Statewide Importance), 133-111-021 (Farmland of Local and Statewide Importance, Grazing Land, Prime Farmland), and 133-130-042 (Farmland of Local Importance)]. The required temporary construction easements would be very limited to areas immediately adjacent to Arnold Drive and would not convert or cause interference with farmland or farming activities. Therefore, the impact on farmland would be less than significant.

Significance Level: Less than Significant

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

Comment:

*Construction and Operation*

Two properties located adjacent to Arnold Drive in the project area have been designated Type I Williamson Act contract lands. The proposed project is not anticipated to require temporary construction easements from the two properties. Therefore, no impact on Williamson Act Contract lands would result.

Several properties located along Arnold Drive in the project area have zoning designations for agricultural use, including properties that are zoned LIA (Land Intensive Agriculture), AR (Agriculture & Residential), and DA (Diverse Agriculture). In order to construct culvert extensions, the proposed project is anticipated to require temporary construction easements at two properties with farmland zoning designations (APNs 133-111-008 and 133-111-021). The temporary construction easements would be very limited to areas immediately adjacent to Arnold Drive and would not conflict with the agricultural zoning designations. Therefore, the impact would be less than significant.

Significance Level: Less than Significant

- 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))?**

Comment:

*Construction and Operation*

There are no properties located along Arnold Drive in the project area that are currently zoned for forest land, timberland, or timberland zoned for production. Therefore, the proposed project would not conflict with or cause rezoning of such lands. No impact would result.

Significance Level: No Impact

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

Comment:

*Construction and Operation*

No forest land is present in the project area. Therefore, no loss or conversion of forest land would result.

Significance Level: No Impact

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

Comment:

*Construction and Operation*

The proposed project would be located along Arnold Drive. The proposed project would not result in any indirect impacts, such as limiting access to agricultural uses, that may result in conversion of farmland. No impact would result.

Significance Level: No Impact

### 3. AIR QUALITY:

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

**Would the project:**

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

Comment:

*Construction and Operation*

The proposed project is located in Sonoma County, within the jurisdiction of the Bay Area Air Quality Management District (BAAQMD), which regulates air quality in the San Francisco Bay Area Air Basin. The San Francisco Bay Area Air Basin is currently designated as a nonattainment area for particulate matter 2.5 microns or less in diameter (PM<sub>2.5</sub>), particulate matter 10 microns or less in diameter (PM<sub>10</sub>), and ozone (O<sub>3</sub>).

The BAAQMD's 2017 Clean Air Plan (BAAQMD 2017a) is the most recently adopted air quality plan for the San Francisco Bay Area Air Basin and contains control measures in nine economic sectors. The Clean Air Plan assumptions for projected air emissions and pollutants throughout the Basin are based on General Plan Land Use Designations. The control measures require actions on the part of the BAAQMD, the California Air Resources Board (CARB), and local communities but are not directly related to actions undertaken for an individual project that aims to add bicycle capacity to an existing roadway. The proposed project is consistent with the County's General Plan and would be consistent with the development assumptions in the Clean Air Plan. The project would not increase regional population growth, and would not cause changes in vehicle traffic or regional vehicle miles traveled. Therefore, the project would not conflict with or obstruct the BAAQMD from implementing 2017 Clean Air Plan actions. No impact would result.

Significance Level: No Impact

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

Comment:

As discussed in Impact (a) above, under California standards, the San Francisco Bay Area Air Basin is designated as a nonattainment area for PM<sub>2.5</sub>, PM<sub>10</sub>, and O<sub>3</sub>. Under national standards, the San Francisco Bay Area Air Basin is designated as nonattainment for PM<sub>2.5</sub> and 8-hour O<sub>3</sub>. Therefore, based on the current Air Basin designations, the non-attainment pollutants of concern are PM<sub>2.5</sub>, PM<sub>10</sub>, and O<sub>3</sub>.

*Construction*

By its nature, air pollution is largely a cumulative impact in that individual projects are rarely sufficient in size to result in nonattainment of ambient air quality standards. Instead, a project's individual emissions may contribute to cumulative adverse air quality impacts. The BAAQMD's CEQA Air Quality Guidelines (BAAQMD 2022) includes screening criteria for determining if an individual project could result in significant construction-phase impact relative to criteria pollutants and precursor emissions. In accordance with the BAAQMD's CEQA Air Quality Guidelines, construction activities have a less than significant impact to air quality if the following screening criteria are met:

1. The project size is at or below the applicable screening level size for its type;

2. All basic management practices are included in the project design and implemented during construction;
3. Construction-related activities would not overlap with operational activities; and
4. Construction-related activities do not include any of the following:
  - Demolition;
  - Simultaneous occurrence of more than two construction phases;
  - Simultaneous construction of more than one land use type;
  - Extensive site preparation;
  - Extensive material transport; or
  - Stationary sources (e.g., backup generators)

The BAAQMD CEQA Guidelines do not include a specific screening level size for bicycle facility projects. During construction, the project would result in a short-term increase in fugitive dust emissions from vehicles accessing and working along Arnold Drive. The construction-period emissions associated with the proposed project were estimated using the Road Construction Emissions Model (RCEM) version 9.0.0. Project-specific material import and export was incorporated in the emissions analysis. Table 5 summarizes the estimated construction emissions for the project relative to the BAAQMD's air quality thresholds of significance.

**Table 5. Construction Emissions Summary**

	<b>Reactive Organic Gases</b>	<b>Nitrogen Oxide</b>	<b>PM<sub>10</sub></b>	<b>PM<sub>2.5</sub></b>
Construction Emissions	0.33 lb/day	3.20 lb/day	0.14 lb/day	0.12 lb/day
BAAQMD Threshold of Significance	54 lb/day	54 lb/day	82 lb/day	54 lb/day

The estimated construction emissions for the project do not exceed the BAAQMD's thresholds of significance. In addition, project-related construction activities are not anticipated to encounter asbestos-containing materials during construction, would not involve the simultaneous occurrence of more than two construction phases, or require construction of more than one land-use type. Construction would not involve extensive site preparation or material transport. With implementation of the BAAQMD's recommended basic construction measures identified in Mitigation Measure AIR-1, the impact of construction-related criteria air pollutants and precursor emissions would be less than significant.

*Operation*

The proposed project is consistent with the County General Plan and Countywide Bicycle and Pedestrian Master Plan, which identify a proposed Class II bikeway along Arnold Drive in the project area. Implementation of the proposed project would serve existing bicyclists by enhancing bicycle safety and increasing connectivity and mobility along Arnold Drive. The project would not generate growth or new vehicle trips and no stationary sources are proposed. The project would have a beneficial effect on air quality by encouraging reductions in criteria air pollutant emissions and GHG emissions through provision of improved bicycle facilities along Arnold Drive. No operational impact would result.

Significance Level: Less than Significant with Mitigation Incorporated

Mitigation:

**Mitigation Measure AIR-1: Implement Air Quality Control Measures during Construction**

To limit dust, criteria pollutants, and precursor emissions associated with the construction activity, Sonoma County will include the following Bay Area Air Quality Management District (BAAQMD) recommended Basic Construction Measures in construction contract specifications for the project:

- Exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas and unpaved access roads) shall be watered two times per day;
- Haul trucks transporting soil, sand, or other loose material off-site shall be covered or shall have at least two feet of freeboard;
- 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 shall be prohibited;
- Vehicle speeds on unpaved areas shall be limited to 15 miles per hour;
- Paving shall be completed as soon as possible after trenching work is finished;
- Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to five minutes (as required by the California airborne toxics control measure Title 13, Section 2485 of California Code of Regulations). Clear signage shall be provided for construction workers at all access points;
- 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; and
- A publicly visible sign shall be posted with the telephone number and person to contact at the County regarding dust complaints. This person shall respond and take corrective action within 48 hours. The Air District's phone number shall also be visible to ensure compliance with applicable regulations.

**c) Expose sensitive receptors to substantial pollutant concentrations?**

Comment:

Under CEQA, residences, schools, daycare centers, and healthcare facilities such as hospitals or retirement and nursing homes are considered sensitive receptors. Single-family residences and the Hanna Center are sensitive receptors located adjacent to the project corridor, while Altimira Middle School is located within one-quarter mile of the project corridor.

*Construction*

Construction activities would temporarily generate toxic air contaminants due to the operation of construction equipment. Concentrations of mobile source diesel particulate matter would be present during temporary construction activities. Given the short construction period (6 to 9 months), the continuous shifting of the construction activities, and the implementation of dust and air quality control measures, prolonged exposure of sensitive receptors to substantial pollutant concentrations would not occur. Such measures include minimizing idling times for trucks and equipment, ensuring that construction equipment is maintained in accordance with manufacturer's specifications, watering exposed surfaces, and other best management practices. The construction-related impact would be less than significant.

*Operation*

The proposed project would not result in operational emissions of criteria air pollutants or increases in vehicular emissions that would expose sensitive receptors to substantial pollutant concentrations. The project would not result in new parking spaces or changes to existing land use activities. The project would improve safety and mobility for nonmotorized transportation users and likely increase the proportion of nonmotorized trips in the community. Therefore, the proposed project would have a beneficial effect on air quality by encouraging reductions in traffic-related pollutant concentrations. Impacts related to carbon monoxide hotspots would be less than significant because the proposed

project would not generate new vehicle trips and would only have short-term temporary traffic impacts during construction. The operational impact would be less than significant.

Significance Level: Less than Significant

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

Comment:

*Construction and Operation*

Construction activities may generate short-term detectable odors such as diesel exhaust from construction equipment, and odor from asphalt paving. However, such odors would be temporary, dissipate rapidly, and are not known to be substantially offensive to receptors. The impact would be less than significant.

The BAAQMD has established odor screening thresholds for land uses that have the potential to generate complaints about substantial odors, including wastewater treatment plants, landfills, transfer stations, composting facilities, confined animal facilities, food manufacturing, and chemical plants. The proposed project is not of a type that is known to produce odors. No operational impact would result.

Significance Level: Less than Significant

## 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 U.S. Fish and Wildlife Service?**

### Regulatory Framework

#### *Special-Status Species*

Special-status species include those plant and wildlife species that have been formally listed, are proposed as endangered or threatened, or are candidates for such listing under the federal Endangered Species Act (ESA) or California Endangered Species Act (CESA). These acts afford protection to both listed and proposed to be listed species. In addition, California Department of Fish and Wildlife (CDFW) Species of Special Concern, which are species that face extirpation in California if current population and habitat trends continue, U.S. Fish and Wildlife Service (USFWS) Birds of Conservation Concern, and CDFW special-status invertebrates, are all considered special-status species. Although CDFW Species of Special Concern generally have no special legal status, they are given special consideration under CEQA. In addition to regulations for special-status species, most birds in the United States, including non-status species, are protected by the Migratory Bird Treaty Act of 1918. Plant species on California Native Plant Society (CNPS) Inventory of Rare and Endangered Plants with California Rare Plant Ranks (Rank) of 1, 2 and 4 are also considered special-status plant species and must be considered under CEQA. Bat species designated as “High Priority” by the Western Bat Working Group (WBWG) qualify for legal protection under Section 15380(d) of the CEQA Guidelines. Species designated “High Priority” are defined as “imperiled or are at high risk of imperilment based on available information on distribution, status, ecology and known threats.”

#### *Endangered Species Act*

The Endangered Species Act (ESA) of 1973, as amended (16 USC 1531 *et seq.*) was enacted to provide a means to identify and protect endangered and threatened species. Under Section 9 of the ESA, it is unlawful to take any listed species. “Take” is defined as harassing, harming, pursuing, hunting, shooting, wounding, killing, trapping, capturing, or collecting a listed species. “Harass” is defined as an intentional or negligent act or omission which creates the likelihood of injury to wildlife by annoying it to such an extent as to significantly disrupt normal behavioral patterns which include, but are not limited to, breeding, feeding, or sheltering. “Harm” is defined as an act which actually kills or injures fish or wildlife and may include significant habitat modification or degradation which actually kills or injures fish or wildlife by significantly impairing essential behavioral patterns, including breeding, spawning, rearing, migrating, feeding, or sheltering. Actions that may result in “take” of a federal-listed species are subject to USFWS or National Marine Fisheries Service (NOAA Fisheries) permit issuance and monitoring. Section 7 of the ESA requires federal agencies to ensure that any action authorized, funded, or carried out by the agency is not likely to jeopardize the continued existence of any endangered or threatened species or result in the destruction or adverse modification of designated critical habitat for such species. Any action authorized, funded, or carried out by a federal agency or designated proxy (e.g., Army Corps of Engineers) which has potential to affect listed species requires consultation with USFWS or NOAA Fisheries under Section 7 of the ESA.

#### *California Endangered Species Act*

The CESA includes provisions for the protection and management of species listed by the State of California as endangered, threatened, or designated as candidates for such listing (California Fish and Game Code (FGC) Sections 2050 through 2085). The CESA generally parallels the main provisions of the ESA and is administered by the CDFW, who maintains a list of state threatened and

endangered species as well as candidate species. The CESA prohibits the “take” of any species listed as threatened or endangered unless authorized by the CDFW in the form of an Incidental Take Permit. Under FGC, “take” is defined as to “hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill.”

#### *Critical Habitat*

Critical habitat is a term defined in the ESA as a specific geographic area that contains features essential for the conservation of a threatened or endangered species and that may require special management and protection. The ESA requires federal agencies to consult with the USFWS to conserve listed species on their lands and to ensure that any activities or projects they fund, authorize, or carry out will not jeopardize the survival of a threatened or endangered species. In consultation for those species with critical habitat, federal agencies must also ensure that their activities or projects do not adversely modify critical habitat to the point that it will no longer aid in the species’ recovery. In many cases, this level of protection is similar to that already provided to species by the ESA jeopardy standard. However, areas that are currently unoccupied by the species but which are needed for the species’ recovery are protected by the prohibition against adverse modification of critical habitat.

#### Comment:

#### *Construction and Operation*

#### Special-Status Plant Species

A total of 83 special-status plant species have been documented within a 9-quad search of the proposed project corridor. Of the 83 special-status plant species, 26 were determined to have a moderate to high potential to occur within the project area. In April and June of 2023, protocol-level floristic surveys were performed along the project corridor within the blooming period of these special-status plant species. No special-status plant species were observed during the surveys, and based on the findings, no impact to special-status plants is anticipated to result. If more than five years pass between the completed botanical survey and the start of construction, the County would ensure that the project corridor is re-surveyed for special-status plant species during seasonally appropriate blooming periods prior to construction occurring.

#### Special-Status Wildlife Species

#### *Amphibians and Reptiles*

One federally threatened species (California red-legged frog) and three Species of Special Concern (foothill-yellow legged frog, California giant salamander, and red-bellied newt) have a moderate potential to occur within the project area. In addition, one special status reptile (Western pond turtle) has a moderate potential to occur. Watercourses in the project area are ephemeral and are often dry during summer and early fall months. However, these special status wildlife species may potentially be present when water is present, and depending on the time of construction, may be affected during construction of the proposed project due to habitat displacement and/or a decrease in habitat quality. The impact is considered potentially significant. Mitigation Measure BIO-1 would reduce the impact on special status amphibians and reptiles to a less-than-significant level.

#### *Nesting Birds*

Biologists conducted site visits of the project corridor on April 17-19, and June 20, 2023, recording reconnaissance level habitat evaluations and wildlife sightings. Observations were made using visual and audible detections, nest, burrow, scat and other signs. No bird nests were observed during the site visits. However, based on the presence of trees and riparian habitat, several special status bird species, including Cooper’s hawk, sharp-shinned hawk, golden eagle, great egret, great blue heron, white-tailed kite, and Lawrence’s goldfinch, have a moderate potential to occur within the project area. Cooper’s hawk, sharp-shinned hawk, white-tailed kite, and Lawrence’s goldfinch have the

potential to nest in the project area. The above-mentioned species, as well as other common passerines, may potentially be affected by the proposed project due to tree removals and habitat disturbance during construction. The impact is considered potentially significant. Mitigation Measure BIO-2 would reduce the potential impact to these species as well as migratory and common bird species that may potentially nest in the project area to a less-than-significant level.

#### *Fish, Crustaceans, and Mollusks*

Two federally listed fish species (coho salmon and steelhead), and three other special status fish species (riffle sculpin, Pacific lamprey, and Western brook lamprey), have the potential to occur within waters in the project area. Federally designated critical habitat for steelhead has been established within Sonoma Creek, which has hydrologic connectivity with the watercourses in the project area. Watercourses in the project area are ephemeral and are often dry during summer and early fall months. However, these species may potentially be present when water is present, and depending on the time of construction, may potentially be affected by the proposed project due to habitat displacement and/or decreases in habitat quality during construction. The impact is considered potentially significant. Mitigation Measure BIO-3 would reduce the potential impact to special status fish species to a less-than-significant level.

One federally and state endangered crustacean species (California freshwater shrimp), and one state special status mollusk (Western ridged mussel), have a moderate potential to occur within aquatic habitat that flows within or near the project area. These species may potentially be present when water is present, and depending on the time of construction, may potentially be affected by the proposed project due to habitat displacement and a decrease in habitat quality during construction. The impact is considered potentially significant. Mitigation Measure BIO-3 would reduce the potential impact to special status crustacean and mollusk species to a less-than-significant level.

#### *Bats*

Two special status bat species (pallid bat and yuma myotis) have a moderate potential to occur within the project area. These species may potentially be affected by tree removals during construction. The impact is considered potentially significant. Mitigation Measure BIO-4 would reduce the potential impact to special status bats to a less-than-significant level.

Significance Level: Less than Significant with Mitigation Incorporated

#### Mitigation:

#### **Mitigation Measure BIO-1: Protect California Red-legged Frog and Special Status Reptiles and Amphibians**

The following measures shall be implemented during construction:

- *Environmental Awareness Briefings.* Prior to construction or related activities in areas where the California red-legged frog or other species of special concern (foothill-yellow legged frog, California giant salamander, red-bellied newt, and Western pond turtle) are likely to occur, environmental staff shall brief contractors and other participants about its potential presence. The briefings shall include a flyer with photos and a description of the species and its habitat, the general provisions of applicable regulatory guidelines and the necessity to comply, and the measures that are being implemented to conserve the species as they relate to the activity.
- *Construction Restrictions.* Construction activities within riparian and aquatic areas (ephemeral and intermittent watercourses) shall be limited to the minimum area and duration required to meet the project design requirements.
- *Seasonal Restrictions.* Work within aquatic or riparian habitat shall be restricted to an in-stream work window, from June 15 through October 15, depending on rainfall, or, as determined by regulatory agency permits. Construction within the aquatic or riparian

habitat areas shall be conducted when such areas are dry. Construction will not occur in aquatic areas during the breeding season of the California red-legged frog (generally November 1 through April 30).

- *Biological Monitoring and Inspections.* When work is scheduled to occur in aquatic or riparian habitat of the California red-legged frog, a qualified biologist shall inspect the work areas prior to the start of work in that area. The biologist shall visually inspect aquatic and riparian habitat, leaf litter, debris, vegetation, and small mammal or other burrows within the potential disturbance area. The qualified biologist shall be present at the work site until such time as the inspection of habitat, instruction of workers, and disturbance have been completed. The monitor shall have the authority to halt any action that might result in impacts to California red-legged frog or other special status species. In the event that a California red-legged frog is observed within a work area, the USFWS Sacramento Field Office USFWS shall be immediately notified, and work will be halted within 100 feet of the individual until the frog has left on its own volition. In the event that a foothill yellow legged frog, California giant salamander, red-bellied newt or Western pond turtle are observed, they may be moved to a safe location in similar habitat outside of the construction zone.
- *Decontamination for Chytrid Fungus and Other Pathogens.* Any equipment (boots, nets, shovels) that has been used off site will be decontaminated prior to conducting activities in riparian or wetland habitat. Decontamination will comprise the equipment being scrubbed with a 75 percent ethanol solution or bleach solution (0.5-1.0 cup/gallon of water) and then rinsed with water. Decontamination will not occur within 100 feet of aquatic resources.

#### **Mitigation Measure BIO-2: Protect Special Status, Migratory, and Nesting Birds**

The following measures shall be implemented during construction:

- *Environmental Awareness Briefings.* Prior to construction or related activities in areas where nesting birds are likely to occur, environmental staff shall brief contractors and other participants about protective measures for nesting birds. The briefings shall include general provisions of applicable regulatory guidelines and the necessity to comply, and the measures that are being implemented to conserve the species as they relate to the activity.
- *Seasonal Restrictions.* Ground disturbance (i.e., grading, earthwork, drilling), tree removal, and vegetation clearing shall be conducted outside of the avian nesting season (the nesting season is typically March 1 – August 15 of any given year).
- *Pre-construction Surveys.* If ground disturbance, tree removals, or vegetation clearing cannot be confined to outside of the avian nesting season, a qualified biologist shall conduct pre-construction nesting bird surveys. Surveys shall include a full area search for nesting activity within the project area and a buffered distance of 50 feet. In addition, this should include frequent visual raptor scans with binoculars within the biological study area (the project boundary and a buffered distance of 500 feet), due to the potential for special status raptors to occur (Cooper's hawk, sharp-shinned hawk, and golden eagle). If raptors are observed, the full area search may include searching for raptors in areas within the biological study area. If the entire area and buffer cannot be physically searched, it shall be visually and audibly assessed. The biologist shall conduct, at minimum, a one-day pre-construction survey within the seven-day period prior to tree/vegetation removal and ground-disturbing activities. If ground disturbance and tree/vegetation removal work lapses for seven days or longer during the nesting season, the qualified biologist shall conduct a supplemental avian pre-construction survey before project work is reinitiated.

- *No Construction Buffer Zones.* If active nests are detected, the biologist shall flag a buffer around each nest. Construction activities shall avoid nest sites until the biologist determines that the young have fledged or nesting activity has ceased. If nests are documented outside of the project study boundary, but up to 500 feet of the area, buffers would be implemented as needed. The buffer size for common species would be determined on a case-by-case basis in consultation with CDFW. Buffer sizes would take into account factors such as (1) noise and human disturbance levels at the construction site; (2) distance and amount of vegetation or other screening between the construction site and the nest; and (3) sensitivity of individual nesting species. If special status bird species are presumed to be nesting, but no nest is detected, buffers may also be implemented.
- *Nest Monitoring.* The qualified biologist shall monitor all located nests at least once per week to determine nesting status and whether birds are being disturbed. If signs of disturbance or distress are observed, the qualified biologist shall immediately implement adaptive measures to reduce disturbance. These measures may include, but are not limited to, increasing buffer size, and/or halting disruptive construction activities in the vicinity of the nest until fledging is confirmed or nesting activity has ceased.

### **Mitigation Measure BIO-3: Protect Special Status Fish, Crustacean, and Mollusk Species**

The following measures shall be implemented during construction:

- *Environmental Awareness Briefings.* Prior to construction or related activities in aquatic habitat where special status fish, crustacean, and mollusk species may occur, environmental staff shall brief contractors and other participants about its potential presence. The briefings shall include a flyer with photos and a description of the species and its habitat, the general provisions of applicable regulatory guidelines and the necessity to comply, and the measures that are being implemented to conserve the species as they relate to the activity.
- *Seasonal Restrictions.* Work within the bed or bank of any stream channel or riparian area shall be restricted to an in-stream work window, June 15 through October 15, depending on rainfall, or, as determined by regulatory agency permits. Construction within the bed or bank of any stream channel shall occur while streams are dry and no construction shall occur where flowing water is present. If a small amount of water persists within a stream bed during the in-water work window, work may be conducted only after the wetted portions of the stream have been investigated by a qualified biologist and it has been determined, by close inspection with nets or other appropriate methods, that special status species are not present and will not be affected by construction.
- *Stormwater and Erosion BMPs.* Stormwater, spill prevention, and general pollution prevention BMPs referenced in Mitigation Measure BIO-7 shall be implemented to reduce potential water quality degradation, dust, or erosion to areas adjacent to construction activities.

### **Mitigation Measure BIO-4: Protect Special Status Mammal Species**

The following measures shall be implemented during construction:

- *Seasonal Restrictions.* To the extent possible, removal of potential bat roosting habitat (i.e. tree cavities, loose bark, structures, etc.) shall be conducted during seasonal periods of bat activity (when bats are volant, i.e., able to leave roosts) between March 1 and April 15 or September 1 and October 15.
- *Apply Two-step Removal for Bat Tree Roost Habitat.* A two-step process shall be applied for the removal of potential tree roost habitat during the bat volant period (i.e., when bats

are active and able to leave their roosts). On day 1, limbs and branches shall be removed by a tree cutter using chainsaws. Limbs with cavities, crevices, or deep bark fissures shall be avoided. On day 2, the entire tree shall be removed.

- *Pre-construction Surveys.* If potential bat roosting habitat cannot be removed during the volant period and project activities must occur during the bat maternity season (April 16 through August 31), a qualified biologist shall conduct surveys for roosting bats within suitable habitat within seven days prior to removal. Survey methodology shall include visual examination of potential roosting bat habitat and may utilize ultrasonic detectors or fecal collection for genetic testing to determine species.
- *Maternal Roost No Construction Buffer Zones.* If evidence of maternal bat roosts (i.e. accumulation of bat guano, ammonia odor, grease stained cavities) are detected within the construction area, an appropriate buffer distance shall be established in consultation with the CDFW to ensure that construction noise would remain below disturbance thresholds for special status bat species. Buffers may be removed when roosting activity has ceased and/or bats become volant.
- *Minimize Nighttime Lighting.* If any construction occurs at night and project-related construction lighting is utilized, such lighting shall be minimized. Minimization may include down casting lights, containing lights within structures, or limiting by appropriate reflectors or shrouds and focused on areas needed for safety, security, or other essential requirements.

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

Comment:

*Construction and Operation*

CDFW provides oversight of habitats (i.e., vegetation communities) listed as Sensitive in the California Natural Diversity Database (CNDDB) and on the *California Sensitive Natural Communities List*, based on NatureServe Conservation global and state rarity rankings. The natural communities are broken down to alliance and association levels for vegetation types affiliated with ecological sections in California. The alliances on the *California Sensitive Natural Communities List* coincide with *A Manual of California Vegetation*. CDFW considers alliances and associations with a state rank of S1 to S3 to be Sensitive.

Riparian areas are defined as plant communities contiguous to and affected by surface and subsurface hydrologic features of perennial or intermittent water bodies (rivers, streams, lakes, or drainage ways). Riparian areas have one or both of the following characteristics: 1) distinctly different vegetative species than adjacent areas; 2) species similar to adjacent areas but exhibiting more vigorous or robust growth forms.

Riparian habitat is present along nine (9) culverted watercourses that cross Arnold Drive in the project area. The riparian habitat identified consists primarily of valley oak (*Quercus lobata*), coast live oak (*Quercus agrifolia*), California bay (*Umbellularia californica*), buckeye (*Aesculus californica*), Oregon ash (*Fraxinus latifolia*), eucalyptus (*Eucalyptus globulus*), Himalayan blackberry (*Rubus armeniacus*), periwinkle (*Vinca major*), curly dock (*Rumex crispus*) and poison oak (*Toxicodendron diversilobum*). Riparian habitat is regulated by CDFW through Sections 1600-1616 of the Fish and Game Code. Small areas of riparian habitat (approximately 0.15 acre overall) may potentially be affected by the proposed project due to ground disturbance and vegetation removal within watercourses during extensions and reconstruction of existing culvert, including removal of approximately 20 trees within riparian areas. The impact is considered potentially significant. Mitigation Measures BIO-5 and BIO-6 would reduce the impact to a less-than-significant level.

No other sensitive natural communities were observed within the project area.

Significance Level: Less than Significant with Mitigation Incorporated

Mitigation:

**Mitigation Measure BIO-5: Avoid / Minimize Permanent Impact to Riparian Habitat**

Impacts to riparian habitat shall be limited to the minimum amount necessary to construct the project. Orange construction fencing shall be placed to delineate areas to be preserved, within which no machinery or workers shall intrude.

**Mitigation Measure BIO-6: Revegetation of Riparian Habitat**

To offset impacts to riparian habitat, revegetation of riparian habitat with appropriate species shall occur as close to the area of impact as feasible. Species shall be comprised of California native and regionally appropriate species. The planting ratio shall be at least three to one, or at the ratio determined through regulatory agency permits. If the project area is inadequate in size to accommodate replacement trees, trees shall be planted at other nearby off-site riparian locations. Tree planted shall be monitored by the County for at least 5 years after project completion to ensure that the replacement plantings have developed and survive at an 80% success ratio.

**Mitigation Measure AES-1: Tree Protection and Replacement**

(see Aesthetic Impact 1.a for a summary of this mitigation measure)

- 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?**

Comment:

*Construction and Operation*

An aquatic resources delineation was conducted for the proposed project in April of 2023 (GHD 2023). Wetlands and other waters of the U.S. were mapped based on wetland vegetation, hydric soils, wetland hydrology, presence of defined channels, and ordinary high water mark. The aquatic resources delineation identified thirteen ephemeral / intermittent watercourses totaling 1,825 square feet (0.04 acres), and one small seasonal artificial wetland (0.009 acres) that is regularly maintained by the County and is not anticipated to be considered a federal or state wetland. The proposed project would require work within approximately seven of the ephemeral / intermittent watercourses, and potentially within the small artificial wetland, all of which have surface water connectivity to Sonoma Creek. These aquatic resources would potentially be affected by the proposed project due to filling, erosion, sedimentation, and the runoff of other contaminants from construction activities. The impact would be potentially significant. Mitigation Measure BIO-7 would reduce the impact to a less-than-significant level.

Significance Level: Less than Significant with Mitigation Incorporated

Mitigation:

**BIO-7: Best Management Practices to Protect Aquatic Resources**

Prior to the start of construction activity within jurisdictional features, required permits from the United States Army Corps of Engineers, Regional Water Quality Control Board, and California Department of Fish and Wildlife shall be obtained. Conditions of approval outlined in the permits shall be implemented during construction, and the County shall ensure that the project does not result in a net loss in wetlands.

The following measures shall be implemented:

- *Seasonal Restrictions.* Work within the bed or bank of any stream channel shall be restricted to an in-stream work window of June 15 through October 15, or as determined through regulatory agency permits. Construction within the bed or bank of any stream channel or watercourse shall occur while streams are dry and no construction shall occur where flowing water is present.
- *Stormwater and Erosion BMPs.* Stormwater and general pollution prevention BMPs shall be implemented to reduce potential water quality degradation to areas adjacent to construction activities. Suitable erosion and sediment control BMPs, such as silt fences, fiber rolls, and/or earthen berms shall be installed or constructed between work zones and/or staging and stockpile areas and any stream channel to intercept potential sediment and runoff to receiving waters during rain events. These structures shall be installed pursuant to regulatory specifications prior to pending rain events greater than 50 percent possibility of rain within 24 hours, as forecasted by the National Weather Service. Any sediment caught by erosion and sediment control BMPs shall be removed and disposed of prior to BMP removal. Temporary spoils or construction material sites shall be located so as to not drain directly into ditches, streams, or other waterbodies. If a spoils/construction materials site has potential to drain into a surface water feature, a retention basin, berm(s), or other catchment device shall be constructed or installed to intercept runoff before it reaches any waterbody. All exposed mineral soil, or stockpiles to remain on-site through the wet season shall be winterized and protected from erosion associated with wind and rain (e.g., silt fences, straw bales, straw mulch, and tarps).
- *Stormwater Pollution Prevention Plan (SWPPP).* The County or its contractor shall obtain coverage under the SWRCB National Pollutant Discharge Elimination System (NPDES) General Permit for Stormwater Discharges Associated with Construction and Land Disturbance Activities (Construction General Permit; Order No. 2009-009- DWQ as amended by 2010-2014-DWQ). The County and its contractor shall prepare and implement a project-specific Storm Water Pollution Prevention Plan (SWPPP) that manages pollutant sources, identifies erosion and sediment control measures and water quality protection measures, and prescribes best management practices to protect water quality pre- and post-construction. The SWPPP would address pollutant sources, best management practices, and other requirements specified in the Order. A Qualified SWPPP Practitioner would oversee implementation of the SWPPP.
- *Spill Prevention and Containment.* Equipment shall be staged, and materials shall be stockpiled, outside of stream channels, wetlands, and riparian habitat. Equipment shall be cleaned of deleterious materials before being delivered to the job site. Refueling will occur at least 100 feet away from any identified aquatic resource or riparian habitat. Gas cans will only be stored in identified staging areas and will utilize secondary containment features. Any construction equipment operating adjacent to or over a stream shall be inspected daily for leaks. Any oil, fuel, and grease residue that has the potential to fall from machinery shall be removed and properly disposed of. Fueling trucks shall be equipped with sealed spill kits at all times.
- *Revegetation of Disturbed Areas.* Areas disturbed by construction and temporary storage sites shall be reseeded and mulched with a suitable erosion control seed mixture post-construction upon completion of construction. Seeds shall be comprised of California native and regionally appropriate species.
- *Design Features.* If feasible, natural bottom culverts shall be incorporated into the design when culvert replacement is required to maximize beneficial habitat. Banks shall be regarded to match existing topography.

- d) **Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?**

Comment:

*Construction and Operation*

The Magnuson-Stevens Fishery Conservation and Management Act (MSFCMA) requires that Essential Fish Habitat (EFH) be identified for all federally managed species including all species managed by the Pacific Fisheries Management Council (PFMC). EFH has been defined as “those waters and substrate necessary to fish for spawning, breeding, feeding, or growth to maturity.” The Pacific Coast Salmon Fisheries Management Plan (FMP) was created to manage commercial and recreational salmon fisheries along the west coast of the U.S.

The project area includes Pacific Salmon EFH, as designated under the Pacific Coast Salmon FMP. Sonoma Creek is located approximately 1,300 feet east of the project corridor, and 13 culverted watercourses cross Arnold Drive in the project area and are hydrologically connect to Sonoma Creek. Each crossing is associated with an existing box or pipe culvert, and nine (9) of the watercourses are expected to provide habitat access and connectivity for aquatic species.

Watercourses in the project area are ephemeral and are often dry during summer and early fall months. However, depending on the time of construction, Pacific Salmon EFH and migratory corridors may potentially be affected by the project due to work within the bed and bank of watercourses and potential discharge of sediment or other runoff during construction. The impact is considered significant. Implementation Mitigation Measures BIO-1, BIO-3, BIO-5, BIO-6, and BIO-7 would reduce the impact to a less-than-significant level.

Following construction, the proposed project would maintain accessible aquatic habitat, riparian connectivity, and wildlife migratory corridors in the project area. The operational impact would be less than significant.

Significance Level: Less than Significant with Mitigation Incorporated

Mitigation:

**Implement Mitigation Measures BIO-1, BIO-3, BIO-5, BIO-6, and BIO-7**

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

The following discussion summarizes the County’s primary environmental regulations that serve to protect sensitive biological resources relevant to the CEQA review process.

*Biotic Habitat (BH) Combining Zone.* The BH combining zone is established to protect and enhance Biotic Habitat Areas for their natural habitat and environmental values and to implement the provisions of the General Plan Open Space and Resource Conservation Element, Area Plans and Specific Plans. Protection of these areas helps to maintain the natural vegetation, support native plant and animal species, protect water quality and air quality, and preserve the quality of life, diversity and unique character of the County.

*Tree Protection Ordinance.* Chapter 26, Article 88. Sec. 26-08-010 (m) of the Sonoma County Code contains a tree protection ordinance (Sonoma County 2013). The ordinance designates ‘protected’ trees as well as provides mitigation standards for impacts to protected trees. While this ordinance is not applicable to County Public Works projects, it is used as a guide for determining impacts and appropriate mitigation measures.

*Sonoma County General Plan.* The *Sonoma County General Plan 2020* (Sonoma County 2008)

Land Use Element and Open Space & Resource Conservation Element both contain policies to protect natural resource lands including, but not limited to watershed, fish and wildlife habitat, biotic areas, and habitat connectivity corridors. Policy OSRC-8b establishes streamside conservation areas along designated riparian corridors. Policy OSRC-3h directs the County to design public works projects to minimize tree damage and removal along Scenic Corridors and to design replanting programs so as to accommodate ultimate planned highway improvements, including revegetation following grading and road cuts.

Comment:

*Construction and Operation*

If not properly mitigated, the project's construction-related impacts may potentially conflict with applicable County goals and policies protecting biological resources. The potential impact is considered significant. However, with implementation of Mitigation Measure AES-1, as well as Mitigation Measures BIO-1 through BIO-7, the impact would be reduced to a less-than-significant level.

Following construction, operation of the proposed project would not require ground disturbance or other activities that would conflict with policies or ordinances protecting biological resources. Therefore, no operational impact would result.

Significance Level: Less than Significant with Mitigation Incorporated

Mitigation:

**Implement Mitigation Measures AES-1, BIO-1, BIO-2, BIO-3, BIO-4, BIO-5, BIO-6, and BIO-7**

- 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?**

Comment:

*Construction and Operation*

No adopted Habitat Conservation Plans, Natural Community Conservation Plans, or other habitat conservation plans cover the proposed project area. No impact would result.

Significance Level: No Impact

## 5. CULTURAL RESOURCES:

Would the project:

- a) **Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?**

Comments:

*Construction and Operation*

The CEQA Guidelines define a historical resource as: (1) a resource listed in the California Register of Historical Resources; (2) a resource included in a local register of historical resources, as defined in the California Public Resources Code (PRC) Section 5020.1(k), or identified as significant in a historical resource survey meeting the requirements of PRC Section 5024.1(g); or (3) any object, building, structure, site, area, place, record, or manuscript that a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California, provided the lead agency's determination is supported by substantial evidence in light of the whole record.

An archival and records search of the California Historical Resources Information Center (CHRIS) was conducted at the Northwest Information Center (NWIC), which is administered by the State of California Office of Historic Preservation (OHP) as the official state repository for records and reports on historical resources. The records search examined:

- NWIC maps (USGS 7.5-minute topographic maps with NWIC annotations), to identify recorded archaeological sites, recorded archaeological surveys, and recorded historic-era resources of the built environment (buildings, structures, and objects).
- Site records and study reports on file at the NWIC corresponding to those marked on the NWIC maps.
- The California Department of Parks and Recreation's California Inventory of Historic Resources and the OHP's Historic Properties Directory and Built Environment Resource Directory to identify California Historical Landmarks, California Points of Historic Interest, and California historic properties that are listed in, or determined eligible for listing in, the National Register of Historic Places or the California Register of Historical Resources.
- Historic-era maps (General Land Office maps, and 19th- and early-20th-century USGS 15- and 7.5-minute topographic maps), to identify additional historic-era buildings, structures, objects, and areas of archaeological sensitivity.
- Online resources including historical map collections, the United States Department of Agriculture Web Soil Survey website, United States Geological Survey online map and geological information, websites of local historical museums and societies, Tribal websites, and subject-specific search results.

The records search identified two historic-era cultural resources outside the area of potential effect but within a 0.25-mile buffer of the project area. One is a winery complex consisting of barns, houses, garage, storage shed, bomb shelter, horse corral, contemporary winery and office, and contemporary residence, garage, and guest house. A portion of the complex dates to the early 20th century, ca. 1914. The other identified historic-era cultural resource is a segment of railroad grade and associated culverts. Neither of the properties is listed in the National Register of Historic Places or the California Register of Historical Resources. The proposed project would not affect the existing use and access to these resources. Neither the physical facilities, nor the functions would be adversely affected.

The proposed project is anticipated to require temporary construction easements at 11 properties

adjacent to Arnold Drive. The temporary construction easements would be limited to areas immediately adjacent to Arnold Drive. No properties along Arnold Drive in the project area are listed in the National Register of Historic Places or the California Register of Historical Resources.

Based on the review, the proposed project would not result in a substantial adverse change in the significance of a historical resource. The impact would be less than significant. The potential for historic-period archaeological resources is evaluated in impact "b" below.

Significance Level: Less Than Significant Impact

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

Comment:

*Construction and Operation*

An Archaeological Resources Survey was prepared for the proposed project (ASC 2023), which evaluated the potential for surficial and/or buried archaeological and historical resources in the project area. The study included four main parts:

- Records and literature search at the NWIC.
- Literature review of publications, files, and maps at ASC and online for ethnographic, historic-era, and prehistoric resources and background information.
- Communication with the Native American Heritage Commission (NAHC) to request a review of the Sacred Lands File and contact information for the appropriate Tribal communities, who were then contacted regarding the project.
- Pedestrian archaeological survey of the project area.

The study area comprised a 0.25-mile buffer surrounding the project corridor, which was deemed sufficient to capture any recorded resources likely to be affected by the project, to provide contextual background, and to indicate the potential for unknown resources. The records search found no previously recorded cultural resources in the project area, and the pedestrian archaeological survey did not identify archaeological resources. The project area was determined to have moderate sensitivity for buried pre-contact and historic-era archaeological resources, as well as for unrecognized surficial archaeological resources for pre-contact and historic-era archaeological resources.

Construction of the project involves ground-disturbing activities including excavation of approximately three feet for road widening and utility line extension, excavation of approximately four feet for culvert improvements, and drilling of piles to approximately 25 feet for retaining walls. Although the Archaeological Resources Survey found no recorded archaeological sites in the project area, the proposed project includes excavation, and previously unrecorded surficial or subsurface archaeological resources may potentially be uncovered during construction. Pre-contact and historic-era resources may be obscured by colluvium, alluvium, vegetation, pavement, or other factors. If a previously unrecorded archaeological resource is identified during ground-disturbing construction activities and is found to qualify as an historical resource, as per CEQA Guidelines § 15064.5, or a unique archaeological resource, as defined in PRC § 21083.2(g), any impacts to the resource resulting from the project could be potentially significant. Implementation of Mitigation Measure CR-1 would reduce the potential impact to a less-than-significant level by outlining procedures to be taken in the event of inadvertent discovery of unrecorded resources consistent with appropriate laws and requirements.

Significance Level: Less than Significant with Mitigation Incorporated

Mitigation:

**Mitigation Measure CR-1: Protect Archaeological Resources and Tribal Cultural Resources if Encountered during Construction**

To limit potential impacts on archaeological resources, the project specifications shall require the contractor to comply with the following measures regarding the discovery of cultural resources, including Native American Tribal Cultural Resources and items of historical and archaeological interest:

- The County's Construction Inspector and construction personnel shall be notified of the possibility of encountering cultural resources during project construction.
- The County shall notify the Tribal Historic Preservation Officers (THPOs) of the appropriate Native American Tribes in writing at least five days prior to the start of the project's ground-disturbing activities that work will commence.
- Prior to initiation of ground-disturbing activities, the County shall arrange for construction personnel to receive training about the kinds of cultural materials that could be present at the project site and protocols to be followed should any such materials be uncovered during construction. An archaeologist who meets the U.S. Secretary of Interior's professional standards (48 CFR Parts 44738-44739 and Appendix A to 36 CFR 61) shall provide the appropriate archaeological training, including the purpose of the training to increase awareness and appropriate protocols in the event of an inadvertent discovery.
- The project specifications will provide that if discovery is made of items of historical, archaeological, or cultural interest, the contractor will immediately cease all work activities in the area of discovery. Historical, archaeological, and cultural indicators may include, but are not limited to, dwelling sites, locally darkened soils, stone implements or other artifacts, fragments of glass or ceramics, animal bones, and human bones. After cessation of excavation, the contractor will immediately contact the County's Construction Inspector and the THPOs. The contractor will not resume work until authorization is received from the Construction Inspector.
- Should an archaeological deposit be encountered during ground disturbance in the project area, all ground-disturbing activities within 25 feet shall be stopped. The County Construction Inspector shall notify a qualified archaeologist meeting the Secretary of the Interior's Professional Qualifications Standards for Archeology contacted to assess the situation and make recommendations for the treatment of the discovery. If the deposit is found to be significant (i.e., eligible for listing in the NRHP) and an adverse effect would occur, the County in consultation with the SHPO shall identify appropriate treatments for the discovery.

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

Comment:

*Construction and Operation*

No information has been identified suggesting the presence of human remains within the project area. Although human remains are not anticipated to be encountered, the potential still exists. If such resources were encountered, a potentially significant impact could result. Implementation of Mitigation Measure CR-2 would reduce the potential impact to previously undiscovered human remains to a less-than-significant level by outlining procedures to be taken in the event of inadvertent discovery consistent with appropriate laws and requirements.

Following construction, no earthwork would occur. No operational impact would result.

Significance Level: Less than Significant with Mitigation Incorporated

Mitigation:

**Mitigation Measure CR-2: Protect Human Remains if Encountered during Construction**

To limit potential impacts on human remains, the County shall implement the following measures:

- In the event that human remains are identified during project construction, these remains must be treated in accordance with Section 7050.5 of the California Health and Safety Code and Section 5097.98 of the Public Resources Code, as appropriate.
- Section 7050.5 of the California Health and Safety Code states that, in the event of discovery or recognition of any human remains in any location other than a dedicated cemetery, there shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains until the coroner of the county in which the remains are discovered has determined whether or not the remains are subject to the coroner's authority. If the human remains are of Native American origin, the coroner must notify the Native American Heritage Commission (NAHC) within 24 hours of this identification. The NAHC will identify a Native American Most Likely Descendent (MLD) to inspect the site and provide recommendations for the proper treatment of the remains and associated grave goods.
- Section 5097.98 of the Public Resources Code states that the NAHC, upon notification of the discovery of Native American human remains pursuant to Health and Safety Code Section 7050.5, shall immediately notify those persons (i.e., the MLD) it believes to be descended from the deceased. With permission of the landowner or a designated representative, the MLD may inspect the remains and any associated cultural materials and make recommendations for treatment or disposition of the remains and associated grave goods. The MLD shall provide recommendations or preferences for treatment of the remains and associated cultural materials within 48 hours of being granted access to the site.

## 6. ENERGY:

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

Comment:

### *Construction*

Temporary energy use in connection with project construction would include consumption of diesel fuel and gasoline by construction equipment and transport of materials, supplies, and construction personnel to and from the project site. Project construction activity would not require a large amount of fuel or energy usage because of the limited extent and nature of the proposed improvements and the minimal number of construction vehicles that would be required for a project of this scale. Impacts related to transportation energy use during construction would be temporary and would not require expanded energy supplies or the construction of new infrastructure. The construction-related impact would be less than significant.

### *Operation*

Following construction, the project would not result in an increase in energy consumption relative to existing conditions. The project would improve safety and mobility for nonmotorized transportation users and likely increase the proportion of nonmotorized trips in the community. The project would not introduce new activities that would increase energy use. The project does not add travel lanes on Arnold Drive that increase the operational capacity of the roadway, nor structures that would require direct or indirect energy use. The project is consistent with the Sonoma County General Plan and Countywide Bicycle and Pedestrian Master Plan which identify a proposed Class II bikeway along Arnold Drive in the project area. The project would not cause wasteful, inefficient or unnecessary consumption of energy resources. No operational impact would result.

Significance Level: Less than Significant

- b) **Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?**

Comment:

### *Construction and Operation*

The proposed project is consistent with the Sonoma County General Plan and Countywide Bicycle and Pedestrian Master Plan, both of which identify a proposed Class II bikeway along Arnold Drive in the project area. Implementation of the proposed project would serve existing bicyclists by enhancing bicycle safety and increasing connectivity and mobility along Arnold Drive. The project would not generate growth or new vehicle trips or require new energy use.

The project would not conflict with or obstruct implementation of a state plan for energy efficiency, such as the State Energy Action Plan or the State Alternative Fuels Plan that have been adopted by the California Energy Commission and the California Public Utilities Commission. Project construction activities would not require a large amount of fuel or energy usage because of the limited extent and nature of the proposed improvements. No conflict with strategies for renewable energy or energy efficiency would result. No impact would result.

Significance Level: No Impact

## 7. GEOLOGY AND SOILS:

Existing geologic conditions that could affect new development are considered in this analysis. Impacts of the environment on the project are analyzed as a matter of County policy and not because such analysis is required by CEQA.

**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.**

Comment:

*Construction and Operation*

The proposed project is not located within a designated Alquist-Priolo Earthquake Fault Zone, and no other active or potentially active faults have been mapped passing through the project area. The project would not expose people or structures to potential substantial adverse effects, including risk of loss, injury, or death, involving rupture of a known earthquake fault. No impact would result.

Significance Level: No Impact

- ii. Strong seismic ground shaking?**

Comment:

*Construction and Operation*

The proposed project is located in a region that would be subject to strong seismic ground shaking resulting from potential earthquakes along the Healdsburg/Rodgers Creek Fault, San Andreas Fault, West Napa Fault, and other active regional faults. Design and construction of the project is subject to engineering standards of the California Building Code and local and state standards that consider soil properties and seismic ground shaking. By applying required geotechnical evaluation techniques and appropriate engineering practices, potential injury and damage from seismic activity would be diminished, thereby exposing fewer people and less property to the effects of a major damaging earthquake. The impact would be less than significant.

Significance Level: Less than Significant

- iii. Seismic-related ground failure, including liquefaction?**

Comment:

*Construction and Operation*

According to the USGS Earthquake Liquefaction Susceptibility Map (USGS 2006), the proposed project is located in "very low" and "moderate" liquefaction susceptibility areas. The design and construction of the project would be subject to engineering standards of the California Building Code and local and state standards and specifications that consider soil properties, including liquefaction. By applying required geotechnical evaluation techniques and appropriate engineering practices, potential injury and damage from seismically-induced liquefaction and ground failure would be diminished. The impact would be less than significant.

Significance Level: Less than Significant

**iv. Landslides?**

Comment:

*Construction and Operation*

According to USGS mapping, the proposed project is located primarily in areas designated as “flat land” with isolated areas near Madrone Road designated as “few landslides.” No steep hillsides or geologic structures known to be at risk of landslide have been identified adjacent to the project corridor. Therefore, the potential impact from landslides is considered less than significant.

Significance Level: Less than Significant

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

Comment:

*Construction and Operation*

Areas along the project corridor that would be disturbed during construction consist predominantly of engineered fill and previously disturbed and underlying soils highly altered from their original natural state. As a result, the project would result in little disturbance to native topsoil.

Grading and earthwork activities during construction would expose soils to potential short-term erosion by wind and water. However, erosion and sediment control provisions of the County Construction Grading and Drainage Ordinance (Zoning Code Chapter 11) and Storm Water Quality Ordinance (Zoning Code Chapter 11A) require implementation of best management practices to reduce runoff and erosion. In addition, because the project would disturb more than one acre, a Storm Water Pollution Prevention Plan (SWPPP) would be developed in accordance with the NPDES General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities. The SWPPP would identify best management practices to be implemented to prevent soil erosion during construction and to stabilize the site at the end of construction. Additionally, stormwater, spill prevention, and general pollution prevention BMPs referenced in Mitigation Measure BIO-7 would be implemented to reduce erosion to areas adjacent to construction activities. These requirements would ensure that potential project impacts on soil erosion would be less than significant.

Significance Level: 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?**

Comment:

*Construction and Operation*

As described above, areas along the project corridor to be disturbed during construction consist predominantly of engineered fill and previously disturbed and underlying soils. The design and construction of the project would be subject to engineering standards of the California Building Code and local and state standards that consider soil properties. By applying required geotechnical evaluation techniques and appropriate engineering practices, potential impacts from unstable soils would be diminished. The impact would be less than significant.

Significance Level: 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?**

Comment:

*Construction and Operation*

As described above, areas along the project corridor to be disturbed during construction consist predominantly of engineered fill and previously disturbed and underlying soils. The design and construction of the project would be subject to engineering standards of the California Building Code and local and state standards that consider soil properties, including expansive soil. By applying required geotechnical evaluation techniques and appropriate engineering practices, potential impacts from expansive soils would be diminished. The impact would be less than significant.

Significance Level: Less than Significant

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

Comment:

*Construction and Operation*

The proposed project does not involve installation or use of septic tanks or alternative wastewater disposal systems. No impact would result.

Significance Level: No Impact

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

Comment:

*Construction and Operation*

Construction of the project involves ground-disturbing activities including excavation of approximately three feet for road widening and utility line extension, excavation of approximately four feet for culvert improvements, and drilling of piles to approximately 25 feet for retaining walls. Paleontological resources are generally found in geologic deposits of sedimentary rock (e.g. sandstone, siltstone, mudstone, claystone, or shale) that are typically buried under surficial soil deposits. Although paleontological resources are not anticipated to be encountered as a result of project excavations, the potential still exists, and if such resources were encountered, a potentially significant impact could result. Implementation of Mitigation Measure GEO-1 would reduce the potential impact to undiscovered paleontological resources to a less-than-significant level by addressing discovery of unanticipated buried resources and preserving and/or recording those resources consistent with appropriate laws and requirements.

Following construction, no earthwork would occur. No operational impact would result.

Significance Level: Less than Significant with Mitigation Incorporated

Mitigation:

**Mitigation Measure GEO-1: Protect Paleontological Resources if Encountered during Construction**

If fossils are encountered during construction (i.e., bones, teeth, or unusually abundant and well-preserved invertebrates or plants), construction activities shall be diverted away from the discovery within 50 feet of the find, and a professional paleontologist shall be notified to

document the discovery as needed, to evaluate the potential resource, and to assess the nature and importance of the find. Based on the scientific value or uniqueness of the find, the paleontologist may record the find and allow work to continue, or recommend salvage and recovery of the material, if it is determined that the find cannot be avoided. The paleontologist shall make recommendations for necessary treatment that is consistent with currently accepted scientific practices. Any fossils collected from the area shall then be deposited in an accredited and permanent scientific institution where they would be properly curated and preserved.

## 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?**

Comment:

Climate change is not caused by any individual emission source but by a large number of sources around the world emitting greenhouse gases (GHGs) that collectively create a significant cumulative impact. The principal GHGs contributing to global climate change are carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), nitrous oxide (N<sub>2</sub>O), and fluorinated compounds. These gases allow visible and ultraviolet light from the sun to pass through the atmosphere, but they prevent heat from escaping back into space.

*Construction*

The BAQQMD does not have an adopted threshold of significance for construction-related GHG emissions. However, the BAAQMD recommends that construction-period GHG emissions be quantified and disclosed. Project construction would result in direct GHG emissions from the operation of construction equipment and the transport of materials and construction workers to and from the project site. Project construction is expected to occur over an approximately six to nine month period. Project construction activities are limited in scope and duration and would not involve construction activities associated with higher-level GHG emissions such as use of a significant amount of heavy construction equipment, substantial earth-moving activities, or import/export of a significant amount of material. The construction-period GHG emissions associated with the proposed project were estimated using the Road Construction Emissions Model (RCEM) version 9.0.0, and were determined to amount to 672 Metric Tons of carbon dioxide equivalent emissions.

As noted above, the construction phase of the proposed project is not subject to thresholds of significance. Nevertheless, best management practices (BMPs) are applied to projects of the County during the construction phase to reduce GHG emissions. These construction phase BMPs include:

- A. Minimize idling times either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes;
- B. Maintain and properly tune equipment in accordance with the manufacturer's specifications;
- C. Recycle demolition materials to the extent feasible; and
- D. Use alternative fueled (e.g., biodiesel, electric) construction vehicles/equipment to the extent feasible.

The temporary impact from construction-related GHG emissions would be less than significant.

*Operation*

Relative to operational GHG impacts, the BAAQMD CEQA Air Quality Guidelines includes thresholds of significance for land use development projects to achieve California's long-term climate goal of carbon neutrality by 2045. The proposed project is a bicycle lane improvement project that would have a beneficial effect on air quality by encouraging reductions in GHG emissions. The project would not generate growth or new vehicle trips and no stationary sources of GHGs are proposed. The project does not add travel lanes on Arnold Drive that increase the operational capacity of the roadway, nor structures that would require direct or indirect energy use. No long-term contribution of GHG emissions is expected with implementation of the proposed project. The impact would be less than significant.

Significance Level: Less than Significant

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

Comment:

Sonoma County's Climate Change Action Resolution resolves to reduce GHG emissions to 40% below 1990 levels by 2030, and to 80% below 1990 levels by 2050. The Climate Change Action Resolution includes twenty strategies for reducing GHG emissions, including increasing carbon sequestration, increasing renewable energy use, and reducing emissions from the consumption of goods and services.

The California Air Resources Board's Climate Change Scoping Plan (CARB 2022) includes measures to move to a zero-emissions (decarbonized) transportation sector and to phase out the use of natural gas in residential and commercial buildings. The 2022 Scoping Plan also aims to reduce emissions of short-lived climate pollutants (SLCPs) and includes mechanical CO<sub>2</sub> removal and carbon capture and sequestration actions, as well as natural working lands management and nature-based strategies.

*Construction and Operation*

As discussed in Impact (a) above, no long-term contribution of GHG emissions is expected with implementation of the proposed project. The project would be consistent with the Climate Change Action Resolution and the County General Plan as it promotes safe bicycle ridership and infrastructure, supports zero emissions transportation options, lowers vehicle miles traveled, and aligns with the Sonoma County Bicycle and Pedestrian Plan. The 2022 Scoping Plan measures are statewide and programmatic in nature and largely advisory, as CARB does not directly regulate many of the sectors identified by the measures. The measures would be implemented at the State level and do not relate to the construction and operation of individual projects such as the proposed project. The proposed project would not conflict with a plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases. No impact would result.

Significance Level: No Impact

## 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?**

Comment:

### *Construction*

Construction activities would involve the use of fuels, lubricants, paints, solvents, concrete, asphalt and other similar materials. Such materials are commonly used during construction, are not acutely hazardous, and would be used in small quantities. During construction, hazardous materials used, stored, or transported would be required to follow standard safety protocols (as determined by the U.S. EPA, California Department of Health and Safety, and Sonoma County). Soil management and disposal procedures would be implemented in accordance with applicable local, state and federal regulations. As discussed in Impact (d) below, the potential for construction activities to encounter residual soil or groundwater contamination associated with a hazardous materials clean-up site is considered low. The construction-related impact would be less than significant.

### *Operation*

Operation of the proposed project would not result in the transport, use, or disposal of hazardous materials. Long-term operation and maintenance of Arnold Drive and the storm drain system would be performed by existing County staff as part of ongoing routine maintenance. No operational impact would result.

Significance Level: 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?**

Comment:

### *Construction and Operation*

The proposed project would not involve any materials or conditions that would result in risk of upset or accident that would release hazardous materials into the environment. Examples of project types that may involve such risk could include refineries, fuel storage, or tanker transportation, where accidents could result in catastrophic environmental or human consequences. The proposed project would not involve such risk or circumstances.

Proper use of materials in accordance with local, state, and federal requirements, and as required in the construction documents, would minimize the potential for accidental releases or emissions from hazardous materials during construction. Caltrans and the California Highway Patrol regulate the transportation of hazardous materials and wastes, including container types and packaging requirements, as well as licensing and training for truck operators, chemical handlers, and hazardous waste haulers. The California Division of Occupational Safety and Health (Cal-OSHA) enforces hazard communication program regulations which contain worker safety training and hazard information requirements, such as procedures for identifying and labeling hazardous substances, communicating hazard information related to hazardous substances and their handling, and preparation of health and safety plans to protect workers and employees. Because contractors would be required to comply with existing and future hazardous materials laws and regulations addressing the transport, storage, use, and disposal of hazardous materials, the potential to create a significant hazard from accidental conditions during construction would be less than significant.

Operation of the proposed project would not result in the use of hazardous materials. Long-term operation and maintenance of Arnold Drive and the storm drain system would be performed by existing County staff as part of ongoing routine maintenance. No long-term operational impact would result.

Significance Level: 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?**

Comment:

*Construction and Operation*

Altimira Middle School and the Hanna Center are located within one-quarter mile of the proposed project. Construction would include the use of fuels, lubricants, degreasers, paints, solvents and similar materials, all of which are common to construction, are not acutely hazardous, and would be used in small quantities. Numerous laws regulate transportation, use, storage, and disposal of hazardous materials (see Impact a & b above). Although construction activities could result in the inadvertent release of small quantities of construction chemicals, a spill or release at a construction area is not expected to endanger individuals at a nearby school given the nature of the materials and the small quantities that would be used. Contractors would be required to comply with existing and future hazardous materials laws and regulations covering the transport, use, and disposal of hazardous materials, and based on the nature and quantity of the hazardous materials to be potentially used by the project, the impact related to the use of hazardous materials during construction within one-quarter mile of a school would be less than significant.

Operation of the proposed project would not result in hazardous emissions or the use of hazardous materials. No long-term operational impact would result.

Significance Level: Less than Significant

**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?**

Comment:

*Construction and Operation*

The provisions in Government Code Section 65962.5 are commonly referred to as the "Cortese List." A search of the Cortese List was completed to determine if any known hazardous waste sites have been recorded on or adjacent to the project corridor. These include:

- Department of Toxic Substances Control EnviroStor database;
- List of Leaking Underground Storage Tank Sites from the Water Board GeoTracker database;
- List of solid waste disposal sites identified by the Water Board with waste constituents above hazardous waste levels;
- List of "active" Cease and Desist Orders and Cleanup and Abatement Orders from the Water Board; and
- List of hazardous waste facilities subject to corrective action pursuant to Section 25187.5 of the Health and Safety Code.

The review indicates that one previously recorded hazardous waste investigation and cleanup site was conducted at 17000 Arnold Drive related to removal of three former petroleum underground storage tanks from the Hanna Center. According to records, the tanks were removed and site

investigation and remedial action was completed. On February 19, 2013, the County of Sonoma Department of Health Services determined that the site followed the requirements of the Health and Safety Code and the site was approved for closure with no required further action. The potential for construction activities to encounter residual soil or groundwater contamination associated with the former clean-up site is considered low because of the intervening distance between the former tanks and Arnold Drive and because the area around the former tanks was remediated. No other adjacent properties have been identified as hazardous materials sites in the Cortese List data resources. The impact would be less than significant.

Significance Level: Less than Significant

- 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?**

Comment:

*Construction and Operation*

The proposed project is not located within an airport land use plan or within two miles of a public airport or public use airport. The nearest airport is Sonoma Skypark, located approximately five miles southeast of the proposed project. No impact would result.

Significance Level: No Impact

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

Comment:

*Construction*

Arnold Drive in the project area is a primary emergency evacuation route for adjacent land uses in the areas of Boyes Hot Springs and Diamond A Estates (County Evacuation Zones SON-6E1 and SON-6D1). During construction, the normal functionality of Arnold Drive would be temporarily altered with partial lane closures and traffic controls to accommodate construction activities, which could have a potentially significant impact on emergency evacuation. Implementation of Mitigation Measure HAZ-1 would ensure adequate traffic access for the public and emergency responders during construction and during a potential evacuation scenario, reducing the impact to less than significant.

*Operation*

Operation of the proposed project would not impair or interfere with the County's emergency response plan or established evacuation travel routes. Arnold Drive would be restored and fully functional as an evacuation travel route following construction. No operational impact would result.

Significance Level: Less than Significant with Mitigation Incorporated

Mitigation:

**Mitigation Measure HAZ-1: Minimize Emergency Evacuation Impacts during Construction**  
During construction, the County and its contractor shall implement traffic controls to ensure Arnold Drive remains a viable emergency evacuation route, including:

- During construction, at least one lane in each direction of Arnold Drive shall be kept open at all times. Through traffic shall be maintained through temporary signals, flaggers or other means.

- Access to driveways and public and private roads shall be maintained, as feasible, by using steel trench plates. If access must be restricted for brief periods (more than one hour), property owners shall be notified by the County and its contractor in advance of such closures.
- Construction shall be coordinated with emergency service providers and administrators of land uses that may be more affected by traffic impacts, such as fire stations, schools, hospitals, and ambulance providers. As construction progresses, emergency providers, and other land uses as mentioned above, shall be notified in advance of construction of the timing, location, and duration of construction activities and the locations and durations of any temporary detours and/or lane closures.
- The contractor shall be required to have ready the means necessary to accommodate access by emergency vehicles, such as plating over excavations, flaggers or other means.
- The contractor shall coordinate traffic control plans with other simultaneous construction projects along Arnold Drive, if any, to minimize impacts to congestion, emergency access, and alternative modes of transportation.

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

Comment:

Arnold Drive in the project area is situated between areas of Local Responsibility to the east and areas of State Responsibility to the west. According to CAL FIRE'S Fire Hazard Severity Zone mapping, the State Responsibility Areas contiguous to the west side of Arnold Drive have been designated as a moderate fire hazard severity zone. The Local Responsibility Areas contiguous to the east side of Arnold Drive have been designated as non-very high fire hazard severity zone. According to the Sonoma County Wildfire Hazard Index, Arnold Drive in the project area crosses an area categorized as a high wildfire hazard area.

*Construction*

If construction activity occurs during the dry season, it is possible that accidental fire ignition could occur related to use of heavy machinery. Because vegetation along the project corridor could be dry during construction, and because of the close proximity of nearby residences and other land uses, the construction-related impact is considered potentially significant. Implementation of Mitigation Measure HAZ-2 would require the use of construction techniques that would reduce the likelihood of wildland fires during construction to less than significant.

*Operation*

Following construction, disturbed areas would be restored and the project would not increase the risk of wildland fires. No operational impact would result.

Significance Level: Less than Significant with Mitigation Incorporated

Mitigation:

**Mitigation Measure HAZ-2: Reduce Wildland Fire Hazards**

At the start of construction, the County and its contractor shall remove or clear away dry, combustible vegetation from within the area of direct impact. Grass and other vegetation less than 18 inches in height above the ground shall be maintained in the construction area where necessary to stabilize the soil and prevent erosion. Vehicles shall not be parked in areas where exhaust systems contact combustible materials. Fire extinguishers shall be available to assist in quickly extinguishing any small fires, and contractors shall have on site the direct phone number for the local fire departments.



## 10. HYDROLOGY AND WATER QUALITY:

Would the project:

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

Comment:

*Construction and Operation*

The San Francisco Bay Regional Water Quality Control Board (SFBRWQCB) establishes water quality standards for surface waters and groundwaters within the project area. Water quality standards include the beneficial uses for a waterbody, water quality objectives to protect beneficial uses, and an Antidegradation Policy that requires the continued maintenance of existing high-quality waters.

The proposed project is located within the Sonoma Creek Watershed. Sonoma Creek flows parallel to the project corridor approximately 0.25-miles to 0.5-miles east of Arnold Drive, and the project corridor crosses 13 ephemeral and intermittent watercourses that hydrologically connect to Sonoma Creek. The SFBRWQCB Basin Plan identifies the following beneficial uses for Sonoma Creek: 1) Commercial and Sport Fishing; 2) Cold Freshwater Habitat; 3) Fish Migration; 4) Preservation of Rare and Endangered Species; 5) Fish Spawning; 6) Warm Freshwater Habitat; 7) Wildlife Habitat; 8) Water Contact Recreation; and 9) Noncontact Water Recreation. Sonoma Creek also provides designated critical habitat for federally endangered steelhead trout (*Oncorhynchus mykiss*).

Sonoma Creek is included on the 303(d) list of impaired water bodies for pathogens and sediment. A listing of a water body as "impaired" triggers development of standards and implementation plans known as Total Maximum Daily Loads (TMDLs) for each water quality pollutant. The SFBRWQCB has adopted Total Maximum Daily Loads (TMDLs) addressing these impairments.

The TMDL for pathogens in the Sonoma Creek watershed addresses septic systems, wastewater treatment facilities, dairies, livestock grazing, and municipal runoff. The County's Municipal Stormwater Permit includes stormwater control programs and is enforced by the SFBRWQCB. The County's Stormwater Plan helps to control contributions of pathogens from municipal runoff. The proposed project would be required to comply with Sonoma County regulations related to stormwater runoff. The proposed project would include new vegetated swales along certain sections of Arnold Drive, and where space is limited, a piped storm drain system may be implemented. Construction of bike lanes along existing roadways and pavement resurfacing are excluded from the storm water low impact development requirements of the County's Phase II MS4 permit. However, new vegetated low impact development treatment areas would be implemented into the design in coordination with the SFBRWQCB Section 401 Water Quality Certification for the project, to the extent feasible. Compliance with these regulations would ensure that the project would not conflict with the County's Municipal Stormwater Permit, and would not result in a substantial increase in sources of pathogens in the watershed due to the minimal increase in paved surface area. As such, the proposed project would not violate or conflict with the Sonoma Creek TMDL for pathogens, nor with other water quality standards or waste discharge requirements.

The TMDL for sediment in the Sonoma Creek watershed was prompted by declines in native fish populations. The Sonoma Creek Sediment TMDL addresses sediment supply from urban stormwater runoff, which includes municipal and construction stormwater, as well as other sources. Sonoma County is regulated by a Municipal Stormwater Permit which includes a Storm Water Management Plan/Program that is implemented by the County and enforced by the SFBRWQCB to reduce the discharge of pollutants to the maximum extent practicable. The project would not conflict with the County's Municipal Stormwater Permit and Storm Water Management Plan/Program. In addition, with implementation of Mitigation Measure BIO-7, Best Management Practices to Protect Aquatic

Resources, the proposed project would not result in a significant increase in sediment to the Sonoma Creek watershed, and the project would be required to comply with NPDES General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities. Thus, the project would not violate or conflict with the Sonoma Creek TMDL for sediment, nor with other water quality standards or waste discharge requirements.

The proposed project is located within the Sonoma Valley Groundwater Basin. The SFBRWQCB Basin Plan identifies two existing beneficial uses for the Sonoma Valley Groundwater Basin: 1) Municipal / Domestic Water Supply, and 2) Agricultural Water Supply. The Basin Plan also identifies Industrial Process Supply and Industrial Service Supply as two potential uses for the groundwater basin. If dewatering is necessary during construction, dewatering would be required to be consistent with SFBRWQCB requirements and as such would not result in a violation of water quality standards or waste discharge requirements. The proposed project would not result in the construction of large impervious surface areas that would prevent water from infiltrating into the groundwater, nor would it result in direct additions or withdrawals to existing groundwater. Therefore, the project would not negatively affect designated beneficial uses.

Significance Level: Less than Significant with Mitigation Incorporated

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

Comment:

*Construction and Operation*

The proposed project would not prevent precipitation from infiltrating into the groundwater, nor would it result in direct additions or withdrawals of existing groundwater. Temporary groundwater dewatering during construction is not anticipated to be required, but if necessary, would involve the pumping of groundwater in a localized area to just below the bottom of an excavation. Water would be pumped upslope and not into receiving waters. Such temporary dewatering, if needed, would only have an effect on groundwater levels in the immediate vicinity of an excavation area, would be temporary, and would not result in a substantial deficit in groundwater levels or well interference. The proposed project would not impede sustainable management of the local groundwater basin. The impact would be less than significant.

Significance Level: Less than Significant

- 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?**

Comment:

*Construction and Operation*

Topography along the proposed project is mostly flat and the exiting grade would not substantially change. The drainage patterns in the project area would be slightly altered by relocating and adding impermeable roadway surfaces and the extension and alteration of culverts crossing beneath the roadway. Where needed, drainage improvements would be installed to capture stormwater and convey it into the existing storm drain systems and channels. These drainage improvements would remain after construction.

Sonoma County is regulated by a Municipal Stormwater Permit which includes a Storm Water

Management Plan/Program that is implemented by the County and enforced by the SFBRWQCB to reduce the discharge of pollutants to the maximum extent practicable. The project would not conflict with the County's Municipal Stormwater Permit and Storm Water Management Plan/Program. Vegetated low impact development treatment areas would be implemented into the design in coordination with the San Francisco Bay Regional Water Quality Control Board, where feasible. The project would also be required to comply with NPDES General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities. Best management practices would be implemented during and after construction so that on-site and off-site erosion and sedimentation would be controlled to the extent practicable. The impact would be less than significant.

Significance Level: 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?**

Comment:

*Construction and Operation*

The proposed project would include new vegetated low impact development treatment swales along certain sections of Arnold Drive, and where space is limited, a piped storm drain system may be implemented. Construction of bike lanes along existing roadways and pavement resurfacing are excluded from the storm water low impact development requirements of the County's Phase II MS4 permit. However, new vegetated low impact development treatment areas would be implemented into the design in coordination with the SFBRWQCB Section 401 Water Quality Certification for the project, to the extent feasible. Cross culverts would be extended to continue to convey storm water runoff flows similar to existing conditions. The proposed project would not be expected to cause on-or off-site flooding given that proper installation and long-term maintenance of the storm water controls would be conditionally required. The impact would be less than significant.

Significance Level: Less than Significant

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

Comment:

*Construction and Operation*

As described above, the proposed project would include new vegetated swales along certain sections of Arnold Drive, and where space is limited, a piped storm drain system may be implemented. New vegetated low impact development treatment areas would be implemented into the design in coordination with the SFBRWQCB Section 401 Water Quality Certification for the project, to the extent feasible, which would help increase surface water infiltration adjacent to the roadway, minimize surface water runoff, and provide water quality treatment. Cross culverts would be extended to continue to convey flows similar to existing drainages, which would have adequate conveyance capacity. The proposed project would not exceed the capacity of existing or planned stormwater drainage systems or result in substantial additional sources of untreated polluted runoff.

Significance Level: Less than Significant

**iv. Impede or redirect flood flows?**

Comment:

*Construction and Operation*

According to FEMA Flood Insurance Rate Maps, most of the proposed project is not located within a

mapped floodplain. However, a portion of Arnold Drive near Loma Vista Drive crosses into Zone A, which is defined as having a 1% chance of floods occurring in any given year. The proposed project would extend the existing storm water culvert at this location on both sides of Arnold Drive, and would continue to convey flows similar to existing conditions. The topography and the existing grade would not substantially change, as the design balances earthwork cut and fill within the SFHA to preserve flood storage volume to maintain existing conditions. Flood waters would not be redirected as a result of the proposed project, therefore, the project would not result in flood water displacement. The impact would be less than significant.

Significance Level: Less than Significant

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

Comment:

*Construction and Operation*

The proposed project is not located within a tsunami inundation zone as mapped by the California Office of Emergency Services, nor close enough to a large waterbody to be exposed to risks from seiche. The proposed project would extend an existing storm water culvert at one location of Arnold Drive that is mapped within a flood zone, which would continue to convey flows similar to existing conditions. The topography and the existing grade would not substantially change, and flood waters would not be redirected as a result of the proposed project. The proposed project would not risk the release of pollutants due to inundation. The impact would be less than significant.

Significance Level: Less than Significant

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

Comment:

*Construction and Operation*

The proposed project would not conflict with or obstruct the implementation of a water quality control plan or sustainable groundwater management plan. Adherence to construction provisions and precautions described in required National Pollutant Discharge Elimination System permits would be upheld, and best management practices would be required to be implemented to prevent violation of water quality standards or waste discharge requirements or degradation of water quality (see Impact (a) above). Operation of the proposed project would not impede sustainable groundwater management as the project would not utilize groundwater, interfere with groundwater recharge, generate growth, or increase water demands.

Significance Level: Less than Significant



# 11. LAND USE AND PLANNING:

Would the project:

**a) Physically divide an established community?**

Comment:

*Construction and Operation*

The physical division of an established community typically refers to the construction of a physical feature or removal of a means of access that would impair the mobility within an existing community, or between a community and outlying areas. The proposed project would provide new Class II bicycle lanes along Arnold Drive from Country Club Drive to Madrone Road in unincorporated Sonoma County. Implementation of the proposed project would serve existing bicyclists by enhancing bicycle safety and increasing connectivity and mobility along Arnold Drive. The project is consistent with the goals, objectives, and policies of the County General Plan and aligns with the County Bicycle and Pedestrian Master Plan. The project would not physically divide an established community. No impact would result.

Significance Level: No Impact

**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?**

Comment:

*Construction and Operation*

Section 65402 of the California Government Code of Regulations requires public and private projects to be reviewed for conformity with applicable General Plans. In a letter dated August 7, 2023, the Sonoma County Permit and Resource Management Department reviewed the proposed project and found it to be consistent with the County General Plan.

Specifically, the project is consistent with the goals, objectives, and policies of the Circulation and Transit, Land Use, and Open Space and Resource Elements of the General Plan because it aligns with Sonoma County goals encouraging safe bicycle ridership and infrastructure, supports zero emissions transportation options, and aligns with the Sonoma County Bicycle and Pedestrian Plan. The proposed project falls within the County's street and highway design parameters by adding safe alternate transportation access, lowering vehicle miles traveled, and minimizing risk of unsafe riding conditions with dedicated bicycle lanes. The proposed project is consistent with the County General Plan and County Bicycle and Pedestrian Master Plan, which identify a proposed Class II bikeway along Arnold Drive in the project area. The intent of the project is to add bicycle capacity via two dedicated bicycle lanes along Arnold Drive. Arnold Drive is a heavily used commuter road for both bicycles and vehicles. Increasing bicycle safety and capacity without increasing capacity for passenger vehicles would promote use of bicycles and compound environmental benefits from the reduction in reliance on passenger vehicles. The project would help to fill in a gap between established bicycle infrastructure along Arnold Drive, enhancing connectivity of bicycle infrastructure and improving safety along an important commuter corridor.

In accordance with General Plan Policy CT-3s, the project was presented to the Sonoma County Bicycle and Pedestrian Advisory Committee (BPAC) for a consistency review with the Sonoma County Bicycle and Pedestrian Plan. The project was presented to the BPAC during the committee's meeting on November 17, 2021. In a memorandum dated November 19, 2021, the BPAC provided a determination that the project is consistent with the Sonoma County Bicycle and Pedestrian Plan.

With implementation of the mitigation measures contained in this document, the proposed project is

consistent with regulations and policies adopted for the purpose of avoiding or mitigating environmental effects. The impact would be less than significant.

Significance Level: Less than Significant Impact

## 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?**

Comment:

*Construction and Operation*

The proposed project is not located in an area known to contain regionally significant mineral resources such as lands classified as State mineral resource zones. Therefore, the project would not result in the loss of availability of a known mineral resource of regional value. No impact would result.

Significance Level: No Impact

- 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?**

Comment:

*Construction and Operation*

The proposed project is not located in an area that has been identified by the County of Sonoma as a locally important mineral resource recovery site. Therefore, the proposed project would not result in the loss of the availability of any locally important mineral recovery site. No impact would result.

Significance Level: No Impact

## 13. NOISE:

Would the project:

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

Comment:

### *Construction*

The County's General Plan and municipal code do not establish construction-related noise standards. However, the County's *Guidelines for the Preparation of Noise Analysis* recommends that temporary construction noise be evaluated at a qualitative level, given its temporary and short term nature. Construction activities would primarily require the use of excavators, backhoes, pavers, and paving equipment. Using typical construction noise levels for public works roadway projects, noise from construction would range from 84 to 88 dBA Leq at a distance of 50 feet. However, noise levels typically attenuate (or drop off) at a rate of 6 dB per doubling of distance from point sources. During construction, anticipated to take approximately 6 to 9 months, noise would be temporary and intermittent in nature. Construction equipment would move in a linear fashion as opposed to operating adjacent to any one sensitive receptor for an extended period of time. Construction activities would be relatively minor (i.e. would not require pile driving, structure demolition, blasting or other such construction techniques) and would not produce excessive levels of noise. Based on the type and extent of work to be performed, nighttime construction is not anticipated, and would only be performed under the approval of the County's Resident Engineer. However, because construction would occur adjacent to sensitive residential receptors, the temporary increase in noise is considered potentially significant. Implementation of Mitigation Measure NOI-1 would reduce the temporary construction noise impact on adjacent sensitive receptors to a less-than-significant level by requiring the implementation of noise control measures that would reduce construction-phase noise generation.

### *Operation*

Policy NE-1b of the County General Plan establishes a standard of reducing exterior noise from traffic on public roadways to 60 to 65 dB Ldn or less in outdoor activity areas and reducing interior noise levels to 45 dB Ldn or less with windows and doors closed.

The proposed project is a bicycle lane improvement project to close a gap between established bicycle infrastructure along Arnold Drive, enhancing connectivity of bicycle infrastructure, and improving safety along an important commuter corridor. The project does not add travel lanes on Arnold Drive and does not shift vehicular lanes closer to adjacent land uses. The proposed project does not generate growth, new vehicle trips, or new stationary noise sources. Operational noise impacts would be less than significant.

Significance Level: Less than Significant with Mitigation

### Mitigation:

#### **Mitigation Measure NOI-1: Reduce Construction Noise**

To reduce construction noise, the County shall require the contractor to implement the following measures:

- Limit hours of construction to avoid the early morning and evening hours (such as 7 am to 7 pm weekdays and 7 am to 5 pm weekends).
- Limit work to non-motorized equipment on Sundays and holidays.

- Use sound blankets for loud operations such as air compressors or other mechanical equipment.
- Site construction staging areas as far as practical from nearby sensitive receptors.
- Require street legal mufflers on construction equipment.

**b) Result in generation of excessive groundborne vibration or noise levels?**

Comment:

*Construction*

Construction activities can cause vibration that varies in intensity depending on several factors. The construction of the project may generate perceptible vibration when heavy equipment is used close to sensitive receptors, such as excavators, backhoes, pavers, and paving equipment. Vibration levels vary depending on soil conditions, construction methods, and equipment used. Vibration levels are highest close to the source, and then attenuate with increasing distance. Construction would not require pile driving, structure demolition, blasting or other such construction techniques.

The primary concern with construction-induced vibration is the potential to damage an adjacent structure, either cosmetically (e.g. minor cracking of building elements), or threatening the integrity of the building. The California Department of Transportation (Caltrans) recommends a vibration limit of 0.5 in/sec Peak Particle Velocity (PPV) for new residential and modern commercial/industrial structures, 0.3 in/sec PPV for older residential structures, or 0.12 in/sec PPV for historical buildings.

For the purposes of this study, groundborne vibration levels exceeding Caltrans' conservative 0.3 in/sec PPV limit have been selected as the significance threshold for a vibration impact. Using typical construction vibration levels for public works roadway projects, vibration from construction would range from 0.003 to 0.21 PPV at a distance of 25 feet. Such vibration levels would not exceed Caltrans significance thresholds. The impact would be less than significant.

*Operation*

Following construction, no sources of groundborne vibration or groundborne noise would be generated by the proposed project. Therefore, the project would not result in exposure of persons to or generation of excessive groundborne vibration or noise levels. No operational impact would result.

Significance Level: 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?**

Comment:

*Construction and Operation*

The proposed project is not located within an airport land use plan or within two miles of a public airport or public use airport. The nearest airport is Sonoma Skypark, located approximately five miles southeast of the proposed project. No impact would result.

Significance Level: No Impact

## 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)?**

Comment:

*Construction and Operation*

The proposed project does not involve construction of new housing or businesses, nor extension of roads or other infrastructure. The proposed project is a bicycle lane improvement project to close a gap between established bicycle infrastructure along Arnold Drive and to increase safety along an important commuter corridor. The project does not add vehicular travel lanes on Arnold Drive and would not generate population growth or new vehicle trips. No impact would result.

Significance Level: No Impact

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

Comment:

*Construction and Operation*

The proposed project would require temporary construction easements and slope easements. County right of way agents would work directly with property owners. The easements would not result in the removal of housing or displacement of residents. The impact would be less than significant.

Significance Level: Less than Significant

## 15. PUBLIC SERVICES:

Would the project:

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

i. **Fire protection?**

ii. **Police?**

Comment:

*Construction and Operation*

The proposed project is a bicycle lane improvement project to close a gap between established bicycle infrastructure along Arnold Drive and to improve safety along an important commuter corridor. During construction, Arnold Drive would remain open to traffic and control measures would be implemented per the California Manual on Uniform Traffic Control Devices. The proposed project would not reduce the width of travel lanes along Arnold Drive, which would continue to adequately accommodate fire protection and police vehicles. The project does not add vehicular travel lanes on Arnold Drive and would not generate population growth or new vehicle trips. The project would not require expanded fire or police protection facilities to maintain acceptable service ratios, response times, or other performance objectives. No impact would result.

Significance Level: No impact

iii. **Schools?**

Comment:

*Construction and Operation*

The proposed project would not result in an increase in the County's student population. No new or expanded schools would be required. No impact would result.

Significance Level: No Impact

iv. **Parks?**

Comment:

*Construction and Operation*

The proposed project is a bicycle lane improvement project to close a gap between established bicycle infrastructure along Arnold Drive and to improve safety along an important commuter corridor. While the project could increase bicycle use in the area, it is not anticipated that any increased park use would occur such that new or expanded parks would be required. No impact would result.

Significance Level: No Impact

v. **Other public facilities?**

Comment:

*Construction and Operation*

The project does not involve residential development or new employment generating land uses and would therefore not generate an increase in the County's population. No major additional public services would be required to serve the proposed project. No impact would result.

Significance Level: No Impact

## 16. RECREATION:

Would the project:

- a) **Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?**

Comment:

*Construction and Operation*

The primary purpose of the project is to help close a gap between established bicycle infrastructure along Arnold Drive, thereby enhancing connectivity of bicycle infrastructure and improving safety along an important commuter corridor. While the proposed project could increase bicycle use in the area, it is not anticipated that any increased use would result in physical deterioration of a nearby recreational facility. Therefore, the proposed project would not increase the use of existing neighborhood or regional parks or other recreational facilities such that physical deterioration would occur or be accelerated. No impact would result.

Significance Level: No Impact

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

Comment:

*Construction and Operation*

The proposed project would not directly or indirectly induce population growth in the project area. The proposed project would not materially increase the use of recreational facilities which may have an adverse physical effect on the environment. No new or expanded recreational facilities would be required. No impact would result.

Significance Level: No Impact

## 17. TRANSPORTATION / TRAFFIC:

Would the project:

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

Comment:

*Construction and Operation*

The proposed project is a bicycle lane improvement project to close a gap between established bicycle infrastructure along Arnold Drive and to improve safety along an important commuter corridor. During construction, Arnold Drive would remain open to traffic and control measures would be implemented per the California Manual on Uniform Traffic Control Devices. The proposed project would not reduce the width of travel lanes along Arnold Drive, which would continue to adequately accommodate two-way vehicular traffic. The project does not add vehicular travel lanes on Arnold Drive and would not generate population growth or new vehicle trips.

The Comprehensive Planning Division of the Sonoma County Permit and Resource Management Department reviewed the proposed project and found it to be consistent with the goals, objectives, and policies of the Circulation and Transit Element of the County's General Plan. The proposed project aligns with Sonoma County goals encouraging safe bicycle ridership and infrastructure, supporting zero emission transportation options, and aligning with the Countywide Bicycle and Pedestrian Master Plan. The proposed project complies within the street design parameters outlined in General Plan Policy CT-2s by adding alternative transportation access, lowering vehicle miles traveled, and minimizing risk of unsafe riding conditions with dedicated bicycle lanes. The Sonoma County Bicycle and Pedestrian Advisory Committee has also provided a determination of project consistency with the Countywide Bicycle and Pedestrian Master Plan. No impact would result.

Significance Level: No Impact

- b) **Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?**

Comment:

*Construction and Operation*

The primary purpose of the proposed project is to help close a gap between established bicycle infrastructure along Arnold Drive, thereby enhancing connectivity of bicycle infrastructure and improving safety along an important commuter corridor. The proposed project would not increase vehicle traffic or vehicle miles traveled because the project does not increase the vehicular capacity of Arnold Drive or result in traffic-generating land uses. Rather, the proposed project would promote alternative modes of transportation and reduce vehicle trips. The proposed project would not conflict with or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b). No impact would result.

Significance Level: No Impact

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

Comment:

*Construction and Operation*

The proposed project addresses existing operational deficiencies along Arnold Drive by adding bicycle capacity via two dedicated Class II bicycle lanes consistent with the County General Plan and

Bicycle and Pedestrian Master Plan. The proposed project would help close the gap between established bicycle infrastructure along Arnold Drive and increase bicycle safety. The proposed project would not introduce a new use or geometry that would substantially increase a hazard. Overall, the project would introduce a safer route of bicycle travel along Arnold Drive. No impact would result.

Significance Level: No Impact

**d) Result in inadequate emergency access?**

Comment:

*Construction*

Arnold Drive in the project area is a primary emergency evacuation route for adjacent land uses in the areas of Boyes Hot Springs and Diamond A Estates (County Evacuation Zones SON-6E1 and SON-6D1). During construction, the normal functionality of Arnold Drive would be temporarily altered with partial lane closures and traffic controls to accommodate construction activities, which is a potentially significant impact on emergency access. Implementation of Mitigation Measure HAZ-1 in Section 9 of this Initial Study would ensure adequate traffic access for emergency responders during construction, reducing the impact to less than significant.

*Operation*

Operation of the proposed project would have no long-term impacts on emergency access. Arnold Drive would be restored and fully functional following construction. The proposed project would not reduce the width of travel lanes along Arnold Drive, which would continue to adequately accommodate fire protection and police vehicles. No operational impact would result.

Significance Level: Less than Significant with Mitigation Incorporated

**Mitigation Measure HAZ-1: Minimize Emergency Evacuation Impacts during Construction**

During construction, the County and its contractor shall implement traffic controls to ensure Arnold Drive remains a viable emergency evacuation route, including:

- During construction, through traffic shall be maintained through temporary signals, flaggers or other means.
- Access to driveways and public and private roads shall be maintained, as feasible, by using steel trench plates. If access must be restricted for brief periods (more than one hour), property owners shall be notified by the County and its contractor in advance of such closures.
- Construction shall be coordinated with emergency service providers and administrators of land uses that may be more affected by traffic impacts, such as fire stations, schools, hospitals, and ambulance providers. As construction progresses, emergency providers, and other land uses as mentioned above, shall be notified in advance of construction of the timing, location, and duration of construction activities and the locations and durations of any temporary detours and/or lane closures.
- The contractor shall be required to have ready the means necessary to accommodate access by emergency vehicles, such as plating over excavations, flaggers or other means.
- The contractor shall coordinate traffic control plans with other simultaneous construction projects along Arnold Drive, if any, to minimize impacts to congestion, emergency access, and alternative modes of transportation.

## 18. TRIBAL CULTURAL RESOURCES

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

**a,b) 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 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?**

Comment:

### *Construction and Operation*

Assembly Bill (AB) 52 requires CEQA lead agencies to evaluate the potential impact of a project on tribal cultural resources. Such resources include sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American Tribe that are eligible for inclusion in the California Register of Historical Resources or included in a local register of historical resources. AB 52 also gives CEQA lead agencies the discretion to determine, based on substantial evidence, whether a resource qualifies as a tribal cultural resource.

In compliance with PRC Section 21080.3.1(b), the County provided formal notification of the proposed project to California Native American tribal representatives. The County sent letters to the following Native American Tribes on June 13, 2023:

- Lytton Rancheria of California
- Federated Indians of Graton Rancheria
- Cloverdale Rancheria of Pomo Indians
- Dry Creek Rancheria Band of Pomo Indians
- Kashia Pomos Stewarts Point Rancheria
- Middletown Rancheria Band of Pomo Indians
- Mishewal Wappo Tribe of Alexander Valley
- Guidiville Indian Rancheria
- Muwekma Ohlone Tribe San Francisco Bay Area
- Pinoleville Pomo Nation
- Robinson Rancheria of Pomo

A response was received from the Lytton Rancheria of California on July 5, 2023, acknowledging receipt of the notification, and stating that the Tribe is not requesting consultation. No other responses to the County's AB 52 notice were received.

Coordination with Native American Tribal representatives was also conducted as part of the Archaeological Resources Study (ASC 2023) that was completed for the project. This included review of the Native American Heritage Commission (NAHC) Sacred Lands File relative to the project area, which did not identify any recorded resources. Letters were also sent to each tribal representative on the NAHC contact list on October 27, 2021.

On November 16, 2021, the Tribal Historic Preservation Officer for the Kashia Band of Pomo Indians at Stewarts Point Rancheria responded that the project is located outside the Tribe's aboriginal territory, and that the Tribe does not have a concern at this time.

On November 19, 2021, Lytton Rancheria of California responded that the project area is within the traditional Pomo territory, but at this time, the Tribe does not have any specific information to provide. However, the Tribe stated that it believes there is a potential for cultural resources to be encountered

during construction of the project. The Tribe also requested a copy of the Archaeological Resource Study upon completion.

On November 23, 2021, the Tribal Heritage Preservation Officer at Federated Indians of Graton Rancheria responded that the project area is within the Tribe's ancestral territory and that there may be impacts to tribal cultural resources. The Tribe requested a copy of the Archaeological Resource Study upon completion.

On November 9, 2023, the County provided the Archaeological Resources Study and proposed cultural and tribal cultural resource mitigation measures to Lytton Rancheria of California and Federated Indians of Graton Rancheria for review, as requested.

Based on the County's coordination with Tribal communities, construction-related ground disturbance has the potential to inadvertently affect Native American tribal cultural resources. If such resources were encountered, a potentially significant impact could result. Implementation of Mitigation Measures CR-1 and CR-2 would reduce the potential impact to a less-than-significant level by outlining procedures to be taken in the event of inadvertent discovery consistent with Tribal considerations and appropriate laws and requirements.

Following construction, no earthwork would occur. No operational impact would result.

Significance Level: Less than Significant with Mitigation Incorporated

Mitigation:

**Mitigation Measure CR-1: Protect Archaeological Resources and Tribal Cultural Resources if Encountered during Construction**

To limit potential impacts on archaeological resources, the project specifications shall require the contractor to comply with the following measures regarding the discovery of cultural resources, including Native American Tribal Cultural Resources and items of historical and archaeological interest:

- The County's Construction Inspector and construction personnel shall be notified of the possibility of encountering cultural resources during project construction.
- The County shall notify the Tribal Historic Preservation Officers (THPOs) of the appropriate Native American Tribes in writing at least five days prior to the start of the project's ground-disturbing activities that work will commence.
- Prior to initiation of ground-disturbing activities, the County shall arrange for construction personnel to receive training about the kinds of cultural materials that could be present at the project site and protocols to be followed should any such materials be uncovered during construction. An archaeologist who meets the U.S. Secretary of Interior's professional standards (48 CFR Parts 44738-44739 and Appendix A to 36 CFR 61) shall provide the appropriate archaeological training, including the purpose of the training to increase awareness and appropriate protocols in the event of an inadvertent discovery.
- The project specifications will provide that if discovery is made of items of historical, archaeological, or cultural interest, the contractor will immediately cease all work activities in the area of discovery. Historical, archaeological, and cultural indicators may include, but are not limited to, dwelling sites, locally darkened soils, stone implements or other artifacts, fragments of glass or ceramics, animal bones, and human bones. After cessation of excavation, the contractor will immediately contact the County's Construction Inspector and the THPOs. The contractor will not resume work until authorization is received from the Construction Inspector.
- Should an archaeological deposit be encountered during ground disturbance in the project area, all ground-disturbing activities within 25 feet shall be stopped. The County

Construction Inspector shall notify a qualified archaeologist meeting the Secretary of the Interior's Professional Qualifications Standards for Archeology contacted to assess the situation and make recommendations for the treatment of the discovery. If the deposit is found to be significant (i.e., eligible for listing in the NRHP) and an adverse effect would occur, the County in consultation with the SHPO shall identify appropriate treatments for the discovery.

**Mitigation Measure CR-2: Protect Human Remains if Encountered during Construction**

To limit potential impacts on human remains, the County shall implement the following measures:

- In the event that human remains are identified during project construction, these remains must be treated in accordance with Section 7050.5 of the California Health and Safety Code and Section 5097.98 of the Public Resources Code, as appropriate.
- Section 7050.5 of the California Health and Safety Code states that, in the event of discovery or recognition of any human remains in any location other than a dedicated cemetery, there shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains until the coroner of the county in which the remains are discovered has determined whether or not the remains are subject to the coroner's authority. If the human remains are of Native American origin, the coroner must notify the Native American Heritage Commission (NAHC) within 24 hours of this identification. The NAHC will identify a Native American Most Likely Descendent (MLD) to inspect the site and provide recommendations for the proper treatment of the remains and associated grave goods.
- Section 5097.98 of the Public Resources Code states that the NAHC, upon notification of the discovery of Native American human remains pursuant to Health and Safety Code Section 7050.5, shall immediately notify those persons (i.e., the MLD) it believes to be descended from the deceased. With permission of the landowner or a designated representative, the MLD may inspect the remains and any associated cultural materials and make recommendations for treatment or disposition of the remains and associated grave goods. The MLD shall provide recommendations or preferences for treatment of the remains and associated cultural materials within 48 hours of being granted access to the site.

## 19. UTILITIES AND SERVICE SYSTEMS:

Would the project:

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

Comment:

*Construction and Operation*

The proposed project would require relocation of existing electric and telecommunication utilities within the project footprint. The County of Sonoma is working directly with utility providers (PG&E and AT&T) to coordinate the relocations. The proposed project also includes new storm water facilities. No additional off-site storm water facilities beyond those evaluated in this Initial Study would be necessary to serve the project. The proposed project would not generate wastewater or result in a substantial long-term increase in water demand. No new or expanded water, wastewater, storm water, or other utility facilities would become necessary to serve the project. The impact would be less than significant.

Significance Level: 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?**

Comment:

*Construction and Operation*

Project construction, including the establishment of new trees and landscaping, would require a minimal amount of water use. Such water use would be sufficiently accommodated by existing water supplies. The proposed project would not result in a long-term increase in water demand. No new water supplies would be required. No impact would result.

Significance Level: No Impact

- 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?**

Comment:

*Construction and Operation*

The proposed project would not result in the generation or discharge of wastewater. No impact on wastewater capacity would result.

Significance Level: No Impact

- 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?**

Comment:

*Construction and Operation*

During construction, the construction contractor would be responsible for controlling and disposing of solid waste in accordance with federal, state, and local statutes and regulations. Construction waste with no practical reuse or that cannot be salvaged or recycled would be disposed of at a local landfill. Solid waste generated during construction of the project would represent a small fraction of the daily permitted tonnage of local landfill facilities and would be sufficiently accommodated. Following construction, the proposed project would not generate solid waste. The overall impact would be less than significant.

Significance Level: Less than Significant

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

Comment:

*Construction and Operation*

During construction, solid waste would be required to be disposed of in accordance with federal, state, and local statutes and regulations. Only construction waste with no practical reuse or that cannot be salvaged or recycled would be disposed of at a local landfill. Following construction, the proposed project would not generate solid waste. No impact would result.

Significance Level: No Impact

## 20. WILDFIRE

Would the project:

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

Comment:

*Construction*

As described in Section 9, impact (f), Arnold Drive in the project area is a primary emergency evacuation route for adjacent land uses in the areas of Boyes Hot Springs and Diamond A Estates (County Evacuation Zones SON-6E1 and SON-6D1). During construction, the normal functionality of Arnold Drive would be temporarily altered with partial lane closures and traffic controls to accommodate construction activities, which is a potentially significant impact on emergency response and evacuation. Implementation of Mitigation Measure HAZ-1 would ensure adequate traffic access for the public and emergency responders during construction and during a potential evacuation scenario, reducing the impact to less than significant.

*Operation*

Operation of the proposed project would not impair or interfere with the County's emergency response plan or established emergency evacuation travel routes. Arnold Drive would be restored and fully functional as an evacuation travel route following construction. No operational impact would result.

Significance Level: Less than Significant with Mitigation Incorporated

Mitigation:

**Mitigation Measure HAZ-1: Minimize Emergency Evacuation Impacts during Construction**

During construction, the County and its contractor shall implement traffic controls to ensure Arnold Drive remains a viable emergency evacuation route, including:

- During construction, through traffic shall be maintained through temporary signals, flaggers or other means.
- Access to driveways and public and private roads shall be maintained, as feasible, by using steel trench plates. If access must be restricted for brief periods (more than one hour), property owners shall be notified by the County and its contractor in advance of such closures.
- Construction shall be coordinated with emergency service providers and administrators of land uses that may be more affected by traffic impacts, such as fire stations, schools, hospitals, and ambulance providers. As construction progresses, emergency providers, and other land uses as mentioned above, shall be notified in advance of construction of the timing, location, and duration of construction activities and the locations and durations of any temporary detours and/or lane closures.
- The contractor shall be required to have ready the means necessary to accommodate access by emergency vehicles, such as plating over excavations, flaggers or other means.
- The contractor shall coordinate traffic control plans with other simultaneous construction projects along Arnold Drive, if any, to minimize impacts to congestion, emergency access, and alternative modes of transportation.

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?**

Comment:

*Construction*

Arnold Drive in the project area is situated between areas of Local Responsibility to the east and areas of State Responsibility to the west. According to CAL FIRE'S Fire Hazard Severity Zone mapping, the State Responsibility Areas contiguous to the west side of Arnold Drive have been designated as a moderate fire hazard severity zone. The Local Responsibility Areas contiguous to the east side of Arnold Drive have been designated as non-very high fire hazard severity zone. According to the Sonoma County Wildfire Hazard Index, Arnold Drive in the project area crosses an area categorized as a high wildfire hazard area.

As described in Section 9, impact (g), if construction activity occurs during the dry season, it is possible that accidental fire ignition could occur related to use of heavy machinery. Because vegetation along the project corridor could be dry during construction, and because of the close proximity of nearby residences and other land uses, the construction-related impact is considered significant. Implementation of Mitigation Measure HAZ-2 would require the use of construction techniques that would reduce the likelihood of wildland fires during construction to less than significant.

*Operation*

Following construction, disturbed areas would be restored, and the project would not increase the risk of wildland fires. No operational impact would result.

Significance Level: Less than Significant with Mitigation Incorporated

Mitigation:

**Mitigation Measure HAZ-2: Reduce Wildland Fire Hazards**

At the start of construction, the County and its contractor shall remove or clear away dry, combustible vegetation from within the area of direct impact. Grass and other vegetation less than 18 inches in height above the ground shall be maintained in the construction area where necessary to stabilize the soil and prevent erosion. Vehicles shall not be parked in areas where exhaust systems contact combustible materials. Fire extinguishers shall be available to assist in quickly extinguishing any small fires, and contractors shall have on site the direct phone number for the local fire departments.

- 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?**

Comment:

*Construction and Operation*

The proposed project would require relocation of existing electric and telecommunication utilities within the project footprint. The County of Sonoma is working directly with utility providers (PG&E and AT&T) to coordinate the relocations. The proposed project also includes new storm water facilities. No additional off-site infrastructure beyond that evaluated in this Initial Study would be necessary to serve the project. Therefore, the proposed project would not require the installation of further associated infrastructure that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment. The impact would be less than significant.

Significance Level: Less than Significant

- 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?**

Comment:

*Construction and Operation*

According to CAL FIRE'S Fire Hazard Severity Zone mapping, the State Responsibility Areas contiguous to the west side of Arnold Drive have been designated as moderate fire hazard severity zones. The Local Responsibility Areas contiguous to the east side of Arnold Drive have been designated as non-very high fire hazard severity zones. According to USGS landslide mapping, the proposed project is located in an area designated primarily as "flat land" with smaller areas designated as "few landslides" near Madrone Road. No hillsides or geologic structures known to be at risk of landslide are located adjacent to the project corridor. The proposed project does not involve large cuts and fills or work adjacent to high fire hazard zones, and would use adequate precautions to prevent fire incidents during construction. The impact would be less than significant.

Significance Level: Less than Significant

## 21. 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?**

Potential project impacts to biological and cultural resources are addressed in Section 3.4, Biological Resources, Section 3.5, Cultural Resources, and Section 3.18, Tribal Cultural Resources, respectively. With implementation of the recommended mitigation measures identified in this Initial Study, the potential for project-related activities to degrade the quality of the environment, including wildlife species or their habitat, plant or animal communities, or important examples of California history or prehistory would be reduced to less-than-significant levels.

Significance Level: Less than Significant with Mitigation Incorporated

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

Cumulative impacts are defined as “two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts” (CEQA Guidelines Section 15355). Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time.

Regarding what constitutes a probable future project, generally a project should be viewed as a probable future cumulative project once the environmental review process for such a future project is underway or there is evidence showing that such a project is feasible, probable or sufficiently certain to occur. Efforts to identify cumulative projects included review of County Public Infrastructure projects, including county road paving projects, road projects, and underground utility projects, as well as development projects in the project area and projects in the City of Sonoma.

Based on current schedules, construction of the proposed project is not anticipated to overlap with construction of cumulative projects in the immediate area and would not add appreciably to any existing or foreseeable future cumulative impact. As summarized in this Initial Study, the project would not result in impacts on mineral resources, public services, or recreation. Therefore, implementation of the project would not contribute to any related cumulative impact on those resources. The planned addition of bike lanes to Arnold Drive in the project area would not contribute substantially to cumulative impacts, such as traffic, noise, or air quality impacts. If the temporary construction activity associated with the project overlaps with a cumulative project in the immediate area, a slight increase in dust generation and exhaust emissions, construction noise, and construction vehicles accessing the area could result. The project impacts summarized in this Initial Study would not add appreciably to a foreseeable future significant cumulative impact. The impacts of the proposed project would be mitigated to a less-than-significant level, and incremental impacts, if any, would be very small, and the cumulative impact would be less than significant.

Significance Level: Less than Significant

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

With implementation of the recommended mitigation measures identified in this Initial Study, the potential for project-related activities to cause substantial adverse effects on human beings would be reduced to less-than-significant levels.

Significance Level: Less than Significant with Mitigation Incorporated

## References

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