

**Initial Study/Proposed Mitigated Negative  
Declaration**

**for the**

**Fryer Creek Pedestrian and Bicycle Bridge  
Project**

**Prepared for:**



City of Sonoma  
No. 1 The Plaza  
Sonoma, California 95476  
Phone (707) 933-2204

**January 19, 2011**

Prepared by:



Winzler & Kelly  
495 Tesconi Circle  
Santa Rosa, CA 95401  
(707) 523-1010



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## **CITY OF SONOMA ENVIRONMENTAL INITIAL STUDY CHECKLIST**

- 1. Project title:** Fryer Creek Pedestrian and Bicycle Bridge Project
- 2. Project location:** **Address:** Fryer Creek at Newcomb Street in the City of Sonoma.  
(See Figure 1 for a Vicinity Map).  
**APN(s):** Project would span across parcel 128-580-034. Located adjacent to parcels 128-580-032, 128-600-012, 128-600-011, 128-580-026, 018-521-024 and 018-061-035.
- 3. Project sponsor's name and address:** City of Sonoma  
No. 1 The Plaza  
Sonoma, CA 95476
- 4. General Plan designation:** Low Density Residential, Medium Density Residential, and Sonoma County Residential.
- 5. Zoning:** Adjacent to land designated as low density residential, medium density residential, and Sonoma County residential.
- 6. Summary description of site and project:**

### **Project Purpose and Need**

#### *Project History*

Starting with a community forum in May 2007, the City of Sonoma (City) partnered with the Sonoma County Transportation Authority (SCTA) to develop a Sonoma Bicycle and Pedestrian Master Plan (Bicycle and Pedestrian Plan). Public input was sought to develop options for bicycle improvements throughout the City, as part of the larger collaborative planning process led by SCTA. The improvements proposed in the Bicycle and Pedestrian Plan would connect with existing bike routes and pedestrian-oriented areas in the City with the goal of making the City a more bicycle safe and friendly community. Since the completion of the Bicycle and Pedestrian Plan, the City has implemented several of these proposed projects.

One of the projects called for in the Bicycle and Pedestrian Plan is a bicycle and pedestrian bridge that would connect the existing Class I<sup>1</sup> bicycle and pedestrian paths to the west of Fryer Creek (south of West

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<sup>1</sup> The City of Sonoma 2020 General Plan provides descriptions of Class I, II, and III bikeways:

- Class I: A completely separated right-of-way designated for the exclusive use of bicycles and pedestrians, commonly called a “bike path.” Cross-flows by pedestrians and motorists are minimized.
- Class II: A restricted right-of-way along a street designated for the exclusive or semi-exclusive use of bicycles, identified by pavement markings and signage and commonly referred to as a “bike lane.” Through travel by pedestrians or motor vehicles is not allowed.
- Class III: A shared street right-of-way designated by signs placed on vertical posts or stenciled on the pavement. These bikeways, which share right-of-way with motor vehicles and are typically called “bike routes,” offer the least protection from automobile traffic. They are typically used to indicate preferred routes.

MacArthur Street) and the proposed Class III bike route on Newcomb Street. This bridge was identified as a “high” priority project in the Bicycle and Pedestrian Plan. The bridge would provide a more convenient bicycle and pedestrian connection between the neighborhoods east and west of Fryer Creek. It would facilitate a safe route to Adele Harrison Middle School and the Sonoma Valley High School (both on Broadway), and it would create new options for accessing the existing Class I bike paths.

#### *Fryer Creek Bridge Alternative Locations*

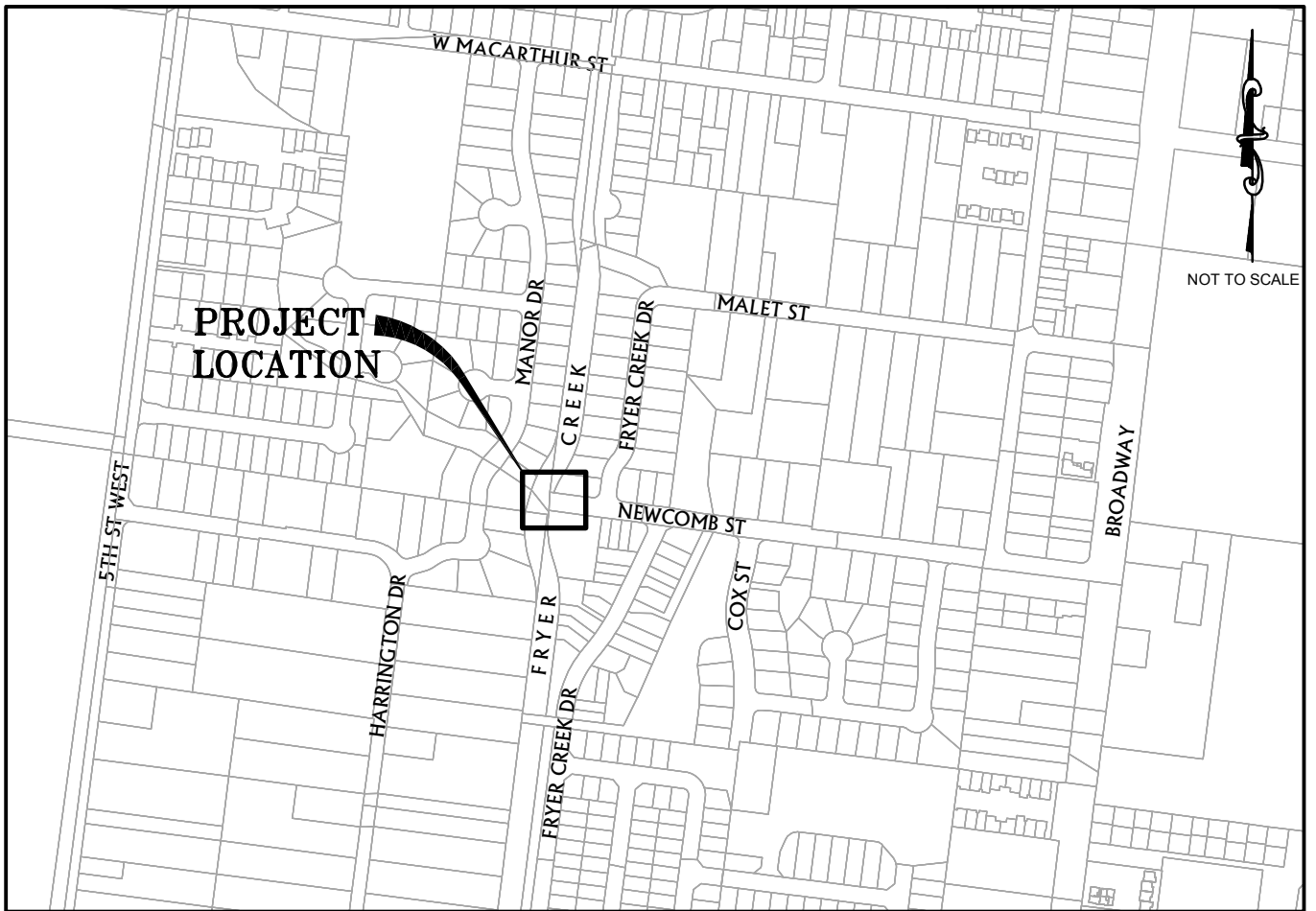
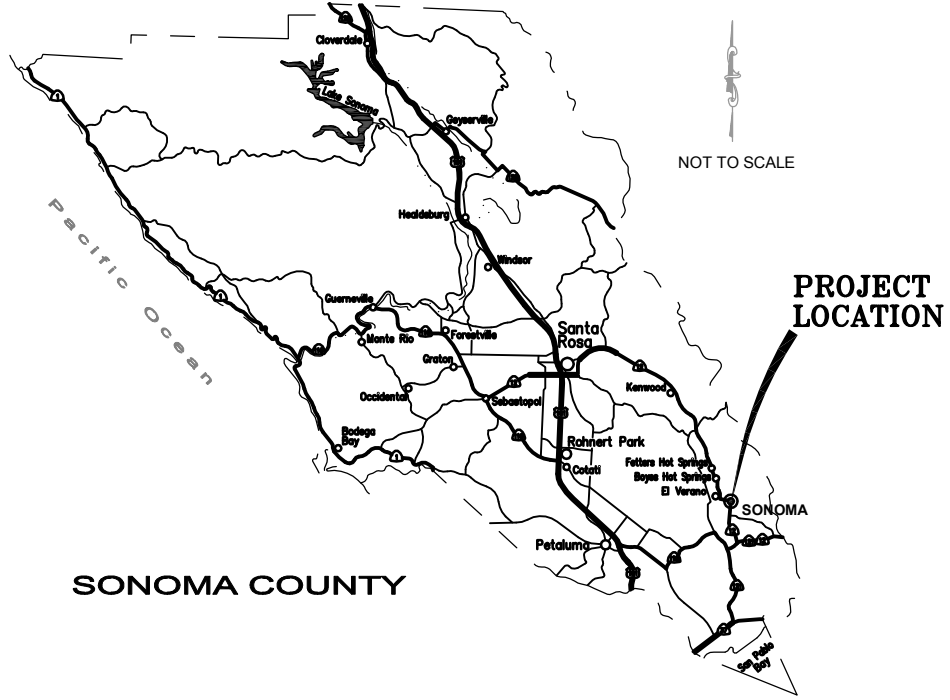
The Bicycle and Pedestrian Plan originally identified two possible locations for the bridge, one at Fryer Creek Drive (north of Pickett Street), and the other at the west end of Newcomb Street. The City Council discussed the location of the bridge at the September 16, 2009 City Council meeting. At this meeting, neighbors expressed concern about the project, and the City Council discussion centered on “the question of whether potential vehicle conflicts at the Newcomb Street location could be adequately mitigated” (City of Sonoma 2009b, p1). Ultimately, the City Council directed City staff to move forward with preparing a concept plan for the Newcomb Street alternative. Based on a review of connectivity of the bicycle and pedestrian paths, it was determined that a bridge at the western terminus of Newcomb Street would provide a good location for crossing of Fryer Creek, since the existing bicycle and pedestrian bridge at Todd Avenue would create a loop connection between the existing Class I paths and the residential neighborhood streets around Fryer Creek Drive, Todd Avenue and Clay Street as shown on Figure 2.

A technical memorandum prepared by Winzler & Kelly on October 27, 2009 evaluated the Newcomb Street alternative in greater detail, including traffic-related concerns raised at the September 16, 2009 City Council meeting. The technical memorandum also discussed the connectivity constraints and solutions at the proposed Newcomb Street location. The technical findings identified the Newcomb Street location as preferred, since it is nearly equal distance from both Todd Avenue and the West MacArthur Street cross-creek access to the north. The proposed bicycle and pedestrian bridge over Fryer Creek at Newcomb Street would improve convenience and create new options for accessing the existing multi-use paths along Fryer Creek, as well as access to adjacent low - and medium-density residential uses through Hertenstein Park (see Figure 2).

A bridge at Newcomb Street would provide a more direct route for students coming from the west side of Fryer Creek, thereby limiting their exposure to heavier vehicle routes. Additionally, the Newcomb Street designated bike route improvements identified in the Bicycle and Pedestrian Plan would connect the proposed bridge to Sonoma Valley High School and Adele Harrison Middle School. On the east side of the school properties is the Nathanson Creek Trail with mirrored access to eastern Sonoma neighborhoods and a proposed Class III bike route along Denmark Street. Although the secondary schools are shown in the Bicycle and Pedestrian Plan as destinations, through connections could be utilized. Additionally, both the Fryer Creek and Nathanson Creek trails provide connectivity to the Sonoma City Trail by way of proposed Class III routes along 3rd Street West and 2nd Street East.

In an effort to further address the concerns expressed at the September 16, 2009 City Council meeting, an onsite meeting was held on November 6, 2009 with the owners of adjoining properties on Newcomb Street and Fryer Creek Drive. At this meeting, planning staff and the consulting traffic engineer updated the residents on the concept plan and solicited additional feedback. Resident concerns expressed at this meeting included:

- Concern about the location of the proposed bridge at Newcomb Street;
- Safety concerns regarding potential conflicts between bicyclists and pedestrians, and vehicles backing out of neighborhood driveways;
- Loss of landscaping; and
- Street lighting.



**FIGURE 1**  
**VICINITY MAP**  
**FRYER CREEK PEDESTRIAN AND**  
**BICYCLE BRIDGE PROJECT**  
**CITY OF SONOMA**

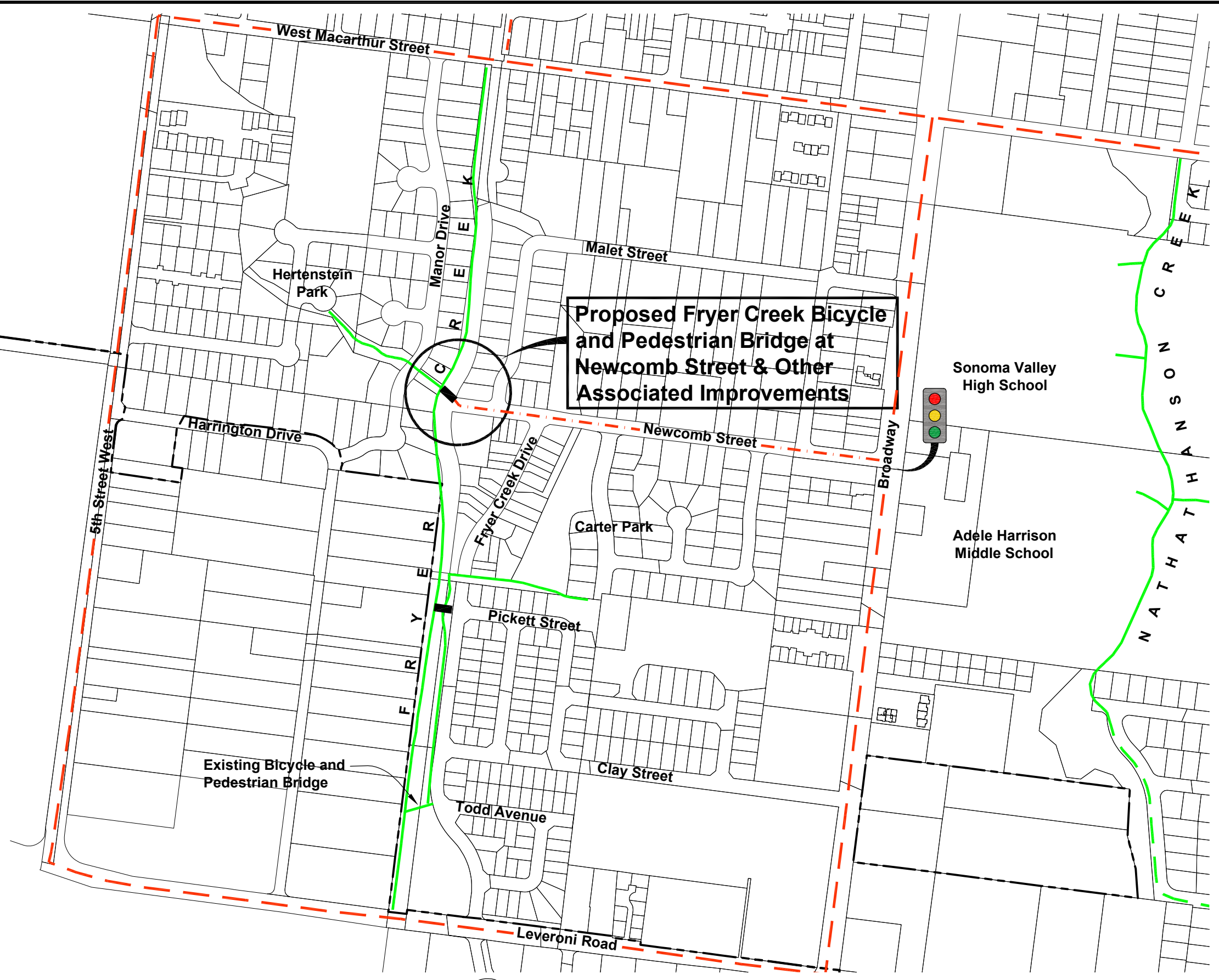




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**LEGEND**

-  EXISTING CLASS I BICYCLE/PEDESTRIAN TRAIL
-  EXISTING CLASS II BICYCLE LANE
-  PROPOSED CLASS II BICYCLE LANE
-  PROPOSED CLASS III BICYCLE ROUTE



**LOCATION MAP**

SCALE: 1" = 200'



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City of  
**SONOMA**

PROPOSED BICYCLE AND PEDESTRIAN  
BRIDGE AT NEWCOMB STREET

**FIGURE 2 - LOCATION MAP**



The revised concept plan and technical memorandum were presented at the November 18, 2009 City Council meeting, and City Council members directed staff to prepare 35% design plans and proceed with the environmental documentation.

### **Project Objectives**

The following are the overall objectives of the project:

- Create a connection between the existing Class I bike paths on both sides of Fryer Creek;
- Create a loop path between the Class I bike paths in the neighborhood;
- Provide a safe route to school through the residential area for students attending Sonoma Valley High School or Adele Harrison Middle School; and
- Improve accessibility and multi-modal circulation to and from the bridge.

### **Project Location**

The project is located in the southwest portion of the City of Sonoma (see Figure 1). The Fryer Creek Pedestrian and Bicycle Bridge would span across Fryer Creek, with the eastern approach connecting to Newcomb Street, and the western approach connecting to existing multi-use paths, one of which connects to Manor Drive (see Figure 3).

### **Project Description**

The Fryer Creek Pedestrian and Bicycle Bridge Project consists of two components (see Figure 3 for site plan):

- Construction of a new bicycle and pedestrian bridge and path and
- Circulation and accessibility improvements to Newcomb Street and Fryer Creek Drive

The following describes the various project components.

#### *Fryer Creek Bridge*

A new bridge would be constructed over Fryer Creek to connect Newcomb Street on the east and the existing multi-use paths and Manor Drive on the west. The Fryer Creek Pedestrian Bridge would be a green-painted, prefabricated steel truss bridge. The bridge would be approximately 48 feet long and 8 feet wide, as shown on Figure 5. The bridge would look similar to the existing bridge at Todd Avenue, which is located approximately 1,600 feet south of the proposed bridge location. The bridge would be placed on newly constructed concrete abutments approximately 13 feet long, 3 feet wide and 3 feet deep. The abutments would be located adjacent to Fryer Creek as shown on Figure 3. The bridge abutments would be excavated vertically and cast-in-place to avoid disturbance to the creek bank during installation. The bridge would be designed such that the bridge and the abutments would be located above the 100-year flood water surface elevation (WSEL) as shown on Figure 5. Horizontal safety rails approximately 4.5 feet in height would be placed on the side trusses for safety.

Existing utilities, including water and sewer lines, cross beneath Fryer Creek at the project site. The bridge abutments would be placed to avoid conflict with existing utilities. The western abutment would be located a minimum of five feet away from the existing water line.

#### *Bicycle and Pedestrian Path*

The project also includes construction of a new 8-foot wide, 60-foot long paved bicycle and pedestrian path. The new path would extend from the eastern bridge approach to the existing residential driveway on the north side of Newcomb Street. Approximately 30 feet of the path would fork into two 4-foot paths

in order to preserve two existing trees along the route. City bike trail signage, directional striping and bollards would be installed along the path to guide users and encourage safe travel. The bicycle and pedestrian path would be located within the City right-of-way.

#### *Circulation and Accessibility Improvements*

A new sidewalk and associated curb and gutter would be constructed along Newcomb Street. The sidewalk would begin at the end of the new pedestrian path and end at the intersection of Fryer Creek Drive and Newcomb Street. The sidewalk would range from 8 feet wide near the new path and narrow to 4 feet wide at the intersection. A new City-standard streetlight with LED lighting would be installed immediately to the east of the driveway (see Figure 3). In order to accommodate the construction of the new sidewalk, one row of existing grape vines and a portion of a privately-owned rock wall within the City right-of-way would be removed to the limits of the new sidewalk (which corresponds with the City right-of-way). Additionally, an existing residential driveway would be repaired following construction of the new sidewalk.

A new buried electrical line would be installed to provide electricity to the new street light and for future lighting on the bridge. Installation would require an 80-foot long and 4-inch wide trench. The trench would be 12 inches deep from the street light to the bridge conduit stub, and 24 inches deep between the street light and the existing PG&E vault. The trench would be located outside of the dripline of the two existing trees to avoid potential tree impacts. Bridge lighting is not proposed at this time. An existing stormwater inlet at the corner of Newcomb Street and Fryer Creek Drive would be relocated and connected to the storm drain system. The new location would be approximately 5 feet north of its current location. Relocation of the inlet would be required to accommodate the new sidewalk in the area.

A new 6-inch curb and Type C Americans with Disabilities Act (ADA) compliant curb ramp would be constructed on the northwestern corner of Newcomb Street and Fryer Creek Drive, and a new detectable warning surface would be installed on the existing curb ramp at the eastern corner. On Fryer Creek Drive, an existing stop sign would be relocated and new striping and crosswalk would be added. A new stop sign and accompanying striping would be installed heading east on Newcomb Street. The project would also remove the existing barricade and fencing at the dead-end of Newcomb Street and replace it with a new City-standard barricade and gate. Additionally, a new driveway with curb and gutter would be constructed for Sonoma County Water Agency (SCWA) access at the dead-end of Newcomb Street.

#### **Construction Access and Staging Areas**

The project site would be primarily accessed from the east, by way of Broadway and Newcomb Street. The existing multi-use path on the west side of Fryer Creek would also be used to access the site, which would likely require an easement from SCWA. A temporary construction staging area within the SCWA right-of-way, at the dead-end of Newcomb Street, would be required to store equipment and materials onsite during construction.

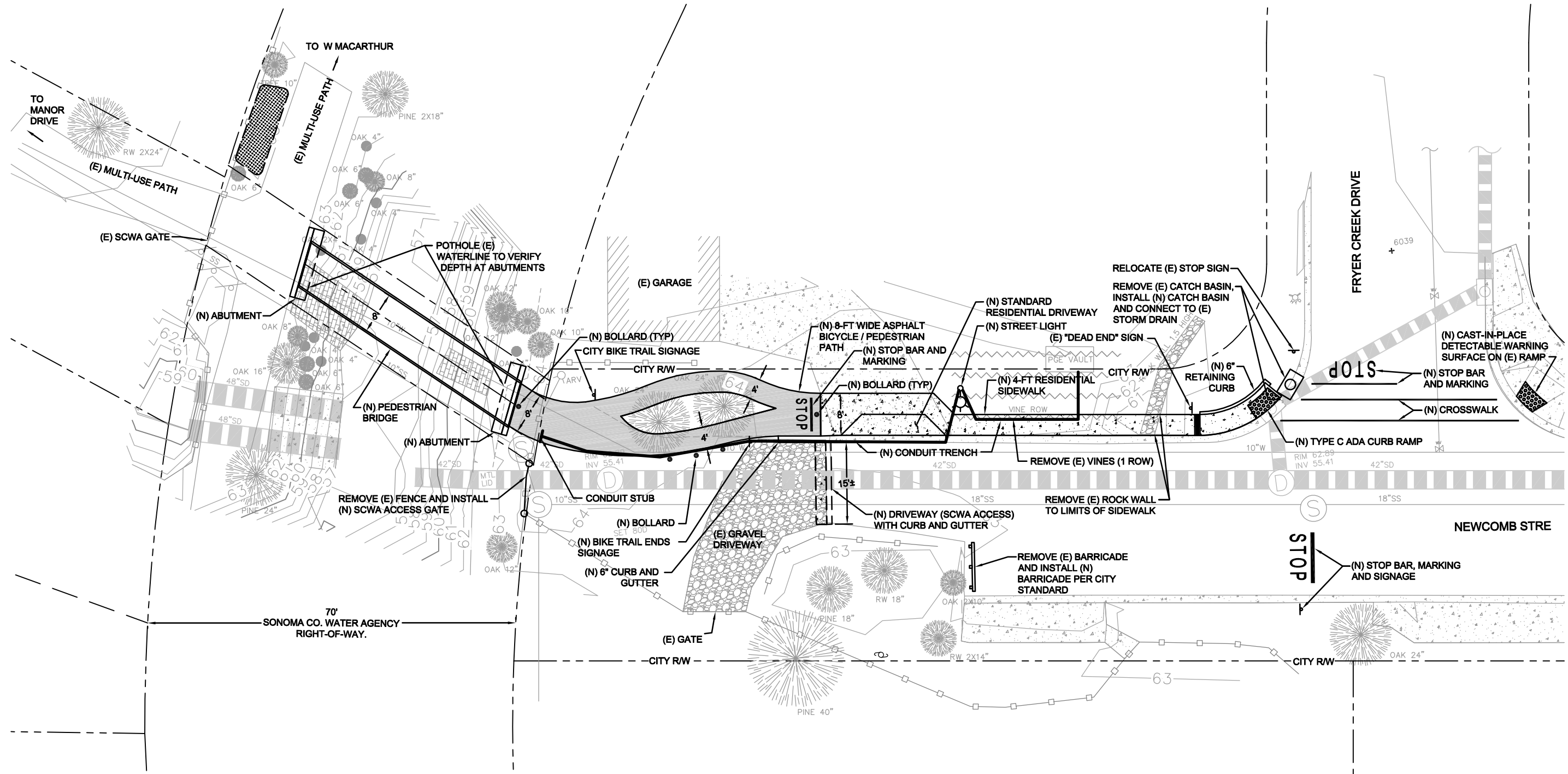
#### **Construction Equipment**

The equipment used for the project would include a backhoe, mini-excavator or excavator, dump truck(s), sweeper, sawcutter, concrete truck, 20-yard asphalt end dump truck, and a crane for bridge deck placement.

#### **Construction Schedule**

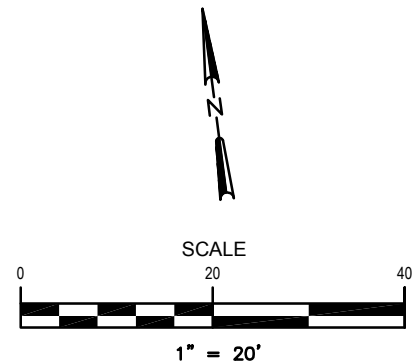
Construction would occur in the summer of 2011. Construction is expected to last approximately 60 days. Table 1 illustrates the anticipated construction sequencing:

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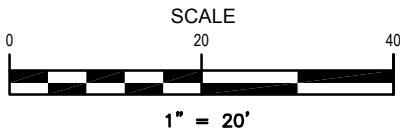
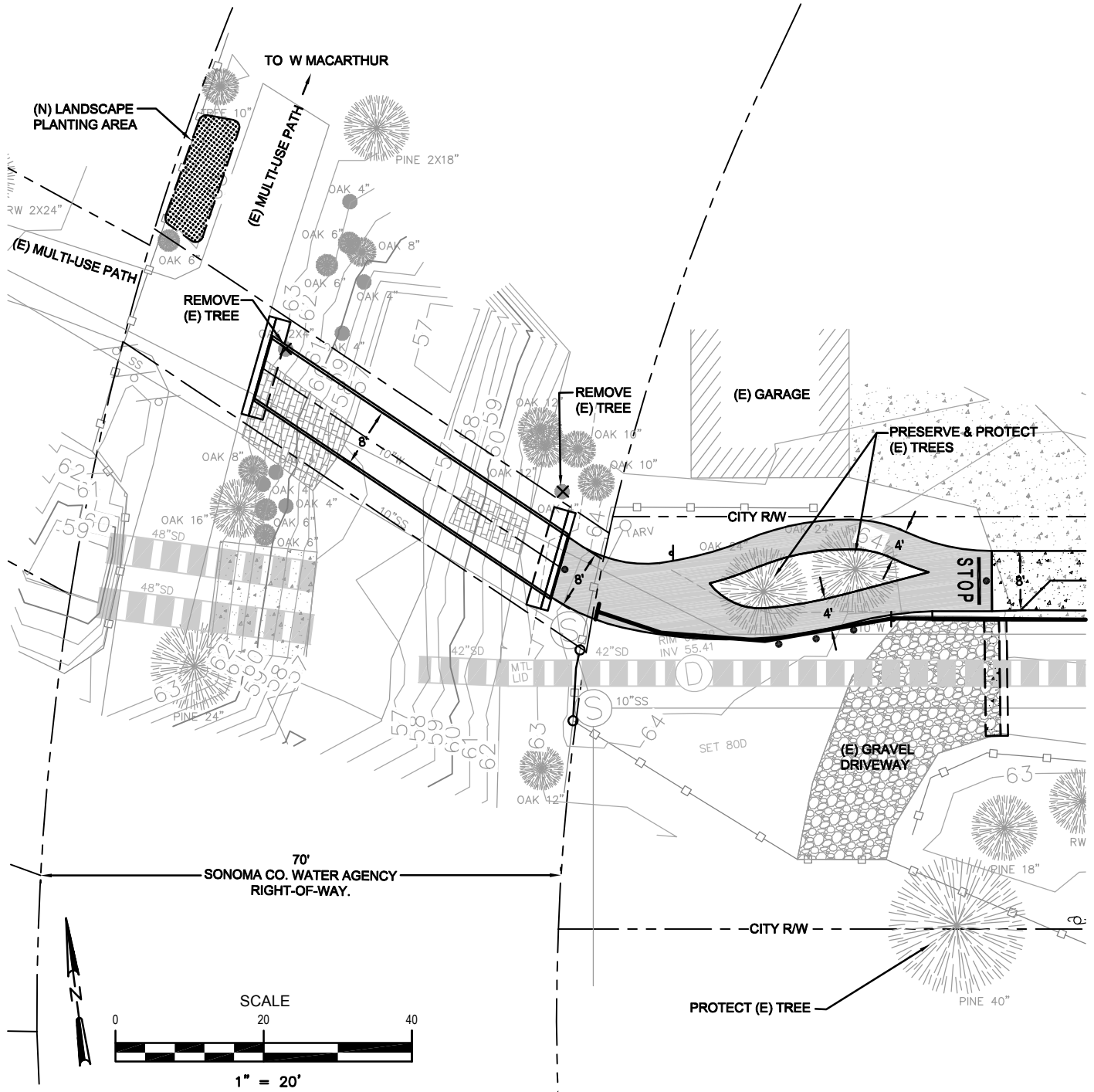
**LEGEND**

- (N) NEW PROJECT ELEMENTS
- (E) EXISTING
- (D) STORM DRAIN
- (S) SANITARY SEWER
- SCWA SONOMA COUNTY WATER AGENCY
- R/W RIGHT-OF-WAY
- CONCRETE SIDEWALK
- EXISTING TREES



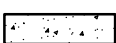



**FIGURE 3  
SITE PLAN  
FRYER CREEK PEDESTRIAN AND  
BICYCLE BRIDGE PROJECT  
CITY OF SONOMA**





**LEGEND**

- (N) NEW PROJECT ELEMENTS
- (E) EXISTING
-  STORM DRAIN
-  SANITARY SEWER
- SCWA SONOMA COUNTY WATER AGENCY
- R/W RIGHT-OF-WAY
-  CONCRETE SIDEWALK
-  EXISTING TREES

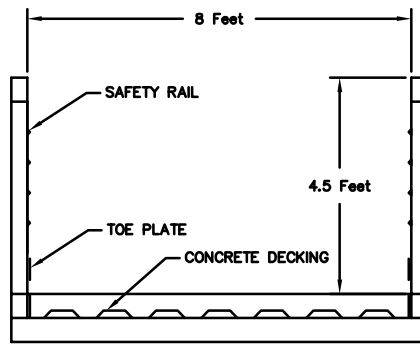
**FIGURE 4**  
**TREE PROTECTION**  
 FRYER CREEK PEDESTRIAN AND  
 BICYCLE BRIDGE PROJECT  
 CITY OF SONOMA





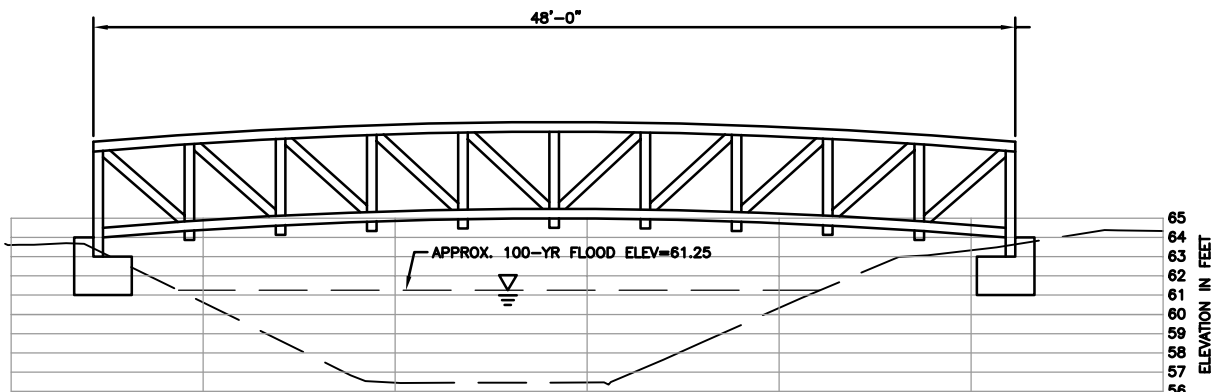


Existing Pedestrian & Bicycle Bridge at Todd Avenue



TYPICAL BRIDGE SECTION

SCALE: 1" = 4'



FRYER CREEK BRIDGE ELEVATION

SCALE: 1" = 10'

**FIGURE 5**  
**BRIDGE DETAILS**  
FRYER CREEK PEDESTRIAN AND  
BICYCLE BRIDGE PROJECT  
CITY OF SONOMA



**Table 1**  
**Construction Activities and Schedule**

<b>Project Component</b>	<b>Construction Activity</b>	<b>Duration</b>
Site mobilization, clearing and grubbing, site access	<ul style="list-style-type: none"> <li>• Site clearing and grubbing</li> </ul>	3 days
Bridge	<ul style="list-style-type: none"> <li>• Excavating the bridge abutments</li> <li>• Construction of cast-in-place bridge foundation</li> <li>• Assembly of the pre-fabricated steel truss bridge</li> <li>• Structural backfill for bridge footings</li> </ul>	10 days
Storm drain	<ul style="list-style-type: none"> <li>• Removing and relocating the storm drain catch basin.</li> <li>• Connecting existing storm drain to new catch basin</li> </ul>	5 days
Path and sidewalk	<ul style="list-style-type: none"> <li>• Excavating for the proposed sidewalk and multi-use path</li> <li>• Trenching and installation of electrical conduit for streetlight and future bridge lighting</li> <li>• Forming and placement of concrete for new sidewalk and driveway</li> <li>• Placement of asphalt for multi-use path</li> <li>• Installation of streetlight</li> </ul>	14 days
Signage and striping	<ul style="list-style-type: none"> <li>• Signage and striping</li> <li>• Bollard installation</li> <li>• Replacement of barricade</li> <li>• Install new fencing/gate</li> </ul>	4 days
Landscaping	<ul style="list-style-type: none"> <li>• Landscaping, tree replacement and revegetation</li> </ul>	3 days

**Cumulative Impacts**

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. Cumulative impacts have been analyzed using the summary of projections contained in an adopted general plan approach (as defined under Section 15130(b)(1)(B) of the CEQA Guidelines). This document uses the current City of Sonoma 2020 General Plan (City of Sonoma 2006a) and studies and analyses conducted during its preparation (Sonoma General Plan FEIR 2006, Sonoma General Plan Background Report 2004).

**CEQA Requirement**

This project is subject to the requirements of the California Environmental Quality Act (CEQA). The lead agency is the City of Sonoma. The purpose of this Initial Study is to provide a basis for deciding whether to prepare an EIR or a Negative Declaration. This Initial Study is intended to satisfy the requirements of the California Environmental Quality Act, CEQA, (Public Resources Code, Div 13, Sec 21000-21177), the State CEQA Guidelines (California Code of Regulations, Title 14, Sec 15000-15387), and the City of Sonoma CEQA implementing procedures. CEQA encourages lead agencies and applicants to modify their projects to avoid significant adverse impacts (for example, CEQA Section 20180(c)(2) and State CEQA Guidelines Section 15070(b)(2) and discussion).

Section 15063(d) of the State CEQA Guidelines states the content requirements of an Initial Study as follows:

- 1) A description of the project including the location of the project;
- 2) An identification of the environmental setting;

- 3) An identification of environmental effects by use of a checklist, matrix, or other method, provided that entries on a checklist or other form are briefly explained to indicate that there is some evidence to support the entries;
- 4) A discussion of the ways to mitigate the significant effects identified, if any;
- 5) An examination of whether the project would be consistent with existing zoning, plans, and other applicable land use controls;
- 6) The name of the person or persons who prepared or participated in the Initial Study.

### **Public Involvement**

Pursuant to Sections 15073.5 and 15105[b] of the state's CEQA Guidelines, the City is now circulating this document for a 30-day public and agency review. All comments received prior to 5:00 p.m. on February 21, 2011 will be considered. To provide input on this project, please send comments to the following contact:

Wendy Atkins  
Associate Planner  
City of Sonoma  
No. 1 The Plaza  
Sonoma, CA 95476  
Email: [watkins@sonomacity.org](mailto:watkins@sonomacity.org)

7. **Surrounding land uses and setting:** The surrounding and uses are single family residential zoned as Sonoma or Medium Density Residential.
8. **Lead agency name and address:** City of Sonoma - Planning Department  
No. 1 The Plaza  
Sonoma, CA 95476
9. **Contact person and phone number:** Wendy Atkins, Associate Planner  
(707) 933-2204

### **10. Other public agencies whose approval is required:**

California Department of Fish and Game. A Section 1602 Streambed Alteration Agreement may be required for work within the riparian corridor.

Sonoma County Water Agency. A revocable license agreement / access easement would be required for work within the SCWA right-of-way. A variance would also be required for placement of the eastern bridge abutment.

**ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:**

The references section contains a list of sources used to prepare this initial study. References are available for review at the City of Sonoma.

This checklist has been adapted from the form in Appendix G of the State CEQA Guidelines, as amended in December 2009. This checklist is modified somewhat for clarity. Explanations of the findings noted in each of the seventeen issue categories (I through XVII) follow each tabular issue section. Where appropriate and where noted, an explanation addresses more than one specific issue question.

The environmental factors checked below would be potentially affected by this project. The significance level is indicated using the following notation: 3=Potentially Significant; 2=Less than Significant with Mitigation; 1=Less than Significant; 0=No Impact.

2	Aesthetics	0	Agriculture and Forestry Resources	2	Air Quality
2	Biological Resources	2	Cultural Resources	2	Geology and Soils
1	Greenhouse Gas Emissions	1	Hazards & Hazardous Materials	2	Hydrology & Water Quality
2	Land Use and Planning	0	Mineral Resources	2	Noise
0	Population and Housing	1	Public Services	1	Recreation
1	Transportation	1	Utilities and Service Systems	2	Mandatory Findings of Significance

**Potentially Significant Impact** is appropriate if there is substantial evidence that an effect is significant, or where an established threshold has been exceeded. If there are one or more "Potentially Significant Impact" entries when the determination is made, an environmental impact report (EIR) may be required. Less than Significant with Mitigation Incorporated applies where the incorporation of mitigation measures would reduce an effect from Potentially Significant Impact to a less-than-significant Impact. Mitigation measures are prescribed to reduce the effect to a less-than-significant level. Measures from earlier analyses may be cross-referenced.

**Less than Significant** applies when the project will affect the environment, but based on sources cited in the report, the impact will not have a significant adverse affect. For the purpose of this report, beneficial impacts are also identified as less than significant. The benefit is identified in Discussion of Impacts, which follows each checklist category.

A **No Impact** answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A No Impact answer is explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).

Earlier analyses may be used where, pursuant to the CEQA process, an effect has been adequately analyzed in an earlier EIR or Negative Declaration. Wherever possible, references to information sources for potential impacts (e.g., general plans, zoning ordinances) are incorporated into the analysis.

**DETERMINATION:**


(To be completed by the E.R.C.) On the basis of this initial evaluation:

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

**Meeting Date: January 7, 2011**

**Vote: Yes: 3 No: 0 Absent/Not Voting: 2**

**Signature:**

  
\_\_\_\_\_  
David Goodison, Planning Director, City of Sonoma

**ENVIRONMENTAL IMPACTS:**

	<b>Potentially Significant Impact</b>	<b>Less Than Significant With Mitigation Incorporated</b>	<b>Less than Significant Impact</b>	<b>No Impact</b>
<b>1. AESTHETICS.</b>				
<i>Would the project:</i>				
a) Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Substantially damage scenic resources, including, but not limited to trees, rock outcroppings, and historic buildings within a state scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Create a new source of substantial light or glare that would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**Discussion:**

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

The project is not located in a scenic vista, nor is the project area visible from a scenic vista. The City of Sonoma Municipal Code defines scenic vistas as “a public view benefitting the community at large, of significant features, including hillside terrain, ridgelines, canyons, geologic features, and community amenities (e.g., parks, landmarks, permanent open space)” (Chapter 19.40.130 Protection of scenic vistas). *No impact* would occur.

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

The project is not located on a state or local scenic highway. *No impact* would occur.

**c) Substantially degrade the existing visual character or quality of the site and its surroundings?**

The project would not result in substantial changes to the existing visual character of the area. The project would be located within a residential area, and there are existing paved paths running north-south along Fryer Creek with a paved path that connects to Manor Drive as shown on Figure 2. Figure 5 illustrates a bridge of similar size and character to the proposed Fryer Creek Bridge. The new bridge would look similar to the existing bridge that is located approximately 1,600 feet south at Todd Avenue.

The addition of a bridge and pedestrian path and sidewalk would complement the existing bicycle and pedestrian system. Activities associated with the new bridge and path would be consistent with pedestrian and bicycle activities already occurring along paths near the bridge. The proposed bicycle and pedestrian bridge would be consistent with the residential character of the neighborhood and the

recreational features of the area. The new streetlight would be consistent with the residential quality of the neighborhood and would be similar to the street lights in the area.

Up to two trees would be removed during bridge installation. Removal of the trees would not substantially alter the visual character of the site. Although no trees or vegetation would be removed near the residences, bridge users may have views into the backyard of the residence at the northwest of the bridge. The view of other residences near the bridge would not be altered. The following mitigation measure would be needed to reduce the impact to a less-than-significant level.

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

The City shall replant trees removed during construction to meet the Sonoma Municipal Code Chapter 12.08 for tree replacement. These trees shall be replaced within the existing landscape strip adjacent to the multi-use path as shown on Figure 4. The replacement trees shall be of sufficient size to provide immediate screening for the adjacent residence.

The replacement trees would help to screen views of the residence (for users of the bridge) and the bridge (for the residence), helping to minimize privacy concerns. Impacts would be reduced to *less than significant* following implementation of Mitigation Measure AES-1.

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

The project would include installation of a new streetlight on Newcomb Street. The streetlight would comply with City of Sonoma standards for street lighting which require downward orientation of street lighting to reduce the potential glare on the surrounding area. The proposed lighting would illuminate a footprint of approximately 150 feet in circumference surrounding the light. The new light would not adversely affect nighttime views in the area.

Lighting on Fryer Creek Pedestrian Bridge is not proposed at this time. However, an electrical conduit would be run to the bridge to accommodate the potential for lighting in the future, if that were found to be necessary to improve security. There is no lighting on the existing bicycle and pedestrian bridge located at Todd Avenue. However, public opinion expressed at the November 2009 onsite meeting led to the incorporation of lighting potential on Fryer Creek Pedestrian Bridge. If implemented, future lighting would be downward facing to reduce glare, and fixed to either the safety rails or the bridge decking. Bridge lighting would be below the line of sight of neighboring residences and fixed no higher than the safety rail height of 4.5 feet. Lighting impacts would be *less than significant*.



Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
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**2. AGRICULTURAL 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 Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forestry Legacy Protocols adopted by the California Air Resources Board)

*Would the project:*

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

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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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 the Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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d) Result in the loss of forest land or conversion of forest land to non-forest use?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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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?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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**Discussion:**

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

The project would be located on land designated as Urban and Built-up Lands on the California Department of Conservation State Lands 2008 Sonoma County Important Farmland map. Surrounding local land use designations include low density residential, medium density residential, and Sonoma County residential (City of Sonoma 2006a). No prime, unique or important farmland would be affected. *No impact* would occur.

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

As stated in 2a, the project would be located on land designated as Built-up Land and the area is not zoned agriculture. The project would not be located on lands under Williamson Act contract according to the California Department of Conservation's Sonoma County Williamson Act Lands 2008 map. Therefore, *no impact* would occur.

- c) **Conflict with existing zoning for, or cause re zoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by the Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?**

The project site is not zoned for, or adjacent to, forest land or timberland. *No impact* would occur.

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

The project site is not located on forest land, and therefore would not result in the loss of forest land or the conversion of these lands to non-forest uses. *No impact* would occur.

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

There are no agricultural lands at the project site or on the surrounding lands. The project would not change the existing environment and would not convert farmland to non-agricultural uses. *No impact* would occur.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
<b>3. AIR QUALITY.</b>				
<i>Would the project:</i>				
a) Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Result in a cumulatively considerable net increase of any criteria pollutant for the project region, leading to nonattainment under an applicable federal or state ambient air quality standard (including releasing emissions, which exceed quantitative thresholds for ozone precursors)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) Create objectionable odors and/or airborne dust affecting a substantial number of people?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Discussion:**

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

The applicable air quality plan for the project is the Bay Area 2010 Clean Air Plan, adopted on September 15, 2010, which is an update to the 2005 Bay Area Ozone Attainment Strategy (OAS). Numerous strategies are set forth in the Bay Area 2010 Clean Air Plan to reduce four categories of air pollutants: ground level ozone and its key precursors, ROG and NOx; particulate matter; air toxics; and greenhouse gases.

A project is deemed inconsistent with the Bay Area 2010 Clean Air Plan if it results in population or development growth that exceeds the estimates accounted for in the plan, thereby generating additional emissions. The Fryer Creek Pedestrian and Bicycle Bridge Project involves the construction of a pre-fabricated steel truss bridge and construction of associated improvements to Newcomb Street to improve accessibility and multi-modal circulation to and from the bridge. The project would not induce population or development growth, and therefore would not conflict with the air quality objectives set forth in the Bay Area 2010 Clean Air Plan.

The project is also consistent with the Bay Area 2010 Clean Air Plan’s Transportation Control Measure TCM D-1 Improve Bicycle Access and Facilities, which calls for expanding bicycle facilities serving residential areas and educational and cultural facilities. The project would not conflict with implementation of the Bay Area’s clean air planning efforts. *No impact* would occur.

**b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?**

No emissions would be generated through the operation of the project. As discussed in 3a, the project would advance the policies of the Bay Area Air Quality Management District (BAAQMD) by

providing a means for alternative modes of transportation and increasing connectivity with existing bicycle and pedestrian paths. **No impact** would occur from project operation.

Construction equipment would include a backhoe, excavator or mini-excavator, dump truck(s) (5 or 10 yard capacity), sweeper, sawcutter, concrete truck, 20 yard end dump truck, and crane as discussed in the project description.

To quantify construction-related emissions, BAAQMD recommends using the Sacramento Metropolitan Air Quality Management District's Roadway Construction Emissions Model (RoadMod) for proposed linear projects. The results should then be compared against the Thresholds of Significance for Construction-Related Criteria Air Pollutants and Precursors to determine if there would be a potentially significant impact for construction-related emissions.

RoadMod provides three choices for project types: New Road Construction, Road Widening, and Bridge/Overpass Construction. The Bridge/Overpass Construction inputs were used and customized for this project. Construction-related emissions are estimated to be 5 lb/day for ROG, 37 lb/day for NO<sub>x</sub>, and 1.9 lb/day for PM<sub>2.5</sub>, and 2.5 lb/day for PM<sub>10</sub>. This is well under the 54 lb/day BAAQMD threshold for ROG, NO<sub>x</sub>, and PM<sub>2.5</sub>, and the 82 lb/day threshold for PM<sub>10</sub>.

Additionally, the BAAQMD recommends the implementation of *Basic Construction Mitigation Measures* whether or not construction-related emissions exceed the thresholds. As such, Mitigation Measure AQ-1 has been developed.

***Mitigation Measure AQ-1: Basic Air Quality Protection Construction Measures***

For all proposed projects, the Bay Area Air Quality Management District (BAAQMD) recommends the implementation of Basic Construction Mitigation Measures, whether or not construction-related emissions exceed applicable thresholds of significance. The following measures from BAAQMD are applicable to all construction activities for the project:

- All exposed surfaces shall be watered two times per day.
- All haul trucks transporting soil, sand or other loose material off-site shall be covered.
- All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.
- All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible.
- Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes (as required by the California airborne toxics control measure Title 13, Section 2485 of California Code of Regulations).
- All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified mechanic and determined to be running in proper condition prior to operation.
- Post a publicly visible sign with the telephone number and person to contact at the Lead Agency regarding dust complaints. The 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.

The impact would be ***less than significant*** with the above mitigation measure, since it would reduce construction-related emissions by implementing protective measures.

**c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)**

The project is located in southern Sonoma County, which is part of the San Francisco Bay Area Air Basin. The Bay Area is currently in attainment for four of the six criteria pollutants: lead, carbon monoxide, sulfur dioxide, and nitrogen dioxide. The Bay Area is in non-attainment for the state and federal 8-hour ozone standard and non-attainment for the State 1-hour ozone standard. The Bay Area is also considered non-attainment for the annual PM<sub>10</sub> and PM<sub>2.5</sub> and 24-hour PM<sub>10</sub> standards by the state, and the 24-hour PM<sub>2.5</sub> standards by the federal government (BAAQMD 2010b).

A project would have a cumulative impact on non-attainment criteria pollutants if it were deemed inconsistent with air quality plans. As discussed in 3a, the project is consistent with air quality plans. As discussed in 3b, the project would have temporary, construction-related emissions deemed to be less than significant with the incorporation the following mitigation measure:

***Mitigation Measure AQ-1: Basic Air Quality Protection Construction Measures***

Therefore, given the temporary nature of the construction-related emissions, impacts to non-attainment criteria pollutants are deemed *less than significant* with the above mitigation measure, since it would reduce construction-related emissions by implementing protective measures.

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

BAAQMD has established thresholds for exposure of sensitive receptors to substantial air pollutants during project operation (BAAQMD 2010a). The project would not generate air pollutants during operation. *No impact* would occur.

As discussed in 3b, construction-related emissions are well below the threshold established by BAAQMD. However, to reduce potential impacts to these residences, the following mitigation measure would be implemented:

***Mitigation Measure AQ-1: Basic Air Quality Protection Construction Measures***

The implementation of this measure would reduce a majority of construction-related dust and vehicle and equipment exhaust. The impact would be *less than significant* with the above mitigation measure, since it would reduce construction-related emissions by implementing protective measures.

**e) Create objectionable odors and/or airborne dust affecting a substantial number of people?**

Project operation would not result in a permanent odor source or a receptor near an existing known odor source. *No impact* would occur from project operation.

Odors created during the construction of the project would be limited to exhaust from heavy equipment and vehicles, and the paving of the new bicycle and pedestrian path. Approximately ten daily vehicle trips would occur during the construction period of 60 days. Paving of the bicycle and pedestrian path would represent a small portion of the 60 day construction period. Residences are located within 15 feet of construction activities and may be affected by construction-related odors. However, these odors would be highly localized (i.e., the odors would disperse), and temporary in nature. To further reduce potential impacts to nearby residences, the following mitigation measure would be implemented:

***Mitigation Measure AQ-1: Basic Air Quality Protection Construction Measures***

This mitigation includes measures for maintenance of equipment and limiting idling times of equipment. Impacts would be *less than significant* with the above mitigation measure, since it would reduce construction-related emissions by implementing protective measures.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
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**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 Game or U.S. Fish and Wildlife Service?

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

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

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

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

f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

**Discussion:**

A biological analysis and field survey were conducted in November 2010 for the project site (Etchell 2010). The biological analysis provided the following project data.

*Setting*

Fryer Creek, a tributary to Nathanson Creek, is within the Sonoma Creek Watershed which flows to San Pablo Bay. The entire length (approximately 1.7 miles) of the creek corridor has been altered by

residential and agricultural development making it difficult to determine its point of origination. The north end of the creek, in central Sonoma, is surrounded by medium-density housing and sustains a narrow sparse riparian corridor. South of the City, it passes through agricultural lands and vineyards and there is little to no riparian vegetation until the point where it joins Nathanson Creek. The creek corridor in the project area is surrounded by medium-density housing developments. Runoff from landscaping and other urban water use contribute to year round creek flow in the project area.

Fryer Creek in the project area appears to have been channelized. A man-made swale on the west side of the creek outlets into the creek via two large corrugated culverts. A storm drain system on the east side also outlets into Fryer Creek in the project area. Small portions of the banks on both sides of the creek have been reinforced with sack concrete.

The creek bed is not level in the project area and at the time of a November 5, 2010 field survey, the creek adjacent to the culverts held several inches of ponded water, while immediately downstream the creek bed was a few feet lower and held about 3 feet of water.

Information about special-status species was obtained from the California Natural Diversity Database (CNDDDB 2010), existing literature, and websites maintained by state and federal agencies including species listed on the U. S. Fish and Wildlife Services (USFWS) online database for federal threatened, endangered and potential candidate species (USFWS 2010), and the California Native Plant Society online website (CNPS 2010) was also consulted for listed plants reported in the region of the project site. On November 5, 2010 an onsite search was conducted by a biologist at the project site and vicinity to document the following: plant and wildlife species observed; habitat for listed federal and state species; and habitats present. Habitat and site features were photographed. The full special-status species list assessed for the project is provided in Appendix B.

#### *Plant Communities and Associated Wildlife Habitat*

The following vegetation communities have been identified on or near the project site.

#### **Valley Foothill Riparian**

Valley and foothill riparian communities are found adjacent to rivers and streams. Riparian vegetation consists of one or more species of deciduous trees, shrubs, and herbs that grow on the banks of most streams, lakes, and springs (Holland and Keil 1995). Riparian vegetation provides wildlife habitat in the form of food, shelter, and breeding sites. Tree canopies shade aquatic habitat and lower water temperatures which is necessary for salmonid spawning and rearing.

Examples of typical riparian vegetation in well vegetated valley foothill riparian habitat include coast live oak (*Quercus agrifolia*), valley oak (*Quercus lobata*), buckeye (*Aesculus californica*); understory plants such as snowberry (*Symphoricarpos albus*) and poison oak (*Toxicodendron pubescens*); and grasses such as purple needlegrass (*Nassella pulchra*) and California fescue (*Festuca californica*).

The dominant tree species at the project site is coast live oak. There is very little understory vegetation which is mostly comprised of non native grasses, sparse scotch broom and fennel.

#### **Urban**

The California Department of Fish and Game (CDFG), California Wildlife Habitat Relationships System (CWHHR) scheme classifies urban vegetation into five definitions; tree grove, street strip, shade tree/lawn, lawn, and shrub cover. Residential landscapes, parks, golf courses, and school grounds are included in this classification. Biomass productivity is greater than natural grasslands because of irrigation and fertilization (Mayer and Laudenslayer 1988). The variable planting design and local climate produce complex mosaics offering wildlife a good source of additional food such as



fruits and berries. Examples of popular landscape species in urban and natural areas in Sonoma that have spread or been planted along the creek corridor include firethorn, crimson bottlebrush, and scotch broom, as well as numerous other species.

Urban environments are unlikely to provide suitable habitat for rare plants due to disturbed soil conditions and the predominance of exotic landscape species that successfully out-compete native vegetation for resources such as space, nutrients and water. Urban habitats are also dominated by generalist scavenger wildlife species such as raccoon (*Procyon lotor*), striped skunk (*Mephitis mephitis*), opossum (*Didelphis virginiana*), American crow, and various rodents. Scavenger species prey upon a variety of wildlife thus decreasing the likelihood that special-status species would be found in urban areas.

Wildlife species observed along Fryer Creek during the survey included California towhee, Anna’s hummingbird, American crow, house finch, chestnut-backed chickadee, bushtit, and western gray squirrel.

Riverine

Riverine habitats are rivers, creeks and streams that occur in association with a variety of terrestrial habitats and are frequently contiguous to lakes and fresh emergent wetland habitats (Mayer & Laudenslayer 1988). Rivers and streams often support riparian vegetation. The riverine and riparian vegetation in and along Fryer Creek where the project would take place has largely been altered or removed over time for channelization and development.

The riverine habitats support entirely aquatic plants. No special-status aquatic plants were listed on the CNDDDB, USFWS or CNPS databases for the project site region.

*Wildlife and Special-Status Species*

Wildlife and plant species observed on the Fryer Creek Pedestrian Bridge Phase II Project site during the November 5, 2010 field survey are listed in the following tables:

**Table 2**  
**Plants Observed on November 5, 2010 Survey**

Scientific Name	Common Name
<i>Aesculus californica</i>	California buckeye
<i>Baccharis salicifolia</i>	Mule fat
<i>Callistemon citrinus</i>	Crimson bottlebrush
<i>Cotoneaster sp.</i>	Cotoneaster
<i>Cyperus eragrostis</i>	Umbrella sedge
<i>Cytisus scoparius</i>	Scotch broom
<i>Equisetum ssp.</i>	Horsetail
<i>Foeniculum vulgare</i>	Fennel
<i>Juglans californica</i>	Black walnut
<i>Lactuca serriola</i>	Prickly lettuce
<i>Mentha ssp.</i>	Mint
<i>Plantago subnuda</i>	Mexican plantain
<i>Quercus agrifolia</i>	Coast live oak
<i>Quercus lobata</i>	Valley oak
<i>Quercus suber</i>	Cork oak
<i>Rumex ssp.</i>	Dock
<i>Sequoia sempervirens</i>	Redwood

**Table 3**  
**Wildlife Observed During November 5, 2010 Survey**

Common Name	Scientific Name
<b>Fish</b>	
California roach	<i>Lavinia symmetricus</i>
<b>Amphibians</b>	
Pacific tree frog	<i>Pseudacris regilla</i>
<b>Birds</b>	
White-tailed kite	<i>Elanus leucurus</i>
American kestrel	<i>Falco sparverius</i>
Anna's hummingbird	<i>Calypte anna</i>
American crow	<i>Corvus brachyrhynchos</i>
Chestnut-backed chickadee	<i>Parus rufescens</i>
American robin	<i>Turdus migratorius</i>
Bushtit	<i>Psaltriparus minimus</i>
Cedar waxwing	<i>Bombycilla cedrorum</i>
Yellow-rumped warbler	<i>Dendroica coronata</i>
California towhee	<i>Pipilo crissalis</i>
Dark-eyed junco	<i>Junco hyemalis</i>
House finch	<i>Carpodacus mexicanus</i>
<b>Other Mammals</b>	
Western Gray Squirrel	<i>Sciurus griseus</i>

### Special-Status Plant Species

Federal and State listed special-status plant species recorded for the Sonoma quadrangle where the project site is located and the nine surrounding U.S.G.S. 7.5 minute quadrangles were investigated. Based upon the types of habitat that each listed species occupies, each plant species was evaluated for its potential to occur in the vicinity of the project site. Based upon the disturbance regime that Fryer Creek has undergone within the project area (i.e. channelization to allow housing developments, installation of culverts and sack concrete) and the close proximity of housing developments, the biological analysis determined that is highly unlikely that there are any special-status plant species associated with Fryer Creek.

### *Special-Status Wildlife Species*

Federal and State listed special-status wildlife species recorded for the Sonoma quadrangle where the project site is located and the nine surrounding U.S.G.S. 7.5 minute quadrangles were investigated. Based upon the types of habitat that each listed species occurs on and also based on the November 5, 2010 site survey, the habitat suitability for each species on the list was assessed.

The federal Endangered Species Act (ESA) requires the government to designate "critical habitat" for any species it lists. Critical habitats are specific geographical areas occupied by the species for which the habitat has been designated and areas that contain physical or biological features essential to conservation and those features may require special management considerations or protections. The ESA also requires the government to develop and implement recovery plans to promote conservation of threatened and endangered species. Not all federally listed species have recovery plans or critical habitat designated; species with potential to occur in the vicinity of Fryer Creek that have recovery plans or critical habitat listings or other special designations are included below:

California freshwater shrimp – ESA threatened species, California species of special concern

The California freshwater shrimp (*Syncaris pacifica*) is listed as federal and state endangered and is the only extant member of the genus *Syncaris*. The shrimp is found in low elevation (less than 115 meters, 380 feet), low gradient (generally less than 1 percent) perennial freshwater streams or intermittent streams with perennial pools where banks are structurally diverse with undercut banks, exposed roots, overhanging woody debris, or overhanging vegetation (USFWS 2006). There are five CNDDDB records for California fairy shrimp in the Sonoma Creek Watershed; the nearest CNDDDB record (occurrence 19) is for several adults observed during surveys in 2004 in Sonoma Creek approximately 1.5 miles northwest of the project site. California fairy shrimp would not be affected by the project, since no construction is proposed to occur within water present in the creek.

Steelhead – ESA threatened species

Steelhead (*Oncorhynchus mykiss irideus*) in Fryer Creek are included by the National Marine Fisheries Service (NMFS) in the Central California Coast Evolutionarily Significant Unit (ESU) and are listed as a federal threatened species. Successful spawning and juvenile rearing of steelhead requires certain types of habitat, including coarse, clean, well-oxygenated gravel for spawning and incubation. After emerging from the gravel, juveniles require cool, clean water that persists through the dry season, a supply of invertebrate food, and shelter for resting and protection from predators. Spawning and juvenile rearing usually takes place in the upper reaches of smaller tributaries where suitable spawning gravel is present and cooler water persists throughout the summer months. Numerous juveniles were observed in 2004 in Carriger Creek (CNDDDB occurrence 26) approximately 3.1 miles west of the project site. This creek is in the same watershed as Fryer Creek. Steelhead would not be affected by the project, since no construction is proposed to occur within water present in the creek.

Foothill Yellow-legged Frog – California species of special concern

This frog is listed as a State species of special concern. These frogs are found in streams, creeks or rivers with sunny banks and gravelly substrates between sea level and 6,700 feet. There are two CNDDDB records for foothill yellow-legged frog in the Sonoma Creek Watershed. The nearest record (occurrence 387) to the project site is for adult frogs observed in 2003 and 2004 in Carriger Creek, approximately 3 miles west of the project site. Fryer Creek provides very marginal habitat for this species because the cobble substrate of the creek is overlain with sediment and the creek bed is filling in with bamboo. Foothill yellow-legged frog would not be affected by the project, since no construction is proposed to occur within water present in the creek.

California Red-legged Frog – ESA threatened species, California species of special concern

The California red-legged frog (*Rana aurora draytonii*) is a federal listed threatened species and a state species of special concern. The California red-legged frog inhabits a variety of aquatic, upland, and riparian environments, including ephemeral and permanent ponds, seasonal wetlands, perennial creeks, intermittent streams, manmade aquatic features (e.g. stock ponds), riparian corridors, blackberry thickets, non-native annual grasslands, and oak savannahs (USFWS 1996). The preferred habitat consists of deep-water pools with dense stands of overhanging willows and an intermixed fringe of cattails. Well vegetated upland habitats in proximity of a riparian corridor may provide sheltering habitat during the winter (USFWS 2005). During the dry summer months these frogs estivate in small mammal burrows and moist leaf litter. California red-legged frogs have been recorded to cover distances from ¼ mile to more than over 2 miles without apparent regard to topography, vegetation type, or riparian corridors (USFWS 2005).

The nearest CNDDDB record (occurrence 524) for occurrences of California red-legged frog is for an adult frog and two tadpoles observed in 2002 in an old land fill leachate pond near Stage Gulch Road approximately 3.4 miles southwest of the project site. The project site is not within USFWS designated critical habitat (USFWS 2010). Fryer Creek provides extremely marginal habitat for California red-legged frog because of the lack of deep water pools and vegetative cover where they shelter from predators. The presence of this species can not be entirely ruled out, and therefore should be included during pre-construction surveys.

Western Pond Turtle – California species of special concern

The western pond turtle is a State species of special concern. Western pond turtles spend most of their life in water, preferring slow moving streams, lakes, marshes, rivers, irrigation ditches, or ponds that provide sunny basking sites. These turtles favor areas that have adequate vegetative cover under which they can hide from predators. They lay their eggs upland of streams in nests they dig in dry soil with sparse vegetation and southern exposure. The project site does not provide enough vegetative cover for sheltering from predators nor does it provide adequate upland habitat breeding for the pond turtle. It is not likely that the western pond turtle would be impacted by the project since no construction is proposed to occur within water present in the creek. However, pond turtles could pass through the creek corridor while foraging or transiting to another aquatic environment, therefore the western pond turtle should be included during pre-construction surveys.

**a) Have a substantial adverse effect on any candidate, sensitive, or special status species?**

The field survey of the project site and local vicinity documented habitat for listed federal and state-listed species present at the site. A biological analysis was prepared to evaluate the potential for occurrence of these species at the site, based on the habitat requirements for each species. See Appendix B for a full list of considered species.

The project in its operation would not have an adverse effect on the above-listed species. The project serves as a connection between the existing multi-use paths adjacent to Fryer Creek, and the neighborhoods east of the creek. The bridge would not encroach within the creek, and the project would not increase the risk of human disturbance to special-status species. Operational impacts would be *less than significant*.

The biological analysis determined that project construction would not impact California fairy shrimp, steelhead, or foothill yellow-legged frog, as construction work would not take place in, or disturb the water present in the creek. Although the California red-legged frog and western pond turtle habitat at the site are extremely marginal and presence is considered unlikely, the biological analysis could not positively exclude the potential for these species to occur within the project area. If these species were impacted during construction activities, the impact would be significant. The following mitigation measure would be necessary to reduce the impact to less than significant levels.

***Mitigation Measure BIO-1: Conduct Pre-Construction Biological Surveys***

Pre-construction surveys for California red-legged frog and western pond turtle shall be conducted by a qualified biologist approved to conduct such surveys by CDFG, USFWS, and NMFS. If any of these species are found in the project area during preconstruction surveys, CDFG, USFWS and/or NMFS shall be notified and individuals shall be captured by the qualified biologist and relocated to suitable areas above or below the project. Surveys for California red-legged frog shall be conducted according to current USFWS guidance, or as recommended by the agencies. If preconstruction surveys identify active western pond turtle nests, it shall be documented and reported to the CDFG CNDDDB database, and a qualified biologist shall establish a no-disturbance buffer zone around the nest using temporary orange construction fencing. The

radius of the buffer zone and the duration of the exclusion shall be determined in consultation with USFWS and CDFG. The buffer zone and fencing shall remain in place until the young have left the nest, as determined by a qualified biologist.

Construction-related impacts would be *less than significant* with implementation of the mitigation measure because special-status species would be identified if present and relocated or avoided to prevent impacts during construction.

**b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community?**

Fryer Creek, a tributary to Nathanson Creek, is within the Sonoma Creek Watershed which flows to San Pablo Bay. The entire length (approximately 1.7 miles) of the creek corridor has been altered by residential and agricultural development. On the west side of the creek at the project area, an approximately 8-foot wide paved multi-use path parallels the creek at the edge of the upper bank. Just beyond the creek corridor lies medium-density housing on each side. The habitat at the project site can best be described as valley foothill riparian.

Fryer Creek in the project area appears to have been channelized. A man-made swale on the west side of the creek outlets into the creek via two large corrugated culverts. A storm drain system on the east side also outlets into Fryer Creek in the project area. Small portions of the banks on both sides of the creek have been reinforced with sack concrete.

Project operation would not have an adverse effect on riparian habitat. The riparian corridor has been previously disturbed and is currently surrounded by development. The bicycle and pedestrian bridge would be designed to avoid encroachment within Fryer Creek's Ordinary High Water (OHW) mark. The bridge would not increase impacts to riparian habitat. Operational impacts would be *less than significant*.

Temporary construction activity could result in adverse impacts to aquatic species and riparian habitat if erosion and sedimentation from bridge construction impacts water quality. As presented in the project description, bridge footings/abutments would be constructed in a way to reduce the potential for erosion. Bridge footings would be excavated vertically and cast-in-place to minimize the impact area around the footings. The creek bank would not be disturbed during placement of concrete of the footings. The top section of the footing (above ground) would require formwork but would be outside of the channel "top of bank" limits.

Despite this construction technique, if erosion and sedimentation would occur an adverse impacts for aquatic species and riparian habitat. The following mitigation measure would be necessary to reduce impacts to less than significant levels:

***Mitigation Measure GEO-1: Prepare an Erosion and Sediment Control Plan***

This measure is discussed fully in the Geology analysis of this document. Construction-related impacts would be *less than significant* with implementation of the mitigation measure because BMPs would be implemented to avoid erosion and sedimentation at the site, and thereby avoid or reduce adverse impacts to aquatic species and habitat.

**c) Have a substantial adverse effect on federally protected wetlands?**

There are no wetlands at the project site. Therefore, there would be *no impact* to wetlands.

**d) Interfere substantially with the movement of any fish or wildlife species or on any wildlife corridor, or impede the use of native wildlife nursery sites?**

Project operation would not have an adverse on migratory species, wildlife corridors or native wildlife nursery sites. The project serves as a connection between the existing multi-use paths adjacent to the creek and the neighborhoods east of the creek. The bridge would not encroach within the creek, and the project would not increase the risk of human disturbance to wildlife. Operational impacts would be *less than significant*.

Temporary construction-related activity and noise could disturb birds and other wildlife in and near the project area. Bird nests, eggs and young are protected under California Fish and Game Codes (§3503, §3503.5, and §3800) and are also protected under the Federal Migratory Bird Treaty Act (50 CFR 10.13) which makes it unlawful to “take” (kill, harm, harass, shoot, etc.) including nests, eggs, and young. Non-native species such as feral pigeon (*Columba livia*), house sparrow (*Passer domesticus*), and European starling (*Sturnus vulgaris*) are exempt from protection. If birds were to nest in or near the project area during construction activities, the nests could be affected and the impact could be significant.

Construction activities are anticipated to begin in the summer of 2011 and last approximately 60 days. Any construction activity during February 1 to October 15 could disturb nesting birds. Construction would occur during this time frame. Therefore, preconstruction nest surveys as described in the mitigation measure below would be necessary to reduce impacts to less than significant:

***Mitigation Measure BIO-2: Conduct Pre-Construction Nesting Surveys***

Pursuant to California Department of Fish and Game Codes (§3503, §3503.5, and §3800) and the Federal Migratory Bird Treaty Act (50 CFR 10.13), birds, nests, eggs and young are protected. If project construction occurs between February 1 and October 15 of any year, a qualified biologist shall conduct preconstruction nesting surveys within 48 hours of construction for nesting passerines (small songbirds) and raptors. If nests are located the biologist, in consultation with CDFG, shall establish a buffer around the nest to remain in place until the young have fledged.

Construction-related impacts would be *less than significant* with implementation of the mitigation measure because nesting birds would be identified and protected from construction impacts.

**e) Conflict with any local policies or ordinances protecting biological resources?**

The City of Sonoma General Plan Background Report’s (2004) Biological Resources element describes creek and riparian habitat within the City, including the portion of Fryer Creek just north of Leveroni Road where SCWA has planted native species to help return the creek to its natural state. The Environmental Resources element in the General Plan (2006) includes policies to preserve natural features such as creek and riparian areas, trees and wildlife habitat. Applicable policies include:

**Goal ER-2 Identify, preserve and enhance important habitat areas and significant environmental resources.**

Policy 2.2 Preserve habitat that supports threatened, rare, or endangered species identified by State or federal agencies.

Policy 2.3 Protect and, where necessary, enhance riparian corridors.

Policy 2.5 Require erosion control and soil conservation practices that support watershed protection.

Policy 2.6 Preserve existing trees and plant new trees.

Policy 2.9 Require development to avoid potential impacts to wildlife habitat, air quality, and other significant biological resources, or to adequately mitigate such impacts if avoidance is not feasible.

Operation of the project would be consistent with the above-listed policies. As discussed in 4a, 4b and 4d, the project would not increase human disturbance to the creek or riparian areas. The bridge has been designed to avoid encroachment into the creek and the OHW mark. *No impact* would occur from project operation.

Additionally, as discussed in 4a, 4b and 4d, the Fryer Creek Pedestrian Bicycle and Bridge Project includes the following mitigation measures to avoid or reduce construction-related impacts on special-status species, migratory birds, and riparian habitat, and ensure consistency with the City of Sonoma General Plan goals and policies protecting biological resources:

***Mitigation Measure BIO-1: Conduct Pre-Construction Biological Surveys***

***Mitigation Measure BIO-2: Conduct Pre-Construction Nesting Surveys***

***Mitigation Measure GEO-1: Prepare an Erosion and Sediment Control Plan***

***Tree Preservation***

An arborist report was prepared for the project site (Horticultural Associates 2010). The arborist report evaluated the potential effects of the project and project construction for fourteen trees in the project vicinity. A summary of project impacts on the fourteen studied trees is as follows: project construction would have a minimal effect on seven trees in the vicinity of the proposed bridge; two trees would be moderately impacted by the construction of the bicycle and pedestrian path; two trees would not be impacted by project construction; and up to two trees would need to be removed.

A valley live oak would be removed to accommodate construction of the bridge. The tree is approximately 4 inches in diameter. A 4-inch diameter coast live oak may be removed during construction, because the tree and canopy heavily leans towards the bridge location. Significant pruning or removal would be required. The City of Sonoma Tree Ordinance requires Tree Committee review for the removal of trees with trunk diameters greater than 36 inches. Since the trees identified for removal are less than 36 inches, the need for Tree Committee review is not anticipated.

Construction of the bicycle and pedestrian path would moderately impact two adjacent trees. Construction of the driveway with curb and gutter on the south side of Newcomb Street would minimally impact one tree. These trees are identified on Figure 4.

Some trees on site may require clearance pruning to reduce the width of the canopies to accommodate construction activities and access. Protection measures are necessary to protect the health of these trees, and to reduce construction impacts to less than significant levels. Therefore, the following mitigation measure would be necessary to reduce impacts to less than significant levels.

***Mitigation Measure BIO-3: Tree Replacement and Tree Protection Measures***

To protect existing trees during project construction, the Contractor shall comply with the following mitigation measures to protect existing trees:

- When constructing the bicycle and pedestrian path, grading shall be minimized, and existing grading shall be used as much as possible. Geotextile fabric shall be used in place of soil compaction.
- During construction, access shall be restricted to the tree on the south side of Newcomb Street. The tree shall be protected with a tree protection fence. Occasional access may occur only under the direction of the project arborist representing the City of Sonoma.
- Pruning of trees shall comply with standard pruning practices designed to protect trees. Pruning shall occur only for the following purposes: construction clearance; site and equipment access; and placement of the bridge itself. No other pruning shall be allowed. All pruning cuts shall be in compliance with the International Society of Arboriculture Pruning Standards. All pruning shall occur under the direct supervision of the project arborist representing the City of Sonoma.
- Trees removed during construction shall be replaced. The City of Sonoma Tree Ordinance restricts the damage, removal or destruction of trees without replacement. Therefore, the removal of up to two trees would require replacement trees as part of the project and discussed in the project description. The Tree Ordinance states that tree replacement shall occur onsite, and shall occur at a minimum of a 1:1 ratio and a 15-gallon box size for each 6 inches of tree diameter removed.

Construction-related impacts would be *less than significant* after mitigation because trees would either be replaced if removed or significantly damaged during construction, and the remaining trees near the project would be protected during construction.

**f) Conflict with the provisions of any adopted or approved local, regional, or state habitat conservation plan?**

The City of Sonoma General Plan Background Report's Biological Resources element describes conservation measures A and C which were implemented in 1990. Measure A established the Sonoma County Agricultural Preservation and Open Space District, and Measure C provided financing for acquisition of open space and agricultural lands. The City of Sonoma implements these open space and habitat protection strategies through: growth management, habitat protection of riparian corridors, hillsides and creeks, protecting agricultural lands, and other policies relating to recreation, public safety and preserving a rural character. Policies applicable to this project are discussed in 4e.

The project would be located in a residential neighborhood. The project would not be located on land designated for conservation. See 4e for additional discussion on project operation. Impacts from project operation would be *less than significant*.

As discussed in 4e, the following mitigation measures would be necessary to avoid potential adverse impacts to special-status species, migratory birds, riparian habitat, existing trees, and to ensure compliance with the applicable habitat conservation goals and policies set forth in the City of Sonoma General Plan:

***Mitigation Measure BIO-1: Conduct Pre-Construction Biological Surveys***

***Mitigation Measure BIO-2: Conduct Pre-Construction Nesting Surveys***

***Mitigation Measure BIO-3: Tree Replacement and Tree Protection Measures***



***Mitigation Measure GEO-1: Prepare an Erosion and Sediment Control Plan***

Construction-related impacts would be *less than significant* with the implementation of the above-listed mitigation measures.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
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**5. CULTURAL RESOURCES.**

*Would the project:*

a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Disturb any human remains, including those interred outside of formal cemeteries?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Discussion:**

**a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?**

The Anthropological Study Center at Sonoma State University (ASC) completed a cultural resources study for the project (ASC 2010). The project study area is situated in the Sonoma Valley, within the Pueblo Lands of Sonoma, in Township 5 North, Range 5 West, as depicted on the USGS 7.5-minute Sonoma, California quadrangle. The study area is also situated on the east side of the Sonoma Valley and is part of the North Coast Ranges, which is composed geologically of the Franciscan formation (Page 1966, p255). Currently, the area surrounding Fryer Creek is residential development.

ASC conducted a records search and review of all site records and study reports on file within a ½ mile radius of the study area. The review included a search of the records on file at the Northwest Information Center (NWIC) of the California Historical Resources Information System and the files and literature of ASC. Included in the review were the *California Inventory of Historical Resources* (California Department of Parks and Recreation 1976), the California Office of Historic Preservation’s *Five Views: an Ethnic Historic Site Survey for California* (1988), *California Historical Landmarks* (1990), *California Points of Historical Interest* (1992), and the *Historic Properties Directory Listings* (through October 5, 2010). The *Historic Properties Directory* includes listings of the National Register of Historic Places (NRHP), California Register of Historical Resources, California Historical Landmarks, and California Points of Historical Interest.

Four historical resources were identified within a 1/2-mile radius of the project area. Three of these resources were standing buildings. The other includes remains of a residential complex, including building pads, landscaping, and an artifact scatter. No historic resources were identified on the project site. Project operation and construction would not permanently or temporarily impact the above listed historical resources. **No impact** would occur.

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

The records search conducted by ASC indicated that five studies have been conducted within a ½ mile radius of the project area, but no cultural materials were identified as a result of these studies (Beard 1998, 2000; Chavez 1988; Origer 1984, 1985). No prehistoric or Native American resources were located within a ½-mile radius of the project location. Although no prehistoric sites were identified, prehistoric archaeological sites in this area are generally found on ridgetops, midslope terraces, near ecotones and near sources of water such as springs, marshes, vernal pools, and near perennial and intermittent water courses. Although the project would be located adjacent to Fryer Creek, an intermittent water course, the extensive recent residential development of the area and historic-era flooding events, surface remains are unlikely to be present. Subsurface cultural material, however, may still be present and may be observed through examination of the creek bank or other subsurface testing.

In addition to the records search, the State of California Native American Heritage Commission (NAHC) was asked to review the Sacred Lands file for information on Native American cultural resources in the study area. Additionally, a formal letter was sent on November 10, 2010 opening further consultation should the Federated Indians of Graton Rancheria request.

A cultural resources field survey was conducted on November 8, 2010 by an ASC staff archaeologist and a representative of the Federated Indians of Graton Rancheria. ASC observed that the alignment of Fryer Creek appears to have been channelized during either the historic era or during more recent construction of the adjacent housing developments on either side. During the field survey, examination of the location for the proposed bicycle and pedestrian bridge at Fryer Creek was focused on the creek bank, in order to identify any presence and potential for buried archaeological material. ASC determined that the creek bank within the study area has been heavily disturbed as the result of the installation of a large corrugated metal culvert and stacked concrete bag retaining walls.

No prehistoric archaeological material was identified by ASC at the study area as a result of the records search or the field survey. The extensive rechanneling of the creek alignment, construction of nearby housing developments, and installation of concrete retaining walls and large culvert suggest that the ground within which the proposed bridge abutments would be placed has already been heavily disturbed. Exposed cutbanks on either side of the study area suggest that fill has been brought in to raise and level the surrounding land surface.

While no resources have been previously identified in the study area and archaeological material was not observed during the site visit, buried archaeological material could be discovered during construction. If archaeological or cultural resources are discovered during construction of the project, impacts could be significant. Therefore, the following mitigation measure is provided in the unlikely event that archaeological resources are discovered.

***Mitigation Measure CR-1: Procedures for Handling Unanticipated Archaeological and Paleontological Resources***

There is a low possibility that subsurface archaeological deposits may exist at the project location, given the archaeological sensitivity of areas near water courses. If concentrations of prehistoric or historic-period materials are encountered during ground-disturbing work along Fryer Creek, all work in the immediate vicinity shall halt until a qualified archaeologist can evaluate the finds and make recommendations. Prehistoric materials might include obsidian and chert flaked-stone tools (e.g., projectile points, knives, scrapers) or toolmaking debris; culturally darkened soil (“midden”) containing heataffected rock, artifacts, or shellfish remains; and stone milling equipment (e.g., mortars, pestles, handstones). Historical materials might include stone, concrete, or adobe footings and walls; filled wells or privies; and deposits of metal, glass, and/or

ceramic refuse. Any evaluation or treatment considerations shall be made in consultation with the Federated Indians of Graton Rancheria.

Project impacts would be *less than significant* with mitigation because the mitigation measures details the procedures to follow in the event previously undiscovered resources are located during construction.

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

There are no unique geologic features at the project site; therefore there would be no impact to unique geologic features.

According to the ASC study, one analytic framework for the interpretation of Sonoma County prehistory is provided by Fredrickson (1974) who divided human history in California into three broad periods: the Paleoindian, the Archaic and the Emergent. This scheme used sociopolitical complexity, trade networks, population and the introduction and variations of artifact types to differentiate between cultural units; the scheme, with minor revisions (Fredrickson 1994), remains the dominant framework for prehistoric archaeological research in this region.

The Paleoindian Period (10,000 to 6,000 B.C.) was characterized by small, highly mobile groups occupying a broad geographic area. During the Archaic Period, consisting of the Lower Archaic Period (6,000 to 3,000 B.C.), Middle Archaic Period (3,000 to 500 B.C.), and the Upper Archaic Period (500 B.C. to 500 A.D.), geographic mobility may have continued, although groups began to establish longer-term base camps in localities from which a more diverse range of resources could be exploited. The addition of milling tools, obsidian and chert concave-base points, and the occurrence of sites in a wider range of environments suggest that the economic base was more diverse. By the Upper Archaic Period, mobility was being replaced by a more sedentary adaptation in the development of numerous villages, and the beginnings of a more complex society and economy began to emerge. During the Emergent Period (A.D. 1000 to contact), where political leaders resided, with associated hamlets and specialized activity sites. Artifacts associated with this period include the bow and arrow, small corner-notched projectile points, mortars and pestles and a diversity of bead ornaments (Fredrickson 1994).

No resources have been previously identified in the study area and archaeological material was not observed during the site visit. If archaeological or cultural resources are discovered during construction of the project, impacts would be significant. Therefore, the following mitigation measure is provided in the unlikely event that paleontological resources are discovered.

***Mitigation Measure CR-1: Procedures for Handling Unanticipated Archaeological and Paleontological Resources***

Project impacts would be *less than significant* with mitigation because the mitigation measures details the procedures to follow in the event previously undiscovered resources are located during construction.

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

No Native American resources were located within a ½-mile radius of the project location. However, while no resources have been previously identified in the study area and archaeological material was not observed during the field survey, the study area remains sensitive for buried archaeological material. If human remains are discovered during construction of the project, impacts would be significant.

Therefore, the following mitigation measure is provided in the unlikely event that human remains are discovered.

***Mitigation Measure CR-2: Procedures for Encountering Human Remains***

The possibility of encountering human remains in the study area cannot be entirely discounted. Section 7050.5 of the California Health and Safety Code states that it is a misdemeanor to knowingly disturb a human grave. If human graves are encountered, work shall halt in the vicinity and the County Coroner shall be notified immediately. At the same time, an archaeologist shall be contacted to evaluate the situation. If human remains are of Native American origin, the Coroner shall notify the Native American Heritage Commission within 24 hours of this identification.

Project impacts would be *less than significant* with mitigation because the mitigation measure details the procedures to follow in the event human remains are discovered during construction.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
<b>6. GEOLOGY AND SOILS.</b>				
<i>Would the project:</i>				
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? (Refer to Division of Mines and Geology Special Publication 42.)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
ii) Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iii) Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iv) Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal or wastewater?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Discussion:**

**a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:**

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

The City of Sonoma is not listed as a city affected by the Alquist-Priolo Earthquake Fault Zones according to the Division of Mines and Geology Special Publication 42, Index to Earthquake Fault Zone Maps Figure 4B, and no known active or potentially active faults are located in the City of Sonoma planning area (City of Sonoma 2006b).

Miller Pacific developed a geotechnical report specific to the Fryer Creek Pedestrian and Bicycle Bridge Project (Miller Pacific 2010). In this report, Miller Pacific identifies the Rodgers Creek Fault (approximately 4 miles west) and the West Napa Fault (approximately 7 miles east) as the nearest known active faults. The project would incorporate recommendations and site-specific information presented in the geotechnical report into the bridge design. These recommendations include designing the bridge in accordance with the most recent provisions of the California Building Code to reduce potential impacts from seismic activity. Impacts from fault rupture are considered *less than significant*.

**ii) Strong seismic ground shaking?**

The geotechnical report indicated that the potential for strong seismic shaking at the project site is high. As discussed in 6ai, the bridge would be designed in accordance with the most recent provisions of the California Building Code to reduce potential impacts from seismic activity. With the incorporation of this design feature, ground shaking impacts are considered *less than significant*.

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

Liquefaction refers to sudden, temporary loss of soil shear strength during strong ground shaking, and includes liquefaction-induced settlement, flow failure and lateral spreading. This can occur where saturated, loose, or granular deposits exist. The geotechnical report indicated that liquefaction susceptibility at the site is moderate to high. Miller Pacific reported that, to the depth explored, soils at the site are medium dense to very dense. Therefore, significant liquefaction and/or lateral spreading are not expected at the project site. Deeper layers of soils, if looser, could be subject to liquefaction, but the relatively thick layer of dense soils would reduce surface manifestations if deeper liquefaction were to occur. Settlements, if liquefaction were to occur, would be less than a few inches. The geotechnical investigation recommended that the proposed bridge be supported on shallow reinforced concrete slab footings to reduce liquefaction risk. This recommendation would be incorporated into the bridge design. Impacts from liquefaction are considered *less than significant*.

**iv) Landslides?**

The General Plan indicates areas that have moderate or high landslide potential. The project site is not considered at risk for landslide potential, and is located on flat ground. Therefore, there would be *no impact* from landslides.

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

Sandy soils on moderate slopes or clayey soils on steep slopes are susceptible to erosion when exposed to concentrated water runoff. The geotechnical report indicated that the existing Fryer Creek bank slopes are moderately steep with inclinations of approximately 2:1. The creek slopes in the immediate project area are stable with no major erosion features visible. The new bridge would not disturb the creek bank, and therefore should not change the erosive potential at the site. The bridge footings would be excavated vertically and cast-in-place. The existing soil on the sides of the excavation would provide the vertical formwork for this portion. The creek bank would not be disturbed for the placement of concrete of the footings, which would be pumped from nearby. The top section of the footing (above ground) would require formwork but would be outside of the channel top-of-bank limits. However, even with the inclusion of the above construction technique, the potential for erosion at the site still exists. If erosion were to occur, the impact would be significant. The geotechnical investigation recommended erosion control measures to reduce the potential for erosion at the project site. With the inclusion of the following mitigation measure, potential erosion impacts would be reduced to less than significant.

***Mitigation Measure GEO-1: Prepare an Erosion and Sediment Control Plan***

The City shall require that the Contractor prepare an Erosion and Sediment Control Plan for the project prior to construction. Below are some of the measures that would be taken to reduce soil erosion and protect water quality during construction. The use of BMPs is designed to reduce erosion and prevent sediment or other potential pollutants from leaving the work site or impacting water quality in Fryer Creek. The City shall require the Contractor to follow BMPs for erosion and sedimentation outlined in the most recent version of the Erosion and Sediment Control Field Manual (California Regional Water Quality Control Board, 2002), or an equivalent publication.

- Best management practices outlined in the most recent version of the Erosion and Sediment Control Field Manual, published by the Regional Water Quality Control Board, or equivalent publication, shall be implemented for erosion, sediment and turbidity control during and after any ground clearing activities or any other project activities that could result in erosion or sediment discharges to surface water.
- Exposed slopes would be protected using temporary erosion control blankets, fiber rolls, silt fences, or other approved erosion and sediment controls.
- Erosion prevention and sediment control measures would be inspected and maintained until disturbed areas are stabilized.
- Disturbed ground surfaces near the creek bank would be revegetated and monitored for future erosion.
- To ensure that stockpiled granular material does not enter the creek or storm drains, the material would be covered with a tarp and surrounded with sand bags when rain is forecast.
- At the end of each working day roadways would be cleaned and swept, and scrap, debris, and waste material, would be collected and disposed of properly.
- Vehicle or equipment cleaning would be performed with water only, and in a designated, bermed area that would not allow rinse water to run off-site or into the creek.
- Maintenance and fueling of construction vehicles and equipment would be performed in a designated, bermed area or over a drip pan that would not allow run-on of stormwater or runoff of spills.



With the incorporation of this mitigation measure, impacts are reduced to *less than significant*, as the additional measures would protect the soil from eroding off the site.

- 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?**

As discussed in 6aiii, the 2010 geotechnical report indicated that significant liquefaction and/or lateral spreading are not expected at the project site. The geotechnical investigation recommended that the proposed bridge be supported on shallow reinforced concrete slab footings to reduce liquefaction risk. With these design features incorporated, impacts would be *less than significant*.

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

The 2010 geotechnical investigation included two borings near the tops of the creek bank, at the planned eastern and western abutments, to a maximum depth of 20.5 feet. These borings identified generally stiff to dense mixtures of clays, silts, sands and gravels. The geotechnical report did not identify expansive soil on the project site. *No impact* would occur.

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

No septic tanks or wastewater disposal systems are included in the project. *No impact* would occur.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
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**7. GREENHOUSE GAS EMISSIONS.**

*Would the project:*

a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emission of greenhouse gases?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**Discussion:**

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

The BAAQMD operational-related threshold of significance for greenhouse (GHG) emissions is 1,100 metric tons per year. The Fryer Creek Pedestrian and Bicycle Bridge Project would not generate GHG emissions in its operation. The project would have a beneficial impact on GHG emissions by reducing dependence on the automobile, a major source of GHG emissions. *No impact* would occur from operation of the project.

BAAQMD does not have adopted thresholds of significance for construction-related GHG emissions. However, BAAQMD suggests that the Lead Agency quantify and disclose GHG emissions that would occur during construction (BAAQMD 2010a). BAAQMD recommends RoadMOD for linear projects. After quantifying GHG emissions from construction, BAAQMD suggests making a determination on the significance of these construction-generated GHG emission impacts in relation to AB 32 GHG reduction goals. AB32, the “Global Warming Solutions Act of 2006,” commits the State of California to reducing GHG emissions to 1990 levels by 2020. As of November 2010, the California Air Resources Board (CARB) is in the process of developing regulatory measures for GHG emissions, including rules governing market mechanisms. The regulations will take effect and are legally enforceable by January 1, 2012 (CARB 2010).

Construction equipment used during the project would include a backhoe, excavator or mini-excavator, dump truck(s) (5 or 10 yard capacity), sweeper, sawcutter, concrete truck, 20 yard end dump truck, and crane. Construction activities for the project are described in the project description.

As discussed in the Air Quality analysis, the RoadMod Bridge/Overpass Construction inputs were used and customized for this project. Construction-related GHG emissions are estimated to be 2,003.3 kilograms/day, or 68.4 metric tons for the total construction project. Given the BAAQMD operational impact for GHG emissions is 1,100 metric tons per year, 68.4metric tons is considered a *less-than-significant* impact.

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

The City of Sonoma is a member of the ICLEI – Local Governments for Sustainability, and produced a 2008 report detailing the GHG emissions Reduction Action Plan Analysis (GHG Reduction Action

Plan) for the City. The City has committed to five ICLEI milestones. As of November 2010, the City has completed Milestone 1, creating the GHG inventory, Milestone 2, setting a reduction target (reduce internal operations emissions to 20% below 2000 levels by 2020), and Milestone 3 creation of a plan to meet the target. In the GHG Reduction Action Plan, five measure-specific action plans were presented as a roadmap to reduce emissions by more than 20% in six sectors: streetlights, buildings, solid waste, water, commute, and fleet. Potential GHG reduction measures for street lighting include converting streetlight bulbs from HPS to LED and using PV to supply street lighting energy. The new street light installed as part of the project would utilize LED lighting and therefore would not conflict with the measures included in the GHG Reduction Action Plan. **No impact** would occur from operation of the project.

Construction was not identified as a sector in the GHG Reduction Action Plan. See 7a for quantification of construction impacts. Given the short-term, relatively minor amounts of GHG emissions from the project, a **less-than-significant** impact would occur in relation to AB 32 and the City of Sonoma applicable plans and policies related to GHG emissions.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
<b>8. HAZARDS AND HAZARDOUS MATERIALS.</b>				
<i>Would the project:</i>				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials (including, but not limited to, oil, pesticides, chemicals, or radiation) into the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) For a project within an airport land use plan, or where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
h) Expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Discussion:**

**a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?**

The project involves the construction of a bicycle and pedestrian bridge and associated improvements to Newcomb Street and Fryer Creek Drive. Operation of the project would not involve the routine transport, use or disposal of hazardous materials. *No impact* would occur from project operation.

Project construction is not expected to create a hazard to the public due to routine use of hazardous materials. Construction would require the use of heavy equipment and vehicles that use diesel fuel, gasoline, oil, and hydraulic fluid. Hazardous materials used during construction would be transported, used, and stored in accordance with state and federal regulations regarding hazardous materials. *Less than Significant* impacts would occur from construction.

**b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials (including, but not limited to, oil, pesticides, chemicals, or radiation) into the environment?**

Operation of the bridge and associated improvements would not involve the use of hazardous materials. *No impact* would occur from project operation.

Project construction would require the use of heavy equipment and vehicles that use diesel fuel, gasoline, oil, and hydraulic fluid. Hazardous materials used during construction would be transported, used, and stored in accordance with state and federal regulations regarding hazardous materials. No hazardous waste or hazardous substance sites are known to occur within the project area. The project would not be located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code 65962.5. Construction impacts would be *less than significant*.

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

There are several schools within ¼ mile of the project. See 8b, above for operational impacts. *No impact* would occur as a result of the project.

See 8b, above for construction-related impacts. Construction impacts would be *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?**

The project site and adjacent properties are not identified on the five lists which comprise the Hazardous Waste and Substances Site List (Cortese List). *No impact* would occur.

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

In January 2001, the Sonoma County Airport Land Use Commission adopted the Comprehensive Airport Land Use Plan for Sonoma County, which designates “airport referral areas.” Airport referral areas designate areas “within which noise, airspace, or safety factors may affect land use compatibility” (Sonoma County 2001). The closest airport to the project is the Sonoma Skypark, which is approximately 2.3 miles southeast of the project site. The project is not located within the airport referral area for Sonoma Skypark, and would not result in a safety hazard due to airport vicinity. *No impact* would occur.

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

There is no private airstrip in vicinity of the project. *No impact* would occur.

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

The City of Sonoma has an Emergency Operations Plan to coordinate the planned response to large-scale disasters. The Emergency Operations Plan describes emergency management organization, roles and responsibilities, and analyzes various hazard risks. However, the plan does not identify specific routes for emergency access or evacuation. Project construction may temporarily affect traffic along Newcomb Street and Broadway; however construction staging onsite would minimize construction vehicle trips to approximately ten vehicle trips per day for the 60 day construction duration. Any temporary construction traffic would be in accordance with City standards and would not interfere with emergency access or evacuation in the area or with the City of Sonoma's Emergency Operations Plan. Impacts would be *less than significant*.

**h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?**

The project is located in an urban area within the City of Sonoma. The Association of Bay Area Governments (ABAG) maps wildland and urban interface fire risk. ABAG's Wildland Urban Interface – Fire Threatened Communities map identifies areas at risk of fire as "Community at Risk." The project would not be located on land designated as "Community at Risk." *No impact* is expected from wildland fires.

	<b>Potentially Significant Impact</b>	<b>Less Than Significant With Mitigation Incorporated</b>	<b>Less than Significant Impact</b>	<b>No Impact</b>
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**9. HYDROLOGY AND WATER QUALITY.**

*Would the project:*

a) Violate any water quality standards or waste discharge requirements?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g. the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f) Otherwise substantially degrade water quality?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
i) Expose people or structures to a significant risk of loss, injury or death involving				

flooding, including flooding as a result of the failure of a levee or dam?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
j) Expose people or structures to inundation by seiche, tsunami, or mudflow?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Discussion:**

**a & f) Violate any water quality standards or waste discharge requirements or otherwise degrade water quality?**

The project in its operation would not impact water quality. As discussed in the Geology analysis, the proposed bridge would not disturb the creek bank. Therefore, the addition of the bicycle and pedestrian bridge would not change the erosive potential at the site and subsequently impact water quality due to sedimentation. *No impact* would occur from project operation.

Construction activities have the potential to cause erosion, sediment, or turbidity. If substantial erosion were to occur, the impact would be significant. Implementation of erosion and sediment controls would reduce the potential for the project to violate any water quality standards or waste discharge requirements to less than significant. With the inclusion of the following mitigation measure, presented fully in the Geology analysis, potential erosion impacts would be reduced to less than significant.

***Mitigation Measure GEO-1: Prepare an Erosion and Sediment Control Plan***

With the incorporation of this mitigation measure, impacts are reduced to *less than significant*, because the additional erosion control measures would protect water quality.

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

The project would not require the use of groundwater supplies. Approximately 1,530 square feet of new impervious surface (new sidewalk, driveways, paved bicycle and pedestrian path, and bridge) would result from implementation of the project. The small amount of new impervious coverage would have a negligible impact on groundwater recharge levels. Impacts would be *less than significant*.

**c) Substantially alter the existing drainage pattern of the site or area, including the alteration of the course of stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?**

The project would not alter the course of Fryer Creek. Winzler & Kelly performed a hydrology and hydraulics analysis in 2010, which analyzed potential scouring (i.e. erosion or removal of streambed or bank material from bridge foundations due to flowing water) at the project site. This analysis determined that the bridge and its abutments do not encroach into the creek or the ordinary high water mark. Therefore, no change to creek velocity would occur and no scouring is expected (Winzler & Kelly 2010). *No impact* would occur.



**d) Substantially alter the existing drainage pattern of the site or area, including the alteration of the course of stream or river, or substantially increase the rate or amount of surface runoff, in a manner which would result in flooding on- or off-site?**

The 2010 hydrology and hydraulics analysis of Fryer Creek determined a 100-year design water surface elevation (WSEL) of 61.25 feet. The WSEL is contained within the top of the channel banks at the selected bridge location and would not change as a result of the project. A minimum of 1-foot freeboard would be maintained between the bridge soffit and the 100-year WSEL, and bridge abutments would not encroach upon the 100-year WSEL boundary. Therefore, the proposed bridge would not cause flood risk or change flood flow patterns. Impacts would be *less than significant*.

**e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems?**

The project would create approximately 1,530 square feet of new impervious surface with the addition of the bicycle and pedestrian path and sidewalk on Newcomb Street. The project, as designed, would direct stormwater runoff to the relocated catch basin at the corner of Newcomb Street and Fryer Creek Drive. This catch basin has sufficient capacity to accommodate any additional stormwater runoff created as part of this project. Impacts would be *less than significant*.

**g) Place housing within a 100 year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?**

The project would not include construction of houses; *no impact* would occur.

**h) Place within a 100 year flood hazard area structures which would impede or redirect flood flows?**

See 9d, above. The proposed bicycle and pedestrian bridge and associated improvements would be located in a 500-year flood hazard area (City of Sonoma 2006b). However, the bridge and its abutments are designed to avoid encroachment upon the 100-year WSEL boundary, and therefore would not impede or redirect flood flows. Impacts would be *less than significant*.

**i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?**

See 9d and 9h above, the proposed bicycle and pedestrian bridge and abutments would not encroach upon the 100-year WSEL boundary, and therefore would not increase flooding risk. The project is not located below a levee or dam. Therefore, impacts would be *less than significant*.

**j) Inundation by seiche, tsunami, or mudflow?**

According to the California Department of Conservation Sonoma County Tsunami Inundation Map, the project site is not located in an area subject to tsunami inundation. The City of Sonoma 2020 General Plan Update Final EIR (2006) states that the City of Sonoma Sphere of Influence is not subject to seiche, tsunami or mudflow hazards. The project would not be inundated by seiche, tsunami or mudflow. Therefore, *no impact* would occur.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
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**10. LAND USE AND PLANNING.**

*Would the project:*

a) Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Discussion:**

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

The project would not divide an established community. The project would offer an improved connection for pedestrians and bicyclists between established neighborhoods. *No impact* would occur.

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

The project would not alter or conflict with existing land use designations or the City of Sonoma General Plan. Applicable General Plan policies include:

**Goal ER-2 Identify, preserve and enhance important habitat areas and significant environmental resources.**

Policy 2.6 Preserve existing trees and plant new trees.

**Goal ER-4 Respond to the Recreational Needs of the Community.**

Policy 4.3 Link Neighborhoods and Recreational, Cultural, Educational, Civic and Commercial destinations with bicycle and pedestrian facilities

**Goal CE-1 Provide a safe walking environment throughout Sonoma.**

Policy 1.1 Preserve and establish short-cuts that take pedestrians away from major streets

**Goal CE-2 Establish Sonoma as a place where bicycling is safe and convenient**

Policy 2.1 Promote bicycling as an efficient alternative to driving.

Policy 2.2 Extend the bike path system, with a focus on establishing safe routes to popular destinations.

The project would be consistent with Goals ER-2, ER-4, Goal CE-1 and Goal CE-2. The project would provide a link between the neighborhoods west and east of Fryer Creek and create a loop connection between existing Class I bike lanes and the Todd Avenue bicycle and pedestrian bridge. The project would provide a safe path of travel away from major roads, especially for students of Sonoma Valley High School and Adele Harrison Middle School. The project would comply with local land use policies, and impacts would be *less than significant*.

**c) Conflict with any applicable habitat conservation plan or natural community conservation plan?**

As discussed in the Biology analysis 4f, the City of Sonoma General Plan Background Report's Biological Resources element describes conservation measures A and C which were implemented in 1990. Measure A established the Sonoma County Agricultural Preservation and Open Space District, and Measure C provided financing for acquisition of open space and agricultural lands. The City of Sonoma implements these open space and habitat protection strategies through: growth management, habitat protection of riparian corridors, hillsides and creeks, protecting agricultural lands, and other policies relating to recreation, public safety and preserving a rural character. Policies applicable to this project are discussed in 4e.

The project is located in a residential neighborhood. The project is not located on land designated as conservation would not impact land designated as conservation. See 4e for additional discussion on project operation. Impacts from project operation would be *less than significant*.

The following mitigation measures would be necessary to avoid potential adverse impacts to special status species, migratory birds, riparian habitat, existing trees, and to ensure compliance with the applicable habitat conservation goals and policies set forth in the City of Sonoma General Plan during construction:

***Mitigation Measure BIO-1: Conduct Pre-Construction Biological Surveys***

***Mitigation Measure BIO-2: Conduct Pre-Construction Nesting Surveys***

***Mitigation Measure BIO-3: Tree Replacement and Tree Protection Measures***

***Mitigation Measure GEO-1: Prepare an Erosion and Sediment Control Plan***

Construction-related impacts would be *less than significant* with the implementation of the above-listed mitigation measures.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
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**11. MINERAL RESOURCES.**

*Would the project:*

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

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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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?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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**Discussion:**

**a) Result in the loss of availability of a known mineral resource that would be of future value to the region and the residents of the state?**

The City of Sonoma is not known to contain any valuable mineral resources (City of Sonoma 2004). Therefore, the project would have *no impact* on mineral resources.

**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?**

See 11a, above. *No impact* would occur.

	<b>Potentially Significant Impact</b>	<b>Less Than Significant With Mitigation Incorporated</b>	<b>Less than Significant Impact</b>	<b>No Impact</b>
<b>12. NOISE.</b>				
<i>Would the project result in:</i>				
a) Exposure of persons to, or generation of noise levels in excess of, standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Exposure of persons to, or generation of excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Discussion:**

Project construction activities would generate noise that would affect sensitive receptors in the project vicinity. Noise in the City of Sonoma is regulated by noise standards established by the City Noise Ordinance (Sonoma Municipal Code, Chapter 9.56). The City Noise Ordinance establishes standards for general noise and construction noise, as discussed below.

*General Noise*

The City Noise Ordinance regulates acceptable general noise limits for varying property types. General Noise limits are provided in Table 4:

**Table 4**  
**City of Sonoma Noise Ordinance – General Noise Limits**

Property Type or Zone	Daytime Limits <sup>1</sup>	Nighttime Limits
Residential	60 dBA Intermittent 50 dBA Constant	50 dBA Intermittent 40 dBA Constant
Commercial/Mixed Use	65 dBA Intermittent 55 dBA Constant	65 dBA Intermittent 55 dBA Constant
Public Property	Most restrictive noise limit applicable to adjoining private property	

Notes:

1. Daytime hours are between 7:00 a.m. and 9:00 p.m. Sunday through Thursday, and 7:00 a.m. and 10:00 p.m. on Friday and Saturday.
2. Nighttime hours are between 9:00 p.m. and 7:00 a.m. Sunday through Thursday, and between 10:00 p.m. and 7:00 a.m. on Friday and Saturday.
3. dBA (A-Weighted decibel) is an overall frequency-weighted sound level that approximates the frequency response to the human ear. Example dBA sound levels are 120 dBA for a jet takeoff, 90 dBA for a heavy truck, and 50 dBA for normal speech.

*Construction Noise*

The City Noise Ordinance also regulates the hours of operation for construction activities, and the acceptable noise limits. These construction hours apply to construction alteration, demolition, maintenance of construction equipment, deliveries of materials or equipment or repair activities, except where granted an exception by permit. Construction noise level at any point outside of the property plane of a construction project is not to exceed 90dBA. Construction hours are as shown in below in Table 5.

**Table 5**  
**City of Sonoma Noise Ordinance – Construction Limits**

Day of the Week	Construction Hours
Monday – Friday	8:00 a.m. – 6:00 p.m.
Saturday	9:00 a.m. – 6:00 p.m.
Sunday & Holidays	10:00 a.m. – 6:00 p.m.

*Sensitive Noise Receptors in the Project Area*

Sensitive receptors within the project area include 1) single-family residences immediately adjacent to the project on Newcomb Street and Fryer Creek Drive, and 2) single-family residences immediately adjacent to the project on Manor Drive.

*Existing Noise Sources*

Existing noise sources in the project vicinity include typical residential noise-generating activities, and noise generated from pedestrian and bicycle traffic along the existing multi-use paths on the west side of Fryer Creek adjacent to Manor Drive.

*Construction Equipment*

Project construction would involve the use of the following equipment: backhoe, mini-excavator or excavator, dump truck(s), sweeper, sawcutter, concrete truck, 20-yard asphalt end dump truck, and a

crane for bridge deck placement. According to the U.S. Department of Transportation Federal Highway Administration Construction Noise Handbook, the use of a sawcutter would generate the most noise; 90dBA at 50 feet. A sawcutter would be used for demolition of the existing driveway, curb and gutter on Newcomb Street, and to cut in the new ADA detectable warning surfaces on the east side of Fryer Creek Drive. The sawcutter would be used for approximately 30 minutes per day for a few days of the 60 day construction duration.

**a) Exposure of persons to, or generation of noise levels in excess of, standards established in the local general plan or noise ordinance, or applicable standards of other agencies?**

The project involves a new bicycle and pedestrian bridge, new bicycle and pedestrian path, and associated accessibility and circulation improvements along Newcomb Street. The project would be adjacent to residential homes, and therefore would be subject to 60 dBA intermittent / 50 dBA constant daytime limits and 50 dBA intermittent / 40 dBA constant nighttime noise limits as shown in Table 4. The operation of the project would be consistent with the existing noise levels in the vicinity of the site. The project would also comply with the general noise limits set forth in the City Noise Ordinance; bicyclists and pedestrians using the bridge and path are not expected to generate noise in excess of 60 dBA intermittent. Typical noise levels for various indoor and outdoor activities are provided in Table 6 for comparative purposes:

**Table 6  
 Typical Noise Levels**

Common Outdoor Activities	A-Weighted Sound Level in Decibels <sup>1</sup>	Common Indoor Activities
	110	Rock band
Jet flyover at 1,000 feet	100	
Gas lawnmower at 3 feet	90	
Diesel truck at 50 feet at 50 mph	80	Food blender at 3 feet Garbage disposal at 3 feet
Noisy urban area, daytime	70	Vacuum cleaner at 10 feet
Gas lawnmower, 100 feet		Normal speech at 3 feet
Commercial area	60	
Heavy traffic at 300 feet		
Quiet urban daytime	50	Large business office Dishwasher in next room
	40	
Quiet urban nighttime		Theater, large conference room (background)
Quiet suburban nighttime	30	
Quiet rural nighttime	20	Library Bedroom at night, concert hall (background)
	10	
		Broadcast/recording studio

Source: ICF Jones & Stokes (2009)

Note:

1. A-Weighted decibel (dBA) is an overall frequency-weighted sound level that approximates the frequency response to the human ear.

Any noise generated from pedestrians and bicyclists using the proposed bridge or multi-use path is expected to be in compliance with the City Noise Ordinance. **No impact** would occur from project operation. The City Noise Ordinance restricts construction noise level at any point outside of the property plane of the project to 90dBA. The project would involve the use of a sawcutter and other noisy construction equipment within 50 feet of residences. Although the City Noise Ordinance exempts capital improvements projects on public property from the City Noise Ordinance, the project would be in close proximity to sensitive receptors, which could result in a significant impact. Therefore, the following mitigation measures are necessary to reduce impacts to less than significant levels.

***Mitigation Measure NOI-1: Comply with the City Noise Performance Standards***

In accordance with the City of Sonoma's Municipal Code Ordinance 02-2010, Chapter 9.56-Noise, the City shall limit construction activities to the hours between 8:00 a.m. and 6:00 p.m. Monday through Friday, between 9:00 a.m. and 6:00 p.m. on Saturdays and between 10:00 a.m. and 6:00 p.m. on Sundays and holidays.

***Mitigation Measure NOI-2: Reduce Construction-Related Noise***

The City shall ensure that construction equipment is properly tuned and muffled according to the manufacturer's specifications. Noise construction activities whose specific location on the site may be flexible (e.g., operation of compressors, cement mixing, general truck idling) shall be conducted as far as possible from nearby residences in order to achieve the reduction of construction noise to at or below 90 dBA outside of the construction property plane.

With the implementation of the following mitigation measures, construction impacts would be **less than significant**, because noise would occur during specified hours and noise would be reduced to acceptable levels.

**b) Exposure of persons to, or generation of excessive ground-borne vibration or ground-borne noise levels?**

The project includes the installation of a new pre-fabricated bicycle and pedestrian bridge and construction of bridge footings, new bicycle and pedestrian path, and associated accessibility and circulation improvements to Newcomb Street. The operation of the project would not generate ground-borne vibration or ground-borne noise levels. **No impact** would occur.

Project construction would not include the use of an impact device or blasting. Equipment used during construction are not high vibration generating equipment. Therefore, any ground-borne vibration or noise generated during construction would be minimal and temporary in nature. Construction impacts are considered **less than significant**.

**c) A substantial permanent increase in ambient noise levels in the project vicinity?**

Ambient noise is the "normal or existing composite level from all sources in an area" (City of Sonoma 2006a, pg 61). Existing conditions include a multi-use path running north-south on the west side of Fryer Creek, and a multi-use path running east-west to Manor Drive. The proposed bridge, and bicycle and pedestrian path on Newcomb Street would not substantially increase the ambient noise levels in the vicinity. Bicyclists and pedestrians currently use the existing multi-use paths, and the proposed project serves as a connection to these existing recreational amenities. The addition of a bicycle and pedestrian path along Newcomb Street is consistent with City plans to designate Newcomb Street as a Class III bike route. Bollards installed along the new bicycle and pedestrian path would also function to slow the speed of bicyclists and thereby reduce potential noise. Impacts are considered **less than significant**.



- d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity?**  
See discussion in 12a and 12c above. The project is consistent with the existing conditions in the project area. The addition of a bicycle and pedestrian path along Newcomb Street is consistent with City plans to designate Newcomb Street as a Class III bike route. Any noise generated from bicyclists and pedestrians using the bridge and path are characteristic of, and consistent with, residential neighborhoods and the existing Class I paths along Fryer Creek. The project would not result in a substantial temporary or periodic increase in ambient noise levels. Impacts would be *less than significant*.

See 12a above for construction noise impacts. Construction duration would last approximately 60 days. The implementation of the following mitigation measures would be necessary to reduce impacts to less than significant levels.

***Mitigation Measure NOI-1: Comply with the City Noise Performance Standards***

***Mitigation Measure NOI-2: Reduce Construction-Related Noise***

With the implementation of the following mitigation measures, construction impacts would be *less than significant*, because noise would occur during specified hours and noise would be reduced to acceptable levels.

- e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?**  
According to the Comprehensive Airport Land Use Plan for Sonoma County, the project is not located in an airport referral area. An airport referral area is defined as “the area within which noise, airspace, or safety factors may affect land use compatibility” (Sonoma County 2001). The project would not expose people residing or working in the project area to excessive airport noise levels and *no impact* would occur.
- f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?**  
The project is not within the vicinity of a private airstrip. *No impact* would occur.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
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**13. POPULATION AND HOUSING.**

*Would the proposal:*

- a) Induce substantial population growth in an area, either directly (e.g., by proposing new homes and businesses) or indirectly (e.g., through extension of roads or other infrastructure)?
- b) Displace substantial numbers of existing housing stock, necessitating the construction of replacement housing elsewhere?
- c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Discussion:**

- a) **Induce substantial population growth in an area, either directly or indirectly?**  
 The project encourages walking and bicycling in the existing City neighborhoods. The addition of a bicycle and pedestrian bridge would not induce population growth or require development of additional infrastructure that may indirectly lead to population growth. *No impact* would occur.
- b) **Displace substantial numbers of existing housing stock?**  
 The project would not displace existing housing stock and, therefore, *no impact* would occur.
- c) **Displace substantial numbers of people?**  
 The project would not displace any people and, therefore, *no impact* would occur.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
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**14. PUBLIC SERVICES.**

*Would the project result in substantial adverse physical impacts associated with the provision of or 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 following public services:*

a) Fire protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**Discussion:**

**a) Fire protection?**

The City of Sonoma is served by the Sonoma Valley Fire & Rescue Authority. The project would construct a bicycle and pedestrian bridge and associated circulation and accessibility improvements. The project would not change existing traffic operations or require additional fire protection services. **No impact** would occur to the performance objectives or response time of the Sonoma Valley Fire & Rescue Authority as a result of the project.

Construction impacts to performance objectives of the Sonoma Valley Fire & Rescue Authority would be minimal, with an estimated ten vehicle trips per day, for approximately 60 days. No work would occur on Broadway, which is the main thoroughfare. Construction impacts would be **less than significant**.

**b) Police protection?**

The City of Sonoma is served by the Sonoma Police Department. The project would construct a bicycle and pedestrian bridge and associated circulation and accessibility improvements. The project would not change existing traffic operations or require additional police protection services. **No impact** would occur.

Construction impacts to performance objectives of the Sonoma Police Department would be minimal, with an estimated ten vehicle trips per day, for approximately 60 days. No work would occur Broadway, which is the main thoroughfare. Construction impacts would be **less than significant**.

**c) Schools?**

The project would improve connections to Sonoma Valley High School and Adele Harrison Middle School. The project would not induce population growth, and therefore would not hinder

performance objectives of surrounding schools. The project would provide a new connection and safe path of travel away from motor vehicles for students of Adele Harrison Middle School and Sonoma Valley High School. *No impact* to schools would occur as a result of the project.

Construction impacts to performance objectives of nearby schools would be minimal, with an estimated ten vehicle trips per day, for approximately 60 days. No work would occur on Broadway, which is the main thoroughfare. Construction impacts would be *less than significant*.

**d) Parks?**

The project is not expected to increase the existing use of parks in the vicinity of the project site. *No impact* to parks would occur as a result of the project.

Construction impacts to performance objectives of nearby parks would be minimal, with an estimated ten vehicle trips per day, for approximately 60 days. No work would occur on Broadway, which is the main thoroughfare. Construction impacts would be *less than significant*.

**e) Other Public Facilities?**

The project is not expected to increase the use of existing public facilities. *No impact* to public facilities would occur as a result of the project.

Construction impacts to performance objectives of nearby public facilities would be minimal, with an estimated ten vehicle trips per day, for approximately 60 days. No work would occur Broadway, which is the main thoroughfare. Construction impacts would be *less than significant*.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
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**15. RECREATION.**

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

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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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?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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**Discussion:**

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

The project involves the construction of a bicycle and pedestrian bridge at Fryer Creek and associated accessibility and circulation improvements along Newcomb Street and Fryer Creek Drive. While the bridge and path would be used recreationally, the use of existing recreational facilities or parks is not expected to increase. Therefore, *no impact* from operation would occur.

The existing Class I bike lanes adjacent to the project site may be closed during project construction. This may result in diverted access to nearby parks. However any closure or access limitations would be temporary in nature. Impacts would be *less than significant*. No mitigation would be required.

**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?**

See 15a, above. The project would not require the construction or expansion of recreational facilities. Therefore, *no impact* would occur.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
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**16. TRANSPORTATION/TRAFFIC.**

*Would the project:*

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

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

c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?

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

e) Result in inadequate emergency access?

f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?

**Discussion:**

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

The project includes the assembly of a bicycle and pedestrian bridge at Fryer Creek, and the construction of associated bicycle and pedestrian path and accessibility and circulation improvements

on Newcomb Street. Circulation improvements such as bollards, signage and striping would be included in the project design to minimize any potential multi-modal conflicts. The project would not adversely impact the performance of the circulation system for intersections, streets, highways and freeways, for vehicles or mass transit.

The project would improve circulation for bicycles and pedestrians, by connecting existing multi-use paths and neighborhoods west of Fryer Creek with the neighborhoods and schools east of the creek, and would complement the existing bridge approximately 1,600 feet south of the project site at Todd Avenue.

Additionally, the project is consistent with the following City of Sonoma General Plan – Circulation Element policies:

**Goal CE-1 Provide a safe walking environment throughout Sonoma**

Policy 1.1 Preserve and establish short-cuts that take pedestrians away from major streets

**Goal CE-2 Establish Sonoma as a place where bicycling is safe and convenient**

Policy 2.1 Promote bicycling as an efficient alternative to driving.

Policy 2.2 Extend the bike path system, with a focus on establishing safe routes to popular destinations.

The project would provide a safe path of travel away from major roads, especially to Sonoma Valley High School and Adele Harrison Middle School, and connect with existing Class I bike lanes. The project represents a continued implementation of projects identified in the Bicycle and Pedestrian Plan and increases opportunities for bicycling and recreation. Therefore, *no impact* to the circulation system would occur as part of the project.

Construction vehicle trips to the project work site would be minimal, and would consist of approximately ten daily vehicle trips for duration of approximately 60 days. No road closures or detours would be required. Access to some residential properties on Newcomb Street may be temporarily affected during construction. However, these impacts would be limited to the immediate vicinity of the construction activity and would not impact overall traffic circulation. Impacts to the effectiveness of the circulation system during construction would be *less than significant*.

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

No changes are proposed to existing roadways or highways that would impact level of service, i.e. changes to traffic lanes or intersections. A new stop sign is proposed as part of the project, for vehicles traveling east on Newcomb Street. This stop sign is included to improve safety between travel modes (bicycles and vehicles) and would not affect level of service standards, since it is a low-traffic neighborhood road. There would be *no impact* to level of service, congestion or travel demand standards.

Construction vehicle trips would have minimal impacts to roadway level of service and congestion. Construction traffic would amount to approximately ten vehicle trips per day for approximately 60 days, since construction staging would be onsite. Therefore, construction impacts would be *less than significant*.

**c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?**

The project involves the construction of a bicycle and pedestrian bridge at Fryer Creek and associated improvements. The project would not involve changes to air traffic patterns. *No impact* would occur.

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

The project involves the assembly of a bicycle and pedestrian bridge at Fryer Creek and the construction of a new asphalt bicycle and pedestrian path connecting the bridge's eastern approach to Newcomb Street. In order to avoid potential hazards between bicyclists, pedestrians and vehicles, several safety features are included as part of the design (see Figure 3).

One bollard and a stop bar and marking are included at the eastern end of the new bicycle and pedestrian path. The bollard is standard design for an entrance to a mixed-use pathway from a sidewalk or roadway, since it obstructs the passage of vehicles to the pathway. The stop bar and marking are included for bicyclists and pedestrians, to enhance safety when exiting the path and continuing past a residential driveway and onto the new public sidewalk (bicyclists would exit the path at the stop marking and continue onto the roadway).

Additionally, three bollards are included at the southern side of new bicycle and pedestrian path, adjacent to a gravel residential driveway. This driveway is within the public right-of-way and serves one residence. In this very low traffic volume area, bollards are an adequate safety enhancement to address concerns of residents utilizing this driveway for access to their property. Impacts would be *less than significant*.

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

The City of Sonoma has an Emergency Operations Plan to coordinate the planned response to large-scale disasters. The Emergency Operations Plan describes emergency management organization, roles and responsibilities, and analyzes various hazard risks. However, the plan does not identify specific routes for emergency access or evacuation. Project construction may temporarily increase traffic along Newcomb Street and Broadway; however construction staging onsite would minimize construction vehicle trips to approximately ten vehicle trips per day. This temporary construction traffic would be in accordance with City standards and would not interfere with emergency access or evacuation in the area or with the City of Sonoma's Emergency Operations Plan. Impacts would be *less than significant*.

**f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?**

As discussed in the Project Description, the project is part of continued implementation of the Bicycle and Pedestrian Plan. The project would improve connectivity of bicycle and pedestrian facilities. Additionally, the project would be consistent with the following bicycle and pedestrian policies from the City of Sonoma General Plan:

**Goal ER-2 Respond to the Recreational Needs of the Community**

Policy 4.3 Link Neighborhoods and Recreational, Cultural, Educational, Civic and Commercial destinations with bicycle and pedestrian facilities



**Goal CE-1 Provide a safe walking environment throughout Sonoma**

Policy 1.1 Preserve and establish short-cuts that take pedestrians away from major streets

**Goal CE-2 Establish Sonoma as a place where bicycling is safe and convenient**

Policy 2.1 Promote bicycling as an efficient alternative to driving.

Policy 2.2 Extend the bike path system, with a focus on establishing safe routes to popular destinations.

The project would provide a link between the neighborhoods west and east of Fryer Creek and connect existing Class I bike lanes. The project is part of the continued implementation of projects identified in the Bicycle and Pedestrian Plan. The project would also provide a safe path of travel away from major roads, especially to Sonoma Valley High School and Adele Harrison Middle School. Therefore, the project is consistent with existing plans and policies and *no impact* would occur.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
<b>17. UTILITIES AND SERVICE SYSTEMS.</b>				
<i>Would the project:</i>				
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Result in a determination by the Sonoma Valley County Sanitation District that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g) Comply with federal, state, and local statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**Discussion:**

**a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?**

The project would not generate wastewater, therefore *no impact* would occur.

**b) Require or result in the construction of new or expanded water or wastewater treatment facilities?**

See 17a, above. The project would not require the construction of water or wastewater treatment facilities. *No impact* would occur.

**c) Require or result in the construction of new or expanded storm water drainage facilities, the construction of which could cause significant environmental effects?**

The project would create approximately 1,530 square feet of new impervious surface. Minor landscape and drainage improvements would accompany the new impervious surface to aid the flow direction of stormwater runoff. The existing stormdrain system, including the relocated catch basin at the intersection of Newcomb Street and Fryer Creek Drive has adequate capacity to handle the minor addition of runoff that may occur as a result of the new impervious surface. The project would not require new or expanded storm water drainage facilities; therefore impacts would be *less than significant*.

**d) Have sufficient water supplies available to serve the project from existing entitlements and resources?**

The project would not require water supplies, therefore *no impact* would occur.

**e) Result in a determination by the Sonoma Valley County Sanitation District that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?**

See 17a and 17b, above. The project would not generate additional demand for Sonoma Valley County Sanitation District facilities and services. *No impact* would occur.

**f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?**

Excess spoils created during construction would be hauled off site and would not be stored along the construction route. The project's solid waste disposal needs during construction would include approximately 30 cubic yards of soil and demolition material from structure and path and sidewalk excavation and demolition. The anticipated volume of spoils material could be accommodated by landfills located in the region, including Redwood Sanitary in Novato, or a City-approved alternative disposal site with sufficient permitted capacity. Following construction, there would be no generation of solid waste. Impacts would be *less than significant*.

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

See 17f, above. Waste disposal would comply with all applicable federal, state, and local regulations. Impacts would be *less than significant*.

Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
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**18. MANDATORY FINDINGS OF SIGNIFICANCE.**

a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, 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?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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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)?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Discussion:**

**a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, 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?**

With implementation of the standard mitigation measures and additional recommended mitigation measures, the project does not have the potential to degrade the quality of the environment, including fish or wildlife species or their habitat, plant or animal communities, or important examples of the major periods of California history or prehistory. The City would be responsible for ensuring standard mitigation measures and additional recommended mitigation measures for impacts in the areas of aesthetics, air quality, biology, cultural resources, geology and soils, hydrology and water quality and noise are properly implemented. With these measures in place, the potential for project-related activities to degrade the quality of the environment would be reduced to *less than significant* levels.

**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)?**

As discussed in Section 10, *Land Use*, the project is consistent with the development contemplated in the City's General Plan, as well as the Sonoma County Bicycle & Pedestrian Master Plan. Cumulative impacts for this project have been analyzed using the summary of projections contained in an adopted general plan approach (as defined under Section 15130(b)(1)(B) of the CEQA Guidelines). The project's impacts would not add to any existing or foreseeable future significant cumulative impact, such as species endangerment, habitat loss, aesthetic impacts, or air quality degradation. Incremental impacts, if any, would be negligible and undetectable. As contemplated throughout this Initial Study/MND, any cumulative impacts to which this project would contribute may be mitigated to the *less than significant* level.

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

Project measures and mitigation measures are identified to prevent significant effects in the categories of aesthetics, air quality, biology, cultural resources, geology and soils, hydrology and water quality and noise. The analysis in this Initial Study/MND shows that with the recommended project measures, the Fryer Creek Pedestrian and Bicycle Bridge Project would have no lasting significant adverse effects to the human population. Impacts would be *less than significant* with mitigation.

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## REFERENCES

- Anthropological Studies Center, Sonoma State University. 2010. *A Cultural Resources Study for the Fryer Creek Pedestrian and Bicycle Bridge at Newcomb Street, Sonoma, Sonoma County, California*. November.
- Association of Bay Area Governments (ABAG). *Wildland Urban Interface – Fire Threatened Communities*. Accessed online at <http://www.abag.ca.gov/bayarea/eqmaps/wildfire/>.
- Bay Area Air Quality Management District (BAAQMD). 2010a. *California Environmental Quality Act (CEQA) Air Quality Guidelines*. June.
- BAAQMD, ABAG, Bay Conservation and Development Commission, and Metropolitan Transportation Commission. 2010b. *Final Bay Area 2010 Clean Air Plan*. September.
- Beard, Vicki. R. 1998. Cultural Resources Study for the Holden Subdivision, 245-246 Malet Street, Sonoma, Sonoma County, California. Prepared for Brelje and Race. On file at the Northwest Information Center of the California Historical Resources Information System, Rohnert Park, California.
- Beard, Vicki. R. 2000. A Cultural Resources Survey for the New Middle School Project Broadway at Woodward Lane, Sonoma, Sonoma County, California. Prepared for Sonoma Valley Unified School District. On file at the Northwest Information Center of the California Historical Resources Information System, Rohnert Park, California.
- California Air Resources Board (CARB). 2010. *Assembly Bill 32: Global Warming Solutions Act*. Accessed online at: <http://www.arb.ca.gov/cc/ab32/ab32.htm>.
- California Department of Conservation. 2009. *Sonoma County Williamson Act Lands 2008*.
- California Department of Conservation. 2010. *Sonoma County Important Farmland 2008*.
- California Department of Conservation. Sonoma County Tsunami Inundation USGS 24K Quads. Accessed online at: [http://www.consrv.ca.gov/cgs/geologic\\_hazards/Tsunami/Inundation\\_Maps/Sonoma/Pages/Sonoma.aspx](http://www.consrv.ca.gov/cgs/geologic_hazards/Tsunami/Inundation_Maps/Sonoma/Pages/Sonoma.aspx).
- California Department of Parks and Recreation. 1976. *California Inventory of Historic Resources*. State of California Department of Parks and Recreation, Sacramento.

- California Environmental Protection Agency. *Cortese List Data Resources*. Accessed online at <http://www.calepa.ca.gov/SiteCleanup/CorteseList/>.
- California Natural Diversity Data Base (CNDDB). 2010. RareFind 3. Computer printout for special-status species within 7.5 the Sonoma, Kenwood, Rutherford, Yountville, Napa, Cuttings Wharf, Sears Point, Petaluma River, Glen Ellen Quadrangles. California Natural Heritage Division, California Department of Fish and Game, Sacramento, CA.
- California Office of Historic Preservation (CA-OHP). 1988. *Five Views: An Ethnic Historic Site Survey for California*. State of California, Department of Parks and Recreation, Sacramento.
- CA-OHP. 1990. *California Historical Landmarks*. State of California, Department of Parks and Recreation, Sacramento.
- CA-OHP. 1992. *California Points of Historical Interest*. State of California, Department of Parks and Recreation, Sacramento.
- CA-OHP. 1998. *California Register of Historic Resources*. State Office of Historic Preservation, Sacramento.
- CA-OHP. 2010. Historic Properties Directory Listing by City (through 5 October 2010). State Office of Historic Preservation, Sacramento.
- California Geological Survey. 1999. Table 4: Alquist-Priolo Earthquake Fault Zones.
- California Native Plant Society. Online Database. Accessed online at: [http://www.cnps.org/programs/Rare\\_Plant/program.htm](http://www.cnps.org/programs/Rare_Plant/program.htm)
- California Regional Water Quality Control Board – San Francisco Bay Region. 2002. *Erosion and Sediment Control: Field Manual*. August.
- Chavez, David. 1988. Montclair Park Subdivision EIR (letter report). Prepare for Brady and Associates, Inc. On file at the Northwest Information Center of the California Historical Resources Information System, Rohnert Park, California.
- City of Sonoma. 2004. *Background Report: 2005-2020 General Plan*. May.
- City of Sonoma. 2006a. *2020 General Plan*. October.
- City of Sonoma. 2006b. *2020 General Plan Final Environmental Impact Report (FEIR)*, September.
- City of Sonoma. 2008a. *Greenhouse Gas Emissions Reduction Action Plan Analysis*. February 22.
- City of Sonoma. 2009. *Emergency Operations Plan*. February.
- City of Sonoma. 2009b. *Supplemental Report: Continued Review of Proposed Fryer Creek Bridge Concept*.
- City of Sonoma. 2010. *Sonoma Municipal Code*. Accessed online at <http://www.codepublishing.com/ca/Sonoma/index.html>.
- Earl W. Hart and William A. Bryant, California Geological Survey, Special Publication 42, supplements 1 and 2 1999. *Fault-Rupture Hazard Zones in California, Figure 4B. Index to Official Maps of Earthquake Fault Zones*.
- Etchell, Sandra. 2010. *Biological Resources Analysis: Fryer Creek Pedestrian Bridge Project*. November.
- Fredrickson, David. 1974. Cultural Diversity in Early Central California: A View from the North Coast Ranges. *Journal of California Anthropology* 1(1): 41-53.
- Fredrickson, David. 1994. Archaeological Taxonomy in Central California Reconsidered. In *Toward a New Taxonomic Framework for Central California Archaeology: Essays by James A. Bennyhoff*

- and David A. Fredrickson*, assembled and edited by Richard E. Hughes, pp. 91-103. Contributions of the University of California Archaeological Research Facility No. 52. Berkeley.
- Holland, V.L. and D. J. Keil. 1995. *California Vegetation*. Kendall / Hunt Publishing Company, Dubuque, Iowa.
- Horticultural Associates. 2010. *Fryer Creek Pedestrian Bridge Arborist Report*. November 21.
- ICF Jones & Stokes. 2009. *Technical Noise Supplement*. Prepared for the California Department of Transportation, Division of Environmental Analysis. November. Accessed online at: <http://www.dot.ca.gov/hq/env/noise/index.htm>
- International Society of Arboriculture – Western Chapter. Pruning Standards.
- Mayer, K. and W. Laudenslayer Jr. (eds.). 1988. *A Guide to Wildlife Habitats of California*. California Department of Forestry and Fire Protection, Sacramento, CA.
- Miller Pacific Engineering Group. 2010. *Geotechnical Investigation: Fryer Creek Bicycle & Pedestrian Bridge, Sonoma, California*. August 31.
- Origer, Thomas M. 1984. An Archaeological Survey for the Broadway Reorganization No. 7 Project, Sonoma, Sonoma County, California. Prepared for Walt Smith and Associates. On file at the Northwest Information Center of the California Historical Resources Information System, Rohnert Park, California.
- Origer, Thomas M. 1985. An Archeological Survey for the Sonoma Hills Elderly Care Center, Sonoma, Sonoma County, California. Prepared for Walt Smith and Associates. On file at the Northwest Information Center of the California Historical Resources Information System, Rohnert Park, California.
- Page, Ben M. 1966. Geology of the Coast Ranges of California. In *Geology of Northern California*. California Division of Mines and Geology, Bulletin 190, San Francisco.
- Sacramento Metropolitan Air Quality Management District. Road Construction Emissions Model, Version 6.3.2.
- Sonoma County. 2001. *Comprehensive Airport Land Use Plan for Sonoma County (CALUP)*. Accessed online at <http://www.sonoma-county.org/prmd/docs/airport/ch8-excerpt.htm>.
- Sonoma County Transportation Authority (SCTA), in partnership with the City of Sonoma. 2008. *Sonoma Bicycle & Pedestrian Master Plan*. September.
- Sonoma County Assessor's Office. *Assessment Roll*. Accessed online at: <http://www.sonoma-county.org/assessor/>.
- U.S. Department of Transportation. Federal Highway Administration. 2006. *Construction Noise Handbook*. August. Accessed online at [http://www.fhwa.dot.gov/environment/noise/construction\\_noise/handbook/index.cfm](http://www.fhwa.dot.gov/environment/noise/construction_noise/handbook/index.cfm).
- U.S. Fish and Wildlife Service. 1996. *Endangered and threatened wildlife and plants; determination of threatened status for the California red-legged frog*. Final rule. Federal Register, Vol. 61 No. 101: 25813-25833. May 23, 1996.
- USFWS. 2005. *Revised guidance on site assessments and field surveys for the California red-legged frog*. Sacramento Fish and Wildlife Office.
- USFWS, 2006. Sacramento Fish and Wildlife Office. Species account. California freshwater shrimp (*Syncaris pacifica*). Accessed online at: [http://www.fws.gov/sacramento/es/animal\\_spp\\_acct/california\\_freshwater\\_shrimp.htm](http://www.fws.gov/sacramento/es/animal_spp_acct/california_freshwater_shrimp.htm)



- USFWS. 2010. Sacramento Fish and Wildlife Office. Online Species List. Federal and Threatened Species that Occur in or may be affected by projects in the counties and/or U.S.G.S. 7 ½ Minute Quadrangles Sonoma, Kenwood, Rutherford, Yountville, Napa, Cuttings Wharf, Sears Point, Petaluma River, Glen Ellen Document No. 101030064618 Updated database April 9, 2010.
- Winzler & Kelly. 2009. *Technical Memorandum: Conceptual Layout of the Fryer Creek Proposed Bicycle and Pedestrian Bridge at Newcomb Street*. Presented at the November 18, 2009 City of Sonoma City Council Meeting. October 27.
- Winzler & Kelly. 2010. *Technical Memorandum: Fryer Creek Pedestrian Bridge – Phase II Hydrology and Hydraulics Study of Existing and Future Conditions*. September 9.



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**Appendix A**  
Mitigation Monitoring Plan



**Appendix A**  
**Mitigation Monitoring Plan – Fryer Creek Pedestrian Bridge Project**

Mitigation Measure	Method of Monitoring/Reporting	Verifying Department	Time of Compliance	Initiation Date
<p><b>Mitigation Measure AES-1: Landscaping and Tree Replacement</b>                      The City shall replant trees removed during construction to meet the Sonoma Municipal Code Chapter 12.08 for tree replacement. These trees shall be replaced within the existing landscape strip adjacent to the multi-use path as shown on Figure 4. The replacement trees shall be of sufficient size to provide immediate screening for the adjacent residence.</p>	<p>1) City inspect construction site</p>	<p>Public Works</p>	<p>Construction completion</p>	<p>Start of construction</p>
<p><b>Mitigation Measure AQ-1: Basic Air Quality Protection Construction Measures</b>                      For all proposed projects, the Bay Area Air Quality Management District (BAAQMD) recommends the implementation of Basic Construction Mitigation Measures, whether or not construction-related emissions exceed applicable thresholds of significance. The following measures from BAAQMD are applicable to all construction activities for the project:</p> <ul style="list-style-type: none"> <li>• All exposed surfaces shall be watered two times per day.</li> <li>• All haul trucks transporting soil, sand or other loose material off-site shall be covered.</li> <li>• All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.</li> <li>• All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible.</li> <li>• Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes (as required by the California airborne toxics control measure Title 13, Section 2485 of California Code of Regulations).</li> <li>• All construction equipment shall be maintained and properly tuned in accordance with manufacturer’s specifications. All equipment shall be checked by a certified mechanic and determined to be running in proper condition prior to operation.</li> <li>• Post a publicly visible sign with the telephone number and person to contact at the Lead Agency regarding dust complaints. The person shall respond and take corrective action within 48 hours. The Air</li> </ul>	<p>1) City inspect construction site</p>	<p>Public Works</p>	<p>Ongoing through construction</p>	<p>Start of construction</p>

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Mitigation Measure	Method of Monitoring/Reporting	Verifying Department	Time of Compliance	Initiation Date
<p>District’s phone number shall also be visible to ensure compliance with applicable regulations.</p>				
<p><b>Mitigation Measure BIO-1: Conduct Pre-Construction Biological Surveys</b>                      Pre-construction surveys for California red-legged frog and western pond turtle shall be conducted by a qualified biologist approved to conduct such surveys by CDFG, USFWS, and NMFS. If any of these species are found in the project area during preconstruction surveys, CDFG, USFWS and/or NMFS shall be notified and individuals shall be captured by the qualified biologist and relocated to suitable areas above or below the project. Surveys for California red-legged frog shall be conducted according to current USFWS guidance (USFWS 1997), or as recommended by the agencies. If preconstruction surveys identify active western pond turtle nests, it shall be documented and reported to the CDFG CNDDDB database, and a qualified biologist shall establish a no- disturbance buffer zone around the nest using temporary orange construction fencing. The radius of the buffer zone and the duration of the exclusion shall be determined in consultation with USFWS and CDFG. The buffer zone and fencing shall remain in place until the young have left the nest, as determined by a qualified biologist.</p>	<ol style="list-style-type: none"> <li>1) Review and approval of preconstruction biological survey report</li> <li>2) If buffers needed, City shall inspect construction site</li> <li>3) Notify State and Federal agencies if species found</li> </ol>	<p>Planning</p>	<p>Prior to construction</p>	<p>Start of construction</p>
<p><b>Mitigation Measure BIO-2: Conduct Pre-Construction Nesting Surveys</b>                      Pursuant to California Department of Fish and Game Codes (§3503, §3503.5, and §3800) and the Federal Migratory Bird Treaty Act (50 CFR 10.13), birds, nests, eggs and young are protected. If project construction occurs between February 1 and October 15 of any year, a qualified biologist shall conduct preconstruction nesting surveys within 48 hours of construction for nesting passerines (small songbirds) and raptors. If nests are located the biologist, in consultation with CDFG, shall establish a buffer around the nest to remain in place until the young have fledged.</p>	<ol style="list-style-type: none"> <li>1) Review and approval of pre-construction nesting survey report</li> <li>2) If buffers needed, City shall inspect construction site</li> </ol>	<p>Planning</p>	<p>Prior to construction, if construction occurs February 1-October 15</p>	<p>Start of construction</p>

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Mitigation Measure	Method of Monitoring/Reporting	Verifying Department	Time of Compliance	Initiation Date
<p><b><i>Mitigation Measure BIO-3: Tree Replacement and Tree Protection Measures</i></b>                      To protect existing trees during project construction, the Contractor shall comply with the following mitigation measures to protect existing trees:</p> <ul style="list-style-type: none"> <li>• When constructing the bicycle and pedestrian path, grading shall be minimized, and existing grading shall be used as much as possible. Geotextile fabric shall be used in place of soil compaction.</li> <li>• During construction, access shall be restricted to the tree on the south side of Newcomb Street. The tree shall be protected with a tree protection fence. Occasional access may occur only under the direction of the project arborist representing the City of Sonoma.</li> <li>• Pruning of trees shall comply with standard pruning practices designed to protect trees. Pruning shall occur only for the following purposes: construction clearance; site and equipment access; and placement of the bridge itself. No other pruning shall be allowed. All pruning cuts shall be in compliance with the International Society of Arboriculture Pruning Standards. All pruning shall occur under the direct supervision of the project arborist representing the City of Sonoma. Trees removed during construction shall be replaced. The City of Sonoma Tree Ordinance restricts the damage, removal or destruction of trees without replacement. Therefore, the removal of up to two trees would require replacement trees as part of the project and discussed in the project description. The Tree Ordinance states that tree replacement shall occur onsite, and shall occur at a minimum of a 1:1 ratio and a 15-gallon box size for each 6 inches of tree diameter removed.</li> </ul>	<p>1) City shall inspect construction sites</p>	<p>Public Works</p>	<p>Ongoing through construction</p>	<p>Start of construction</p>
<p><b><i>Mitigation Measure CR-1: Procedures for Handling Unanticipated Archaeological and Paleontological Resources</i></b>                      There is a low possibility that subsurface archaeological deposits may exist at the project location, given the archaeological sensitivity of areas near water courses. If concentrations of prehistoric or historic-period materials are encountered during ground-disturbing work along Fryer Creek, all work in the immediate vicinity shall halt until a qualified archaeologist can evaluate the finds and make recommendations. Prehistoric materials might include</p>	<p>1) City shall inspect construction activities                       2) City to notify Federated Indians of Graton</p>	<p>Public Works</p>	<p>If archaeological / paleontological resources encountered during construction</p>	<p>Start of construction</p>

**Appendix A**  
**Mitigation Monitoring Plan – Fryer Creek Pedestrian Bridge Project**

Mitigation Measure	Method of Monitoring/Reporting	Verifying Department	Time of Compliance	Initiation Date
<p>obsidian and chert flaked-stone tools (e.g., projectile points, knives, scrapers) or toolmaking debris; culturally darkened soil (“midden”) containing heataffected rock, artifacts, or shellfish remains; and stone milling equipment (e.g., mortars, pestles, handstones). Historical materials might include stone, concrete, or adobe footings and walls; filled wells or privies; and deposits of metal, glass, and/or ceramic refuse. Any evaluation or treatment considerations shall be made in consultation with the Federated Indians of Graton Rancheria.</p>	<p>Rancheria</p> <p>3) City shall approve archaeologist’s recommendation and require implementation</p>			
<p><b>Mitigation Measure CR-2: Procedures for Encountering Human Remains</b>                      The possibility of encountering human remains in the study area cannot be entirely discounted. Section 7050.5 of the California Health and Safety Code states that it is a misdemeanor to knowingly disturb a human grave. If human graves are encountered, work shall halt in the vicinity and the County Coroner shall be notified immediately. At the same time, an archaeologist shall be contacted to evaluate the situation. If human remains are of Native American origin, the Coroner shall notify the Native American Heritage Commission within 24 hours of this identification.</p>	<p>1) City to notify County Coroner.</p> <p>2) City to notify NAHC</p> <p>3) City shall provide NAHC with access to the construction site, and confer regarding recommendations for treatment</p>	<p>Planning</p>	<p>If human remains encountered during construction</p>	<p>Start of construction</p>
<p><b>Mitigation Measure GEO-1: Prepare an Erosion and Sediment Control Plan</b>                      The City shall require that the Contractor prepare an Erosion and Sediment Control Plan for the project prior to construction. Below are some of the measures that would be taken to reduce soil erosion and protect water quality during construction. The use of BMPs is designed to reduce erosion and prevent sediment or other potential pollutants from leaving the work site or impacting water quality in Fryer Creek. The City shall require the Contractor to follow BMPs for erosion and sedimentation outlined in the most recent version of the Erosion and Sediment Control Field Manual (California Regional Water Quality Control Board, 2002), or an equivalent publication.</p> <ul style="list-style-type: none"> <li>• Best management practices outlined in the most recent version of the</li> </ul>	<p>1) City shall inspect construction activities</p>	<p>Public Works</p>	<p>Ongoing during construction.</p>	<p>Start of construction</p>



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**Mitigation Monitoring Plan – Fryer Creek Pedestrian Bridge Project**

Mitigation Measure	Method of Monitoring/Reporting	Verifying Department	Time of Compliance	Initiation Date
<p>Erosion and Sediment Control Field Manual, published by the Regional Water Quality Control Board, or equivalent publication, shall be implemented for erosion, sediment and turbidity control during and after any ground clearing activities or any other project activities that could result in erosion or sediment discharges to surface water.</p> <ul style="list-style-type: none"> <li>• Exposed slopes would be protected using temporary erosion control blankets, fiber rolls, silt fences, or other approved erosion and sediment controls.</li> <li>• Erosion prevention and sediment control measures would be inspected and maintained until disturbed areas are stabilized.</li> <li>• Disturbed ground surfaces near the creek bank would be revegetated and monitored for future erosion.</li> <li>• To ensure that stockpiled granular material does not enter the creek or storm drains, the material would be covered with a tarp and surrounded with sand bags when rain is forecast.</li> <li>• At the end of each working day roadways would be cleaned and swept, and scrap, debris, and waste material, would be collected and disposed of properly.</li> <li>• Vehicle or equipment cleaning would be performed with water only, and in a designated, bermed area that would not allow rinse water to run off-site or into the creek.</li> <li>• Maintenance and fueling of construction vehicles and equipment would be performed in a designated, bermed area or over a drip pan that would not allow run-on of storm water or runoff of spills.</li> </ul>				
<p><b><i>Mitigation Measure NOI-1: Comply with the City Noise Performance Standards</i></b></p> <p>In accordance with the City of Sonoma’s Municipal Code Ordinance 02-2010, Chapter 9.56-Noise, the City shall limit construction activities to the hours between 8:00 a.m. and 6:00 p.m. Monday through Friday, between 9:00 a.m. and 6:00 p.m. on Saturdays and between 10:00 a.m. and 6:00 p.m. on Sundays and holidays.</p>	<p>1) City shall inspect construction activities</p>	<p>Public Works</p>	<p>Ongoing through construction</p>	<p>Start of construction</p>

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**Mitigation Monitoring Plan – Fryer Creek Pedestrian Bridge Project**

Mitigation Measure	Method of Monitoring/Reporting	Verifying Department	Time of Compliance	Initiation Date
<p><i>Mitigation Measure NOI-2: Reduce Construction-Related Noise</i>                      The City shall ensure that construction equipment is properly tuned and muffled according to the manufacturer’s specifications. Noise construction activities whose specific location on the site may be flexible (e.g., operation of compressors, cement mixing, general truck idling) shall be conducted as far as possible from nearby residences in order to achieve the reduction of construction noise to at or below 90 dBA outside of the construction property plane.</p>	<p>1) City inspect equipment</p>	<p>Public Works</p>	<p>Ongoing during construction</p>	<p>Start of construction</p>

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**Appendix B**  
Special-Status Species List  
Fryer Creek Pedestrian and Bicycle Bridge Project Region



## Appendix B

The following table was originally presented in the biological analysis prepared for the Fryer Creek Pedestrian Bridge Project (Etchell 2010). The table contains Federal, State and California Native Plant Society special-status plant and wildlife species recorded for the Sonoma, Kenwood, Rutherford, Yountville, Napa, Cuttings Wharf, Sears Point, Petaluma River, and Glen Ellen U.S.G.S. 7.5 minute quadrangles. An explanation for deriving potential presence or absence of special status plant species is provided.

### Special-Status Plant Species List – Fryer Creek Pedestrian Bridge Project Region

Species	Status			Habitat	Occurrences
	Federal	State	CNPS		
<i>Allium peninsulare</i> var. <i>franciscanum</i> Franciscan onion	--	--	1B	Cismontane woodland, valley and foothill grassland. Found in clay or serpentine soils. Dry Hill-sides. Bloom May-June; elev. 100-300 m	Not likely to occur due to channelized creek and other disturbance.
<i>Alopecurus aequalis</i> var. <i>sonomensis</i>	FE		1B	Freshwater marshes and swamps, riparian scrub. Bloom May-Jul; elev. 5-365 m	Not likely to occur due to channelized creek and other disturbance.
<i>Amorpha californica</i> var. <i>napensis</i> Napa false indigo	--	--	1B	Openings in broadleaved upland forests, chaparral, cismontane woodland. Bloom Apr-Jul; elev. 120-2000 m	Not likely to occur due to channelized creek and other disturbance.
<i>Arctostaphylos canescens</i> ssp. <i>sonomensis</i> Sonoma canescent manzanita	--	--	1B	Chaparral, lower montane coniferous forest /sometime serpentinite. Bloom Jan-Jun; elev. 180-1675 m	No observed manzanita within project area.
<i>Arctostaphylos stanfordiana</i> ssp. <i>decumbens</i> Rincon Ridge Manzanita	--	--	1B	Chaparral (rhyolitic), cismontane woodland. Bloom Feb-Apr; elev. 75-370 m	No observed manzanita within project area.

**Special-Status Plant Species List – Fryer Creek Pedestrian Bridge Project Region**

Species	Status			Habitat	Occurrences
	Federal	State	CNPS		
<i>Astragalus claranus</i> Clara Hunt’s milk-vetch	FE	ST	1B	Chaparral in openings, cismontane woodland, valley and foothill grassland in serpentinite or volcanic, rocky, clay soil Bloom Mar-May; elev. 75-275 m	No suitable habitat present.
<i>Astragalus tener</i> var. <i>tener</i> Alkali milk-vetch	--	--	1B	Playas, valley and foothill grassland in adobe clay soils, vernal pools in alkaline soils. Bloom Mar-Jun; elev. 1-60 m	No suitable habitat present.
<i>Atriplex joaquiniana</i> San Joaquin spearscale	--	--	1B	Chenopod scrub, meadows and seeps, playas, valley and foothill grassland in alkaline soils. Bloom Apr-Oct; elev. 1-835 m	No suitable habitat present.
<i>Blennosperma bakeri</i> Sonoma sunshine	FE	SE	1B	Valley and foothill grassland (mesic), vernal pools. Bloom Mar-May; elev. 100-110 m	No suitable habitat present.
<i>Brodiaea californica</i> var. <i>leptandra</i> Narrow-anthered California brodiaea	--	--	1B	Broadleafed upland forest, chaparral, cismontane woodland, lower montane coniferous forest, valley and foothill grassland in volcanic soils. Bloom May-Jul; elev. 110-915 m	Not likely to occur due to channelized creek and other disturbance.
<i>California macrophylla</i> Round-leaved filaree	--	--	1B	Cismontane woodland, valley and foothill grassland in clay soil. Bloom Mar-May; elev. 15-1200 m	Not likely to occur due to channelized creek and other disturbance.

### Special-Status Plant Species List – Fryer Creek Pedestrian Bridge Project Region

Species	Status			Habitat	Occurrences
	Federal	State	CNPS		
<i>Calycadenia micrantha</i> Small-flowered calycadenia	--	--	1B	Chaparral, meadows and seeps in volcanic soils, valley and foothill grassland in roadsides, rocky, talus, scree, sometime serpentinite, sparsely vegetated areas. Bloom Jun-Sep; elev. 5-1500 m	No suitable habitat present.
<i>Ceanothus confusus</i> Rincon Ridge ceanothus	--	--	1B	Closed-cone coniferous forest, chaparral, cismontane woodland in volcanic or serpentinite soils. Bloom Feb-Jun; elev. 75-1065 m	No ceanothus observed in project area during survey.
<i>Ceanothus divergens</i> Calistoga ceanothus	--	--	1B	Chaparral in rocky serpentinite or volcanic soils. Bloom Feb-Mar; elev. 170-950 m	No ceanothus observed in project area during survey.
<i>Ceanothus purpureus</i> Holly-leaved ceanothus	--	--	1B	Chaparral, cismontane woodland in rocky volcanic soils. Bloom Feb-Jun; elev. 120-640 m	No ceanothus observed in project area during survey.
<i>Ceanothus sonomensis</i> Sonoma ceanothus	--	--	1B	Chaparral in sandy, serpentinite or volcanic soil. Bloom Feb-Apr; elev. 215-800 m	No ceanothus observed in project area during survey.
<i>Centromadia parryi</i> ssp. <i>parryi</i> Pappose tarplant	--	--	1B	Chaparral, coastal prairie, meadows and seeps, coastal salt marshes and swamps, vernal mesic valley and foothill grassland often in alkaline soils. Bloom May-Nov; elev. 2-420 m	No suitable habitat present.

### Special-Status Plant Species List – Fryer Creek Pedestrian Bridge Project Region

Species	Status			Habitat	Occurrences
	Federal	State	CNPS		
<i>Chorizanthe valida</i> Sonoma spineflower	FE	SE	1B	Coastal prairie (sandy) Bloom Jun-Aug; elev. 10-305 m	No suitable habitat present.
<i>Cordylanthus maritimus ssp. palustris</i> Point Reyes bird's-beak	--	--	1B	Marshes and swamps (coastal salt) Bloom Jun-Oct; elev. 0-10 m	No suitable habitat present.
<i>Cordylanthus mollis ssp. mollis</i> Soft bird's-beak	FE	SR	1B	Coastal salt marshes and swamps. Bloom Jul-Nov; elev. 0-3 m	No suitable habitat present.
<i>Delphinium luteum</i> Golden larkspur	FE	SR	1B	Chaparral, coastal prairie, coastal scrub in rocky soil. Bloom Mar-May; elev. 0-100 m	No suitable habitat present.
<i>Downingia pusilla</i> Dwarf downingia	--	--	2	Mesic valley and foothill grassland, vernal pools. Bloom Mar-May; elev. 1-445 m	No suitable habitat present.
<i>Erigeron biolettii</i> Streamside daisy	--	--	3	Broadleafed upland forest, cismontane woodland, mesic north coast coniferous forest in rocky soils. Bloom Jun-Oct; elev. 30-1100 m	Not likely to occur due to channelized creek and other disturbance.
<i>Erigeron greenei</i> Greene's narrow-leaved daisy	--	--	1B	Chaparral in serpentinite or volcanic soils. Bloom May-Sep; elev. 80-1005 m	No suitable habitat present.



### Special-Status Plant Species List – Fryer Creek Pedestrian Bridge Project Region

Species	Status			Habitat	Occurrences
	Federal	State	CNPS		
<i>Fritillaria liliacea</i> Fragrant fritillary	--	--	1B	Cismontane woodland, coastal prairie, coastal scrub, valley and foothill grassland often in serpentinite soil Bloom Feb-Apr; elev. 3-410 m	Not likely to occur due to channelized creek and other disturbance.
<i>Hemizonia congesta</i> ssp. <i>congesta</i> Pale yellow hayfield tarplant	--	--	1B	Valley and foothill grassland, sometime on roadsides. Bloom Apr-Nov; elev. 20-560 m	Not likely to occur due to channelized creek and other disturbance.
<i>Hesperolinon bicarpellatum</i> Two-carpellate western flax	--	--	1B	Chaparral in serpentine soil. Bloom May-Sep; elev. 0-700 m	No suitable habitat present.
<i>Hesperolinon serpentinum</i> Napa western flax	--	--	1B	Chaparral in serpentine soil. Bloom May-Jul; elev. 50-800 m	No suitable habitat present.
<i>Horkelia tenuiloba</i> Thin-lobed horkelia	--	--	1B	Broadleafed upland forest, chaparral, openings in mesic valley and foothill grassland in sandy soils. Bloom May-Jul; elev. 50-500m	Not likely to occur due to channelized creek and other disturbance.
<i>Juglans hindsii</i> Northern California black walnut	--	--	1B	Riparian forest, riparian woodland. Bloom Apr-May; elev. 0-440 m	There are a few walnut trees in the riparian corridor in the vicinity of the project site although it is likely that they are hybridized. The nearest CNDDDB record (occurrence 6) is for one tree observed in 2001 approximately 10 miles west of the project site near the Napa River.

**Special-Status Plant Species List – Fryer Creek Pedestrian Bridge Project Region**

Species	Status			Habitat	Occurrences
	Federal	State	CNPS		
<i>Lasthenia conjugens</i> Contra Costa goldfields	FE	--	1B	In vernal pools, swales, low depressions in open grassy areas in cismontane woodland, playas in alkaline soils, valley and foothill grassland. Bloom Mar-Jun; elev. 0-470 m	No suitable habitat present.
<i>Lathyrus jepsonii</i> var. <i>jepsonii</i> Delta tule pea	--	--	1B	Freshwater and brackish marshes and swamps Bloom May-Jul (Sep); elev. 0-4 m	No suitable habitat present.
<i>Layia septentrionalis</i> Colusa layia	--	--	1B	Chaparral, cismontane woodland, valley and foothill grassland in sandy, serpentinite soil Bloom Apr-May; elev. 100-1095 m	No suitable habitat present.
<i>Legenere limosa</i> Legenere	--	--	1B	Vernal pools Bloom Apr-Jun; elev. 1-880 m	No suitable habitat present.
<i>Leptosiphon jepsonii</i> Jepson’s leptosiphon	--	--	1B	Chaparral, cismontane woodlands usually in volcanic soils Bloom Mar-May; elev. 100-500 m	Not likely to occur due to channelized creek and other disturbance.
<i>Lessingia hololeuca</i> Woolly-headed lessingia	--	--	3	Broadleaved upland forest, coastal scrub, lower montane coniferous forest, valley and foothill grassland in clay, serpentinite soils Bloom Jun-Oct; elev. 15-305 m	Not likely to occur due to channelized creek and other disturbance.
<i>Lilaeopsis masonii</i> Mason’s lilaeopsis	--	SR	1B	Brackish or freshwater marshes and swamps, riparian scrub Bloom Apr-Nov; elev. 0-10 m	Not likely to occur due to channelized creek and other disturbance.

**Special-Status Plant Species List – Fryer Creek Pedestrian Bridge Project Region**

Species	Status			Habitat	Occurrences
	Federal	State	CNPS		
<i>Limnanthes vinculans</i> Sebastopol meadowfoam	FE	SE--	1B	Meadows and seeps, valley and foothill grasslands, vernal mesic vernal pools Bloom Apr-May; elev. 15-305 m	No suitable habitat present.
<i>Lupinus sericatus</i> Cobb Mountain lupine	--	--	1B	Broadleaved upland forest, chaparral, cismontane woodland, lower montane coniferous forest Bloom Mar-Jun; elev. 275-1525 m	Not likely to occur due to channelized creek and other disturbance.
<i>Micropus amphibolus</i> Mt. Diablo cottonweed	--	--	1B	Broadleaved upland forest, chaparral, cismontane woodland, valley and foothill grassland in rocky soil Bloom Mar-May; elev. 45-825	Not likely to occur due to channelized creek and other disturbance.
<i>Navarretia leucocephala</i> ssp. <i>bakeri</i> Baker's navarretia	--	--	1B	Cismontane woodland, lower montane coniferous forest, meadows and seeps, valley and foothill grassland, vernal pools (mesic) Bloom Mar-Jul; elev. 5-1740	Not likely to occur due to channelized creek and other disturbance.
<i>Navarretia leucocephala</i> ssp. <i>pauciflora</i> Few-flowered navarretia	FE	ST	1B	Vernal pools with soils from volcanic ash flow Bloom May-Jun; elev. 400-855 m	No suitable habitat present.
<i>Navarretia leucocephala</i> ssp. <i>pliantha</i> Many-flowered navarretia	FE	FE	1B	Vernal pools (volcanic ash flow) Bloom May-Jun; elev. 30-950 m	No suitable habitat present.

### Special-Status Plant Species List – Fryer Creek Pedestrian Bridge Project Region

Species	Status			Habitat	Occurrences
	Federal	State	CNPS		
<i>Penstemon newberryi</i> var. <i>sonomensis</i> Sonoma beardtongue	--	--	1B	Chaparral in rocky soils Bloom Apr-Aug; elev. 700-1370 m	No suitable habitat present.
<i>Plagiobothrys mollis</i> var. <i>vestitus</i> <i>Petaluma popcorn-flower</i>	--	--	1A	Marshes and swamps (coastal salt), valley and foothill grasslands (mesic). Bloom Jun-Jul; elev. 10-50 m	No suitable habitat present.
<i>Polygonum marinense</i> Marin knotweed	--	--	3	Mashes and swamps (coastal salt or brackish Bloom Apr-Oct; elev. 0-10	No suitable habitat present.
<i>Sidalcea calycosa</i> ssp. <i>rhizomata</i> Point Reyes checkerbloom	--	--	1B	Marshes and swamps (freshwater near coast). Bloom Apr-Sep; elev. 3-75 m	No suitable habitat present.
<i>Sidalcea oregano</i> ssp. <i>valida</i> Kenwood Marsh checkerbloom	FE	SE	1B	Marshes and swamps (freshwater) Bloom Jun-Sep; elev. 115-150 m	No suitable habitat present.
<i>Streptanthus breweri</i> var. <i>hesperidis</i> Green jewel-flower	--	--	1B	Openings in chaparral, cismontane woodlands in rocky serpentinite soil) Bloom May-Jul; elev. 130-760 m	No suitable habitat present.
<i>Symphotrichum lentum</i> Suisun Marsh aster	--	--	1B	Brackish and freshwater marshes and swamps Bloom May-Nov; elev. 0-3 m	No suitable habitat present.

**Special-Status Plant Species List – Fryer Creek Pedestrian Bridge Project Region**

Species	Status			Habitat	Occurrences
	Federal	State	CNPS		
<i>Trichostema ruygtii</i> Napa bluecurls	--	--	1B	Chaparral, cismontane woodland, lower montane coniferous forest, valley and foothill grassland, vernal pools Bloom Jun-Oct; elev. 30-60 m	Not likely to occur due to channelized creek and other disturbance.
<i>Trifolium amoenum</i> Two-fork clover, showy rancheria clover	FE	--	1B	Coastal bluff scrub, valley and foothill grasslands sometimes in serpentinite soil Bloom Apr-Jun; elev. 5-415m	Not likely to occur due to channelized creek and other disturbance.
<i>Trifolium depauperatum</i> var. <i>hydrophilum</i> Saline clover	--	--	1B	Marshes and swamps, valley and foothill grasslands (mesic, alkaline soils), vernal pools Bloom Apr-Jun; elev. 0-300m	Not likely to occur due to channelized creek and other disturbance.
<i>Viburnum ellipticum</i> Oval-leaved viburnum	--	--	2	Chaparral, cismontane woodland, lower montane coniferous forest Bloom May-Jun; elev. 215-1400m	Not likely to occur due to channelized creek and other disturbance.

**Status Legend for Listed Plants**

Federal:

FE = Listed as endangered under the Federal Endangered Species Act

FT = Listed as threatened under the Federal Endangered Species Act

State:

SE = Listed as endangered under the California Endangered Species Act

ST = Listed as threatened under the California Endangered Species Act

SR = Listed as rare under the California Endangered Species Act

California Native Plant Society:

1B = Rare, threatened or endangered in California

2 = Rare, threatened or endangered in California

3 = More information needed regarding occurrences

**Special-Status Wildlife Species List – Fryer Creek Pedestrian Bridge Project Region**

Species	Status		Habitat Association	Occurrences
	Federal	State		
<b>Invertebrates</b>				
<i>Speyeria zerene myrtleae</i> Myrtle’s silverspot butterfly	FE	--	Restricted to foggy, coastal dunes/hills (grasslands) of the Point Reyes Peninsula. Larval food plant is thought to be <i>Viola adunca</i>	No suitable habitat present.
<i>Branchinecta lynchi</i> Vernal pool fairy shrimp	FT	--	Endemic to the grasslands of the Central Valley, central coast mountains, and south coast mountains in astatic rain-filled pools.	No suitable habitat present.
<i>Syncaris pacifica</i> California freshwater shrimp	FE	FE	Endemic to Marin, Napa and Sonoma Counties, found in low elevation, low gradient streams where riparian cover is moderate to heavy.	Suitable habitat present. There are 5 records for this species in the Sonoma Creek Watershed. The nearest CNDDDB record (19) is for several adults observed during surveys in 2004 in Sonoma Creek, 1.5 miles northwest of the project site. Would not be affected by the project since no construction is proposed to occur within water present in the creek.
<b>Fish</b>				

**Special-Status Wildlife Species List – Fryer Creek Pedestrian Bridge Project Region**

Species	Status		Habitat Association	Occurrences
	Federal	State		
<i>Oncorhynchus mykiss irideus</i> Steelhead – Central California Coast DPS	FT	--	From Russian River south to Soquel Creek and to, but not including the Pajaro River. Also San Francisco and San Pablo Bays.	Suitable habitat present. Numerous juveniles were observed in 2004 in Carriger Creek (CNDDDB occurrence 26) approximately 3.1 miles west of the project site. This creek is in the same watershed as Fryer Creek. Would not be affected by the project since no construction is proposed to occur within water present in the creek.
<b>Amphibians</b>				
<i>Rana boylei</i> Foothill yellow-legged frog	--	SC	Partly-shaded, shallow streams and riffles with a rocky substrate in a variety of habitats.	Marginal suitable habitat present. There are two CNDDDB records for foothill yellow-legged frog in the Sonoma Creek Watershed. The nearest record (occurrence 387) to the project site is for adult frogs observed in 2003 and 2004 in Carriger Creek, approximately 3 miles west of the project site. Would not be affected by the project since no construction is proposed to occur within water present in the creek.

**Special-Status Wildlife Species List – Fryer Creek Pedestrian Bridge Project Region**

Species	Status		Habitat Association	Occurrences
	Federal	State		
<i>Rana draytonii</i> California red-legged frog	FT	--	Occurs in a variety of ponds, sloughs, low-gradient streams, and low-salinity lagoons. Adults may forage in, and migrate through, terrestrial grasslands, riparian woodlands, and forests, but require weedy, slow moving or standing water that persists through most of the dry season for successful reproduction. Introduced bullfrogs and predatory fish are implicated in the decline of red-legged frogs throughout their range.	Marginal suitable habitat present. The nearest CNDDDB record (occurrence 524) for occurrences of California red-legged frog is for an adult frog and two tadpoles observed in 2002 in an old land fill leachate pond near Stage Gulch Road approximately 3.4 miles southwest of the project site. Should be included in preconstruction surveys.
<b>Reptiles</b>				
<i>Actinemys marmorata</i> Western pond turtle	--	SC	Ponds, marshes rivers, streams, and irrigation ditches that have emergent or riparian vegetation and sunny basking sites. Upland nesting habitat consists of friable soil exposed to full sun.	No suitable habitat present because of lack of vegetative cover for hiding from predators and no suitable uplands habitat in which to breed. However, this species could transit the creek in the project area and should be included in preconstruction surveys.
<b>Birds</b>				
<i>Circus cyaneus</i> Northern harrier	--	SC	Coastal salt and fresh-water marsh, nest and forage in grasslands. Nests on ground in shrubby vegetation usually at marsh edge; nest built of a large mound of sticks in wet areas.	No suitable nesting habitat present.
<i>Buteo swainsoni</i> Swainson's hawk	--	ST	Breeds in grasslands with scattered trees, juniper-sage flats, riparian areas, savannahs, and agricultural or ranch	No suitable nesting habitat present.



**Special-Status Wildlife Species List – Fryer Creek Pedestrian Bridge Project Region**

Species	Status		Habitat Association	Occurrences
	Federal	State		
<i>Haliaeetus leucocephalus</i> Bald eagle	Delisted	SE	Ocean shore, lake margins and rivers for both nesting and wintering. Most nests within 1 mile of water. Nests in large old-growth or dominant live tree with open branches, especially ponderosa pine.	No suitable nesting habitat present.
<i>Rallus longirostris obsoletus</i> California clapper rail	FE	SE FP	Salt-water and brackish marshes traversed by tidal sloughs in the vicinity of San Francisco Bay.	No suitable habitat present.
<i>Laterallus jamaicensis coturniculus</i> California black rail	--	ST FP	Inhabits freshwater marshes, wet meadows and shallow margins of saltwater marshes bordering larger bays. Needs water depths of about 1 inch that does not fluctuate during the year and dense vegetation for nesting habitat.	No suitable habitat present.
<i>Charadrius alexandrinus nivosus</i> Western snowy plover	FT	SC	Nest near tidal waters on sandy beaches, salt pond levees and alkali lakes. Foraging and roosting areas include sandy coastal beaches, salt pans, coastal dredge spoil sites, dry salt ponds, salt pond levees and gravel bars.	No suitable habitat present.
<i>Coccyzus americanus occidentalis</i> Western yellow-billed cuckoo	FC	SE	Riparian forest nester, along the broad, lower flood-bottoms of larger river systems. Nests in riparian thickets of willows, often mixed with cottonwoods, with lower story of blackberry, nettles, or wild grape.	No suitable habitat present.
<i>Athene cunicularia</i> Burrowing owl	--	SC	Open, dry annual or perennial grasslands, deserts and scrublands characterized by low-growing vegetation. Subterranean nester, dependent upon burrowing mammals, most notably, the California ground squirrel.	No suitable nesting habitat present.
<i>Cypseloides niger</i> Black swift	--	SC	Coastal belt; breeds in small colonies on cliffs behind or adjacent to waterfalls in deep canyons and sea-bluffs above the surf.	No suitable habitat present.

**Special-Status Wildlife Species List – Fryer Creek Pedestrian Bridge Project Region**

Species	Status		Habitat Association	Occurrences
	Federal	State		
<i>Geothlypis trichas sinuosa</i> Saltmarsh common yellowthroat	--	SC	Inhabits fresh and salt water marshes of the San Francisco Bay Region. Requires thick, continuous cover down to water surface for foraging; tall grasses, tule patches, and willows for nesting.	No suitable habitat present.
<i>Melospiza melodia samuelis</i> San Pablo song sparrow	--	SC	Residents of salt marshes along the north side of San Francisco and San Pablo Bays. Inhabits tidal sloughs in the Salicornia marshes; nests in <i>Grindelia</i> bordering slough channels.	No suitable habitat present.
<i>Agelaius tricolor</i> Tricolored blackbird	--	SC	Highly colonial species, most numerous in Central Valley and vicinity. Largely endemic to California. Requires open water, protected nesting substrate, and foraging area with insect prey within a few km of the colony.	No suitable nesting habitat present.
<b>Mammals</b>				
<i>Corynorhinus townsendii</i> Townsend’s big-eared bat	--	SC	Throughout California in a wide variety of habitats. Most common in mesic sites. Roosts in the open, hanging from walls and ceilings. Roosting sites limiting. Extremely sensitive to human disturbance.	No suitable habitat present.
<i>Antrozous pallidus</i> Pallid bat	--	SC	Roosts in caves, mine tunnels, crevices in rocks, bridges, buildings, and hollowed trees.	No suitable habitat present. No suitable old or hollowed trees are present in the project area.
<i>Sorex ornatus sinuosus</i> Suisun shrew	--	SC	Tidal marshes of the northern shores of San Pablo and Suisun Bays. Require dense low-lying cover and driftwood and other litter above the mean high tide line for nesting and foraging.	No suitable habitat present.

**Special-Status Wildlife Species List – Fryer Creek Pedestrian Bridge Project Region**

Species	Status		Habitat Association	Occurrences
	Federal	State		
<i>Reithrodontomys raviventris</i> Salt marsh harvest mouse	FE	SE FP	Occur only in the saline emergent wetlands of San Francisco Bay and its tributaries.	No suitable habitat present.
<i>Taxidea taxus</i> American badger	--	SC	Dry open stages of most shrub, forest and herbaceous habitats with friable soils.	No suitable habitat present.

**Status Legend**

Federal:  
 FE = Listed as endangered under the Federal Endangered Species Act  
 FT = Listed as threatened under the Federal Endangered Species Act  
 FM = Protected under the Federal Marine Mammal Act  
 State:  
 SE = Listed as endangered under the California Endangered Species Act  
 ST = Listed as threatened under the California Endangered Species Act  
 SC = Species of special concern under the California Endangered Species Act  
 FP = Fully Protected under the California Endangered Species Act