Agenda Item #13.1 For Council Meeting of: April 16, 2013

CITY OF SANTA ROSA CITY COUNCIL

TO:MAYOR AND CITY COUNCILSUBJECT:CHANATE ROAD PEDESTRIAN BRIDGE AND PATHSTAFF PRESENTER:NOAH HOUSH, CITY PLANNERTRANSPORTATION AND PUBLIC WORKS DEPARTMENT

AGENDA ACTION: RESOLUTION

ISSUE(S)

Should the City Council, by Resolution, adopt the Mitigated Negative Declaration and approve the Chanate Road Pedestrian Bridge and Path project?



COUNCIL GOALS AND STRATEGIES

Goal 3: Provide Leadership in Environmental Initiatives

Goal 6: Committed to Making Santa Rosa a Community Where People Feel Safe to Live, Work, and Play

This project directly relates to several Council goals in that it is an improvement to the transportation system by expanding the available sidewalk/pedestrian infrastructure, will help to reduce Greenhouse Gasses by allowing more transportation options, and is a safety improvement which will expand on the Safe Routes to Schools network in a neighborhood close to schools and a park.

BACKGROUND

- 1. March 27, 2007-Citywide Creek Master Plan was adopted which identified this site as a needed and desired path location for Paulin Creek.
- 2. September 2010-Bicycle and Pedestrian Master Plan was completed. The Master Plan included this section of Chanate Road on the list of high priority pedestrian projects.
- January, 2011--A \$405,000 federal grant to construct the project was received through the Metropolitan Transportation Commission's Transportation for Livable Communities Program. In addition, \$101,250 of local transportation funds will be used to fund balance of project. No City General Fund money is included in this project.

Chanate Road Pedestrian Bridge and Path Page 2

- 4. September 2011-Preliminary design work and environmental analysis began on the proposed project.
- 5. July, 2012-Draft Mitigated Negative Declaration was completed and posted for public and agency comments.
- 6. August 2012-Comment period on the Mitigated Negative Declaration closed and project design was finalized.

ANALYSIS

- Project proposes to construct approximately 420 linear feet of five foot wide pedestrian pathway along the northern side of Chanate Road between Parker Hill Road and Fitzpatrick Court, in northeast Santa Rosa. The pathway project includes a pedestrian bridge crossing Paulin Creek which flows through a culvert under Chanate Road.
- 2. The existing sidewalk along the north side of Chanate Road terminates midblock between Fitzpatrick Court and Glen Echo Drive creating a potential barrier to pedestrian circulation for neighborhood residents and school children attending Hidden Valley Elementary School. The path is proposed to connect the existing sidewalk on the east side of the Parker Hill Road intersection, to the existing sidewalk between Fitzpatrick Court and Glen Echo Drive. The pathway design is compliant with the requirements of the Americans with Disabilities Act (ADA).
- 3. This project meets many of the policies of the General Plan. Specifically

T-J-Provide attractive and safe streets for pedestrians and bicyclists

T-K-Develop a safe, convenient and continuous network of pedestrian sidewalks and pathways that link neighborhoods with schools, parks,...

T-K-1-Link the various citywide pedestrian paths, including street sidewalks, ...park pathways, and other creek-side and open space pathways.

Additionally, this location has been identified as a site for a pedestrian pathway in both the Citywide Creek Master Plan and the Bicycle and Pedestrian Master Plan.

4. One public comment was received from an adjacent property owner who has a secondary driveway with access from Chanate Road. The project design results in the elimination of vehicular access from Chanate Road to the adjacent property. While the property owner has agreed to the elimination of vehicular access, he has requested a fence be constructed at the back side of the path to address concerns regarding the projects impacts on privacy and potential increased liability. Given the grade difference between the path and the

Chanate Road Pedestrian Bridge and Path Page 3

adjacent property, these concerns appear to be valid and the addition of the fence is recommended by staff.

5. With the exception of the issue identified by the adjacent property owner, no issues were identified with the proposed project and no significant impacts were identified by the Initial Study and resulting Mitigated Negative Declaration after the incorporation of mitigation.

RECOMMENDATION

It is recommended by the Transportation and Public Works Department that the City Council, by Resolution, adopt the proposed Mitigated Negative Declaration and approve the Chanate Road Pedestrian Bridge and Path project.

Author: Noah Housh, City Planner

Attachments:

- Proposed Mitigated Negative Declaration with Comments
- Aerial Photo
- Public Comment Letter

Proposed Initial Study/Mitigated Negative Declaration *for the*

Chanate Road Pedestrian Bridge and Path Project



Prepared for:

City of Santa Rosa Transportation and Public Works Department

July, 2012

Proposed Initial Study/Mitigated Negative Declaration *for the*

Chanate Road Pedestrian Bridge and Path Project

Prepared for:

City of Santa Rosa Transportation and Public Works Department

Prepared by:

Nancy Dakin Woltering, Environmental Planning Consultant

In association with:

City of Santa Rosa Public Works and Community Development Department Staff, Tom Origer and Associates, Cultural Resources

July, 2012

Table of Contents

Proposed Initial Study/Mitigated Negative Declaration for the Chanate Road Pedestrian Bridge and Path Project

1. P	roject Description	1-1
1.1	Project Overview	1-1
1.2	Project Location	1-1
1.3	Project Need and Objectives	1-1
1.4	Existing Conditions	1-4
1.5	Project Characteristics	1-4
1.6	Alternatives Considered for the Proposed Action	1-6
1.7	Required Permits and Approvals	1-6
1.8	Project Funding	1-6
1.9	Timeline for Project Implementation	1-6
1.10	Other Projects Planned in the Vicinity	1-6
2.	Environmental Checklist	2-1
2.1	Aesthetics	2-7
2.2	Agricultural Resources and Forest Land	2-9
2.3	Air Quality	2-11
2.4	Biological Resources	2-14
2.5	Cultural Resources	2-19
2.6	Greenhouse Gas Emissions	2-21
2.7	Geology and Soils	2-22
2.8	Hazards and Hazardous Materials	2-25
2.9	Hydrology and Water Quality	2-27
2.10	Land Use and Planning	2-30
2.11	Mineral Resources	2-31
2.12	Noise	2-32
2.13	Population and Housing	2-34
2.14	Public Services	2-35
2.15	Recreation	2-36
2.16	Transportation / Traffic	2-37
2.17	Utilities and Service Systems	2-39
2.18	Summary of Environmental Impacts	2-42
3.	Mitigation Monitoring Program	3-1
4.	Agencies and Organizations Consulted	4-1
5.	Report Preparation	5-1

List of Figures

Figure 1:	Project Vicinity Map	1-2
Figure 2:	Project Location Map	1-3
Figure 3:	Project Site Plan	1-5
Figure 4:	Looking west from the terminus of the existing sidewalk near	
	3210 Chanate Road	2-8
Figure 5:	Looking east along Chanate Road near 3210 Chanate Road	2-8
Figure 6:	View of the Paulin Creek Riparian Corridor from Chanate Road	2-16
Figure 7.	Storm drains would be extended by 27' within the existing ditch on	
	the north side of Chanate Road.	2-40
Figure 8.	The storm drain would be extended by 15' toward Paulin Creek	2-40

List of Tables

Table 1:	Mitigation Monitoring Program	3-1
----------	-------------------------------	-----

Attachments

Attachment A:	Biological Assessment, Steve Brady,
	Senior Environmental Specialist, City of Santa Rosa,
	January 5, 2012

Attachment B: Cultural Resources Survey, Tom Origer & Associates, December 20, 2011

1. **Project Description**

1.1 **Project Overview**

The proposed project consists of installing a pedestrian path and bridge along the north side of Chanate Road between Parker Hill Road and Fitzpatrick Court. The path would provide an important pedestrian connection to Hidden Valley Elementary School, located adjacent to Fitzpatrick Court.

1.2 Project Location

The project is located in northeast Santa Rosa (See Figure 1, Project Vicinity Map). The path would extend from the existing path at the corner of Chanate Road and Parker Hill Road, across Paulin Creek, east past Glen Echo Drive, and would join the existing sidewalk east of 3210 Chanate Road. The existing sidewalk extends to Fitzpatrick Court (See Figure 2, Project Location on the Paulin C Map of the Citywide Creek Master Plan).

1.3 Project Need and Objectives

The project is consistent with the Santa Rosa General Plan 2035 and the Climate Action Plan which support the development of a network of bicycle and pedestrian paths as part of the City's strategy to reduce greenhouse gases. This project provides an important connection between the existing path at Parker Hill Road and Chanate Road and the sidewalk that extends along the north side of Chanate Road connecting to Hidden Valley Elementary School. The segment is part of Reach 2 of Paulin Creek, as described in the Santa Rosa Citywide Master Plan (Map: Paulin C).ⁱ

The project is also consistent with the following General Plan policies:

- LUL-S-3: Link pedestrian and bicycle paths to community destinations (parks, etc.) to the surrounding rural countryside trail system and the downtown area.
- *T-J:* Provide attractive and safe streets for pedestrians and bicyclists.
- *T-K:* Develop a safe, convenient and continuous network of pedestrian sidewalks and pathways that link neighborhoods with schools, parks, shopping areas and employment centers.
- T-K-1: Link the various citywide pedestrian paths, including street sidewalks, downtown walkways, pedestrian areas in shopping center and work complexes, park pathways, and other creek-side and open space pathways.
- T-K-2: Allow the sharing or parallel development of pedestrian walkways with bicycle paths, where this can be safely done, in order to maximize the use of public rights-of-way.

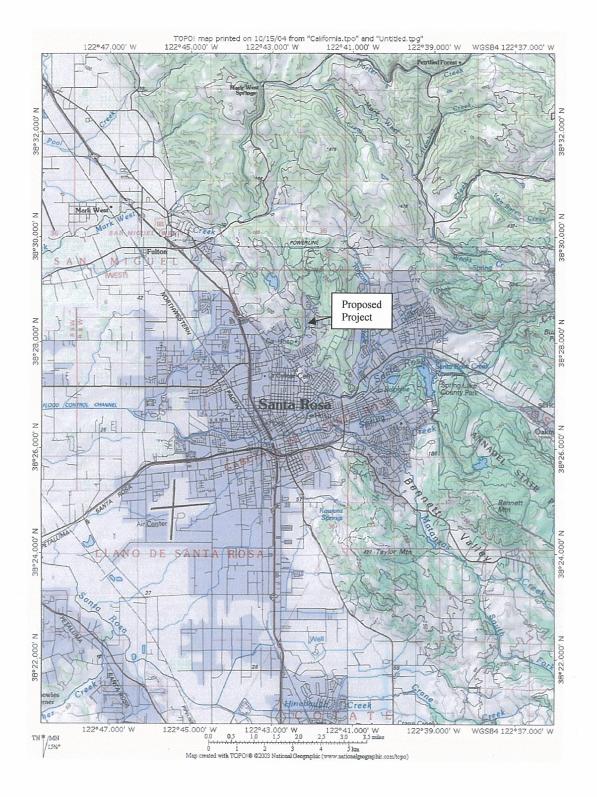


Figure 1 Project Vicinity Map

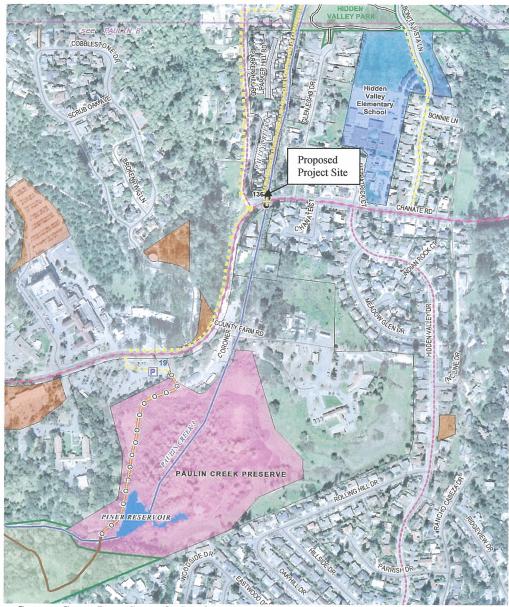




Figure 2 Project Location on the Paulin C Map

1.4 Existing Conditions

Existing Site Conditions: The project site is located adjacent to the Chanate Road corridor that extends through the Hidden Valley residential neighborhood. The project site consists of the roadway right-of-way for Chanate Road. A Class II bicycle lane has been striped along Chanate Road, south of the proposed pedestrian path alignment. Front yards with some ornamental landscaping slope toward Chanate Road. Existing path segments have already been installed both to the west and to the east of the project site.

Surrounding Land Uses in the Project Vicinity: Land uses in the project vicinity consist primarily of residential uses. Condominiums are located west of the project site at the corner of Parker Hill Road and Chanate Road. Single family residences are located along Chanate Road between Paulin Creek and Hidden Valley Elementary School. Residences along Glen Echo Drive are located in the unincorporated area of the County. Residential neighborhoods are located on both sides of Chanate Road in Hidden Valley. Parker Hill Road extends north to the Fountaingrove area, and Chanate Road is a key connector between northern Santa Rosa and Rincon Valley. The Paulin Creek Preserve is a 42-acreⁱⁱ parcel located south of the project area, adjacent to the County Farm and Coroner's Office.

1.5 Project Characteristics

The project involves the construction of a pedestrian path connecting existing path segments near the corner of Parker Hill Road and Chanate Road and a pedestrian bridge over Paulin Creek (See Figure 3, Project Site Plan).

The proposed project has the following features:

Pedestrian Path: The project would consist of a 5-foot wide and approximately 420-foot long (380-foot path and 44-foot long bridge) asphalt concrete path (AC). It would connect two existing path segments on both sides of Paulin Creek and would provide access through the Hidden Valley neighborhood and to Hidden Valley Elementary School. The path would start approximately 100-feet east of Parker Hill Road. It would cross Paulin Creek over a pedestrian bridge and then connect to the existing sidewalk west of Fitzpatrick Court.

Asphalt Concrete Dike: An asphalt concrete (AC) dike would be installed to separate the path from the existing bike lane.

Small Retaining Walls: Where there are changes in grade along the path, small retaining walls would be installed.

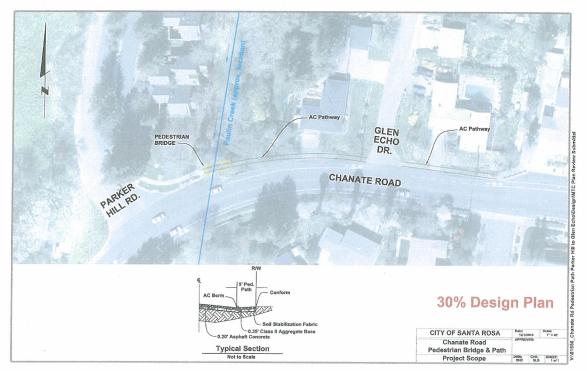
Storm Drain System: The existing storm drain system would be extended from the driveway of 3515 Chanate Road approximately 15' into the existing drainage ditch that drains toward Paulin Creek and upstream approximately 27' east of the driveway at 3210

Chanate Road. The path would be constructed over the storm drain in front of 3515 Chanate Road and in front of a portion of 3210 Chanate Road.

Pedestrian Bridge: A 44-foot prefabricated pedestrian bridge would extend over Paulin Creek and would require two bridge abutments at the top of the bank on either side of the creek.

Soil Removal and Installation of Asphalt Concrete: To construct the AC path, 6" of the existing soil would be removed and hauled off to an offsite landfill. A soil stabilization fabric would be placed between the native soil and the compacted Class II Aggregate Base (AB2). Three inches of AC would be placed over the AB2.

ADA Standards: The path would meet all accessibility requirements in compliance with the Americans with Disabilities Act (ADA). The path would have less than a 5% grade along its length.



Source: City of Santa Rosa Transportation and Public Works Department

Figure 3 Project Site Plan

1.6 Alternatives Considered For the Proposed Action

The project joins two existing paths to improve access in the Hidden Valley neighborhood, and particularly access to the Hidden Valley Elementary School. Other alignments are proposed for future construction in the Citywide Creek Master Plan in the vicinity of the project (See Figure 2); however, these alignments would not meet the objectives of the project. The only other project under consideration is the No project alternative; similarly, it would not meet the objectives of the project.

1.7 Required Permits and Approvals

The proposed pedestrian bridge would be constructed at the top of the banks of Paulin Creek and would require a Streambed Alteration Agreement from the Department of Fish and Game.ⁱⁱⁱ It would also require Clean Water Act Section 401/Waste discharge Requirement permit from the North Coast Regional Water Quality Control Board. The project would also need to comply with the Santa Rosa Tree Ordinance.

1.8 Project Funding

The project would be developed with grant funds that cover the design and construction of the project.

1.9 Timeline for Project Implementation

It is anticipated that the project would be constructed during the summer and early fall of 2012.

1.10 Other Projects Proposed in the Vicinity

The project site is located in an existing residential area. Residences along Glen Echo Drive and east of Bonita Vista Lane are located in the unincorporated area of the County. No immediate development or intensification of development is anticipated. Additional trails are proposed including a footpath along Paulin Creek, connecting with Hidden Valley Park, and on-street connections up Parker Hill Road, along Chanate connecting to Paulin Creek Preserve, and along Bonita Vista Lane.

ⁱ City of Santa Rosa, *Santa Rosa Citywide Creek Master Plan*, Adopted March 27, 2007, pp. 185-186 and the Paulin C Map.

ⁱⁱ Sonoma County Agricultural Preservation and Open Space District, accessed May 2, 2012 (<u>http://www.sonomaopenspace.org/Content/10078/preview.html</u>)

ⁱⁱⁱ Telephone communication with Adam McKannay, Environmental Specialist, California Department of Fish and Game, May 4, 2012.

2. Initial Study of Environmental Impacts

1. Project title:

Chanate Road Pedestrian Bridge and Path Project

2. Lead agency name and address:

City of Santa Rosa Transportation and Public Works Department 69 Stony Circle Santa Rosa, CA 95401

3. Contact person and phone number:

Danny Chen Assistant Engineer (707) 543-3911

4. **Project location:**

The proposed project would be located adjacent to Chanate Road near the corner of Parker Hill Road in Northeast Santa Rosa. The pedestrian bridge would be constructed over Paulin Creek. The path would then connect with Fitzpatrick Court, east of the project.

5. Project sponsor's name and address:

City of Santa Rosa Transportation and Public Works Department 69 Stony Circle Santa Rosa, CA 95401

- 6. General plan designation: The project area is designated for low density residential development (2-8 units/acre).ⁱ The residences along Glen Echo Drive are located within the unincorporated area of the County. The right-of-way along Chanate Road is owned by the City of Santa Rosa.
- 7. **Zoning:** The project site is zoned for residential development. The path spans Paulin Creek. The parcel to the east is zoned R-1-6 Combining District. The parcel to the west is zoned Planned Development.ⁱⁱ
- 8. **Description of project:** (Describe the whole action involved, including but not limited to later phases of the project, and any secondary, support, or off-site features necessary for its implementation. Attach additional sheets if necessary.)

The project consists of a 5-foot wide and 420-foot long path that connects Hidden Valley Elementary School with the existing sidewalk at the corner of Chanate Road and Parker Hill Road. The project area is located within City of Santa Rosa right-of-way along the north side of Chanate Road adjacent to residential uses. The pathway would begin approximately 100 feet east of Parker Hill Road, connecting to an existing sidewalk west of Fitzpatrick Court. The pathway project would cross Paulin Creek and would require two bridge abutments to accommodate the new pedestrian bridge. The abutments would be constructed on the top of the bank on either side of the creek.ⁱⁱⁱ

- 9. Surrounding land uses and setting: Land uses surrounding the proposed project consist of residential uses fronting on Chanate Road and Parker Hill Road. Hidden Valley Elementary School is also located east of the project area.
- 10. Other public agencies whose approval is required (e.g., permits, financing approval, or participation agreement.): A Streambed Alteration Agreement would be required from the California Department of Fish and Game.^{iv} A Clean Water Act Section 401/Waste Discharge Requirement Permit would be required from the North Coast Regional Water Quality Control Board. The project would also need to comply with the Santa Rosa Tree Ordinance.

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

	Aesthetics		Agriculture Resources		Air Quality
\boxtimes	Biological Resources		Cultural Resources	\boxtimes	Geology /Soils
	Hazards & Hazardous Materials	\boxtimes	Hydrology / Water Quality		Land Use / Planning
	Mineral Resources	\boxtimes	Noise		Population / Housing
	Public Services		Recreation		Transportation/Traffic
	Utilities / Service Systems		Mandatory Findings of Sign	ificanc	ce

NONE	
-------------	--

DETERMINATION

On the basis of this initial evaluation:

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

Prepared By:

(Dolfering 7/2/12

Nancy Dakin Woltering Environmental Planning Consultant

Date

Reviewed By:

7/3/2012

Danny Chen, Assistant Engineer Department of Transportation and Public Works City of Santa Rosa

Date

I concur with the findings and conclusions above.

7/5/12

Gillian Hayes Environmental Coordinator City of Santa Rosa

Date

CEQA GUIDANCE

EVALUATION OF ENVIRONMENTAL IMPACTS:

- 1) A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).
- 2) All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.
- 3) Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.
- 4) "Negative Declaration: Less Than Significant With Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from Section XVII, "Earlier Analyses," may be cross-referenced).
- 5) Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. Section 15063(c)(3)(D). In this case, a brief discussion should identify the following:
 - a) Earlier Analysis Used. Identify and state where they are available for review.
 - b) Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.
 - c) Mitigation Measures. For effects that are "Less than Significant with Mitigation Measures Incorporated," describe the mitigation measures that were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.
- Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances).
 Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.

- 7) Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.
- 8) This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whatever format is selected.
- 9) The explanation of each issue should identify:
 - a) the significance criteria or threshold, if any, used to evaluate each question; and
 - b) the mitigation measure identified, if any, to reduce the impact to less than significance.

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

Discussion:

a. Effect on a Scenic Vistas

The project site consists of a roadway corridor extending over Paulin Creek (See Figures 4 and 5). Houses line both sides of the roadway. Vistas include views of Paulin Creek, the eucalyptus trees above Chanate Road near its intersection with Parker Hill Road, and the hills of the Fountaingrove area above and to the north of the project. Adding a pedestrian path and bridge would not adversely affect views of the creek or the surrounding hills. The project would blend with the roadway corridor (Less-than-Significant/Negligible Impact).

b. Potential Damage to Scenic Resources

Existing scenic resources in the project vicinity include Paulin Creek and nearby groves of eucalyptus trees. Construction of the project would result in removal of a small amount of vegetation which would result in negligible visual impact. Placing a bridge across the creek would enhance visual access to the creek for people crossing it. Impacts to scenic resources would be negligible (Less-than-Significant/Negligible Impact).

c. Effects on Visual Character

The site vicinity consists of a roadway corridor with travel lanes, striped bike lanes and portions of a sidewalk. The project would close an existing gap in the sidewalk, connecting Parker Hill Road to residences along Chanate Road and Hidden Valley Elementary School. Completing the sidewalk would be a minor but positive visual change in the visual character of the site vicinity (Negligible/Beneficial Impact).

d. Effects Related to Light and Glare

The proposed project would not result in the addition of lights and would therefore have no impact related to generation of light and glare (No Impact).

Impacts related to Visual Quality and Aesthetics would be Less-than-Significant (LS).



Figure 4. Looking west from the terminus of the existing sidewalk near 3210 Chanate Road.



Figure 5. Looking east along Chanate Road near 3210 Chanate Road.

Mitigation Measures:

None required.

Potentially Less Than Les Significant Significant Sig Impact With Mitigation Incorporated	nificant Impact
---	-----------------

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

a)	Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping & Monitoring Program of the California Resources Agency, to non- agricultural uses?		
b)	Conflict with existing zoning for agricultural use, or a Williamson Act contract?		\boxtimes
c)	Conflict with existing zoning for, or cause rezoning of, forestland (as defined in Public Resources Code section 12220(g)) or timberland (as defined in Public Resources Code section 4526)?		\boxtimes
d)	Result in the loss of forestland or conversion of forest land to non-forest use?		\boxtimes
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?		\boxtimes
Di	scussion:		

Agricultural Land

a. Convert Farmland to Non-Agricultural Uses?

The site is categorized as "Urban and Built-Up Land" on the Sonoma County Important Farmlands Map (2008).^v (No Impact)

b. Conflict with existing zoning for Agricultural Use?

There are no lands under Williamson Act contracts in the project vicinity (agricultural preserve lands subject to enforceable restrictions).^{vi} The project would not conflict with existing zoning for agricultural use nor result in the conversion of prime agricultural land to other uses (No Impact).

Forest Land

c, d and e. Potential Conflict with Existing Zoning for Forest Land or Conversion of Forest Land to Other Uses

Parcels on both sides of Paulin Creek are zoned for low density residential development. The project site does not contain either agricultural land or forestland. The proposed project would not result in adverse impacts to either type of resource (No Impact).

The proposed project would have no impact on agricultural land or forest land.

Mitigation Measures:

None Required.

Poten Signifi Impac	cant	Less Than Significant With	Less Than Significant	No Impact
		Mitigation		
		Incorporated		

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

a) Conflict with or obstruct implementation air quality plan?	of the applicable			\boxtimes
 b) Violate any air quality standard or contribution to an existing or projected air quality violation 			\boxtimes	
c) Expose sensitive receptors to substantial p concentrations?	ollutant [\boxtimes	
d) Result in a cumulatively considerable net criteria pollutant for which the project reg attainment under an applicable federal or quality standard (including releasing emis quantitative thresholds for ozone precurso	ion is non- state ambient air [sions that exceed		\boxtimes	
e) Create objectionable odors affecting a sub of people?	stantial number			\boxtimes

Discussion:

a. Result in a Conflict with the Applicable Air Quality Plan

The project is located within the jurisdiction of the Bay Area Air Quality Management District (BAAQMD). The project is required to be consistent with the BAAQMD's 2010 Clean Air Plan (CAP). The BAAQMD's 2010 CAP was adopted on September 15, 2010. It updates the Bay Area's Ozone Strategy and provides an integrated strategy for improving air quality, protecting public health and addressing greenhouse gases and climate change.

On June 2, 2010, the BAAQMD adopted updated CEQA Guidelines. The Guidelines were further updated in May 2011. However, on March 5, 2012 the Alameda County Superior Court issued a writ of mandate ordering the District to set aside the Thresholds and cease dissemination of them until the Air District complies with CEQA.^{vii} Prior CEQA Guidelines are in effect until the thresholds have undergone CEQA analysis (No Impact).

b. Potential Air Quality Violations

State and national ambient air quality standards have been established for the following pollutants: ozone, carbon monoxide, nitrogen dioxide, fine particulate matter (PM_{10}) and lead. These pollutants are referred to as "criteria pollutants" because they are regulated by developing human health-based and/or environmentally based criteria for setting permissible levels. For some of these standards, notably ozone and PM_{10} , State standards are more stringent than the national standards. The State has also established ambient air quality standards for sulfates, hydrogen sulfide, vinyl chloride and visibility reducing particles.

The San Francisco Bay Area is currently a nonattainment area for the State 8-hour and 1-hour ozone standards, and the federal 8-hour ozone standard. It is also nonattainment for the State Annual and 24-hour standards for fine particulate matter (PM_{10}). The U.S. EPA lowered the 24-hour $PM_{2.5}$ standard from 65 µg/m³ (micrograms per cubic meter) to 35 µg/m³ in 2006. The EPA designated the Bay Area as nonattainment of the $PM_{2.5}$ standard on October 8, 2009. The effective date of the designation is December 14, 2009, and the Air District has three years to develop a plan, called a State Implementation Plan (SIP), that demonstrates the Bay Area will achieve the revised standard by December 14, 2014. The SIP for the new $PM_{2.5}$ standard must be submitted to the U.S. EPA by December 14, 2012.^{viii}

Fine Particulate Matter (PM₁₀ and PM_{2.5}): Fine particulate matter (PM₁₀ and PM_{2.5}) is the pollutant of greatest concern with construction activities. It consists of small liquid and solid particles suspended in the air. It includes particles smaller than 10 microns in diameter (PM₁₀) as well as finer particles smaller than 2.5 microns in diameter (PM_{2.5}). Ambient PM is made up of particles that are emitted directly such as soot and fugitive dust, as well as secondary particles that are formed in the atmosphere from reactions involving precursor pollutants such as oxides of nitrogen, sulfur oxides, volatile organic compounds (NOx, SOx, and VOC), and ammonia. Secondary PM and combustion soot tend to be fine particles (PM_{2.5}), whereas fugitive dust is mostly coarse particles (PM₁₀).^{ix} Particulate emissions can result from a variety of construction activities including excavation, grading, and vehicle and equipment exhaust.^x

Construction activities including minor excavation and grading would result in increases in dust (generally PM_{10}) and some vehicle and equipment emissions (generally $PM_{2.5}$) during the construction period. Implementation of Mitigation Measure 3-1 would address construction-related impacts. Given the limited length of the path and short duration of construction, impacts would not be expected to be potentially significant; implementation of Mitigation Measure 3-1 would further reduce the level of impact (Less-than-Significant Impact; mitigation still recommended as a condition of project approval).

Over the long-term, the development of the project would result in a beneficial impact to air quality by providing area residents with pedestrian access to Hidden Valley Elementary School and other parts of their neighborhood. The project would be consistent with Clean Air Plan goals related to encouraging use of non-motorized transportation. Project implementation would contribute to meeting air quality standards.

c. Exposure of Sensitive Receptors to Substantial Pollutant Concentrations

Sensitive receptors in the project vicinity include students at Hidden Valley Elementary School and residents living in the project vicinity. Residents including students using the proposed pathway would be exposed to some automobile emissions, given its proximity to the roadway corridor. However, given the short duration of use on any given day, these impacts would not be considered potentially significant (Less-than-Significant Impact).

d. Result in Cumulatively Considerable Increases in Criteria Pollutants for which the Area is a Non-Attainment Area?

The Bay Area is a non-attainment area for particulate matter. Increases in criteria pollutants would not be cumulatively considerable; however, implementation of Mitigation Measure 3-1 would further reduce the level of this potential impact during the construction period. Over the long-term,

developing a network of pedestrian paths would reduce cumulative impacts related to criteria pollutants (Less-than-Significant Impact).

e. Create Objectionable Odors

The project would not result in or generate objectionable odors (No Impact).

(Less-than-significant impact with Mitigation Incorporated (LS/M) / (B)).

Mitigation Measures:

- 3-1: Implementing the following measures (as specified by the 1996 BAAQMD CEQA Guidelines) would reduce construction-related air quality impacts to an insignificant level.
 - Water all active construction areas at least twice daily.
 - Cover all trucks hauling soil, sand and other loose materials, or require trucks to maintain at least two feet of freeboard.
 - Pave, apply water three times daily, or apply (non-toxic) soil stabilizers on all unpaved access roads, parking areas and staging areas at construction sites.
 - Sweep daily (with water sweepers) all paved access roads, parking areas and staging areas at construction sites.
 - Sweep streets daily (with water sweepers) if visible soil material is carried onto adjacent public streets.
 - The contractor shall be responsible for ensuring that all construction equipment and vehicles are maintained in good operating order and that all factory installed emission control devices are installed and functioning properly. All vehicles and construction equipment shall be turned off when not in use to minimize emissions.

2.4	BIOLOGICAL RESOURCES. Would the	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant	No Impact
a)	Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the DFG or USFWS?		\boxtimes		
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 DFG or USFWS?		\boxtimes		
c)	Have a substantial adverse effect on federally-protected wetlands as defined by Section 404 of the federal Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, <i>etc.</i>) 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 corridors, or impede the use of native wildlife nursery sites?		\boxtimes		
e)	Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?			\boxtimes	
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. Special Status Plant and Wildlife Species

Special-status species are protected through the California Environmental Quality Act, the Native Plant Protection Act, and the California federal Endangered Species Acts. The Endangered Species Division of the U.S. Fish and Wildlife Service (Appendix C of Attachment 1) and the California Department of Fish and Game's California Natural Diversity Data base (CNDDB) records (December 2011) were consulted to determine if any special-status species may be impacted by the project. Appendix D of Attachment 1 lists special-status species with potential to occur or that have been recorded within 2 miles of the project site.^{xi}

Chinook and coho salmon are not known to occur within Paulin Creek or Piner Creek watershed. There is potential for resident rainbow trout to occur within Paulin Creek, adjacent to the project site; however, even if present, all work would be performed outside the creek channel and would not result in a "take" of these species.^{xii}

The Northwestern pond turtle is a federal and state species of concern. They are typically found in slow moving aquatic habitat, including ponds, marshes, rivers and streams with rocky or muddy

substrates and extensive aquatic and emergent vegetation. Pond turtles prefer areas with adequate basking sites and egg laying areas within 200 m (656 feet) of aquatic areas.^{xiii}

This species has been found in adjacent watersheds and it is possible that this species occurs within or near the project area. Preconstruction surveys for the Northwestern pond turtle would be required to reduce potential impacts to the species to a less-than-significant level. See Mitigation Measure 4-1 below.

There is also potential for hoary bats and other sensitive bat species to utilize the site. If any mature trees or structures are removed, there may be impacts to bats utilizing these areas. Construction activities also have the potential to disturb roosting bats. Potential impacts to bats would be reduced to a less-than-significant level with implementation of Mitigation Measure 4-2, identified below.

b. Riparian Areas or Other Special Plant Communities

Paulin Creek is a perennial stream with adjacent riparian vegetation (See Figure 6). The project would involve adding fill material into the riparian area that is adjacent to Paulin Creek. ^{xiv} Implementation of Mitigation Measure 4-3 would reduce impacts to riparian habitat to a less than significant level.

Vegetation along the stream included Himalayan blackberry (*Rubus procerus*), periwinkle (Vinca major), Privet (Ligustrum sp.), and willow (Salix sp.). Vegetation here is typical of the mixed willow series (Sawyer and Keeler-Wolf 2009).^{xv} Construction of the proposed project would result in the removal of 2 Valley Oaks, 2 Live Oaks, 2 Yellow Willows, 1 Plum tree, 1 California Walnut, 2 Liquidamber, 1 Privet and 1 Butterfly bush.^{xvi} Removal of these small trees and bushes would result in a less-than-significant impact. Trees to be removed would be replaced in accordance with the Santa Rosa Tree Ordinance. See Mitigation Measure 4-8 and 4-9.

c. Federally Protected Wetlands

The project would avoid adding fill or dredge materials to wetland and riparian areas that are adjacent to the project area. "Roadside ditches occur from 3515 Chanate Road west toward Paulin Creek and upstream (east of the driveway at 3210 Chanate Road, conveying road drainage and overland flow. Portions of both ditches are proposed to be permanently impacted by extending the drainage system to facilitate construction of the pathway. The ditches appear to have been created to drain the roadway and surrounding areas. The upstream ditch is asphalt-lined except for the last 6 feet before entering the storm drain system. The downstream ditch appears to be managed to maintain flow and lacks vegetative cover other than a single wild onion (*Allium crispum*) plant. A preliminary wetland delineation indicated these ditches do not qualify as wetlands and/or Waters of the U.S."^{xvii} Measures would still be taken to ensure that sediment does not enter the ditches or creek. See Mitigation Measure 4-4. (Less-than-Significant Impact; Mitigation Measure 4-4 is still recommended as a condition of project approval to further reduce the level of impact).



Figure 6. View of the Paulin Creek Riparian Corridor from Chanate Road.

d. Potential Interference with Migration of Fish or Other Wildlife

The bridge across Paulin Creek would be constructed outside of its banks to avoid impacts to fish or other wildlife using the creek corridor for movement and/or migration. Steelhead/rainbow trout exist within Paulin Creek downstream of the project site. Paulin Creek is a tributary to Piner Creek which flows into Santa Rosa Creek and then on to the Laguna and the Russian River. The Sonoma County Water Agency operates the Paulin Creek reservoir downstream of the site; the reservoir is a barrier to anadromous fish migration to this reach of the creek. The Santa Rosa Creek watershed has been excluded from critical habitat by the National Marine Fisheries Service due to economic reasons. Chinook and coho salmon are not known to occur within the Paulin Creek or Piner Creek watersheds. There is a potential for resident rainbow trout to occur within Paulin Creek adjacent to the project site. Implementation of Mitigation Measure 4-5 would reduce potential impacts to rainbow trout to a less-than-significant impact.

Project construction could result in disturbance of nesting birds in nearby trees. If work is conducted during the nesting season and active nests are identified, buffers would be maintained until the young have fledged their nests. Implementation of Mitigation Measure 4-6 would reduce this potentially significant impact to a less-than-significant level (Less-than-Significant Impact with Mitigation Incorporated).

e. Local Policies Protecting Biological Resources

The proposed project would be developed in accordance with the Santa Rosa Tree Ordinance (Chapter 17-21 of the City Code). While all trees to be removed are smaller than those identified as *"heritage"* trees by the tree ordinance, the following mitigation measures would be implemented to minimize impact to the riparian corridor. While not required to reduce a potentially significant

impact, implementation of Mitigation Measures 4-8 and 4-9 would further reduce the level of impact (Less-than-Significant Impact).

f. Conflict with a Habitat Conservation Plan

The project is outside of the Santa Rosa Plain Conservation Strategy area (USFWS 2005). The project would therefore not conflict with a Habitat Conservation Plan or comparable plan. The project is located northeast of the Paulin Creek Preserve, a locally protected open space area. Development of the pedestrian bridge and path would not adversely affect the preserve (No Impact).

Implementation of Mitigation Measures 4-1 through 4-9 would reduce potentially significant impacts to biological resources to a less-than-significant level (Less-than-Significant Impact with Mitigation)

Mitigation Measures:

- 4-1 A preconstruction survey for Northwestern western pond turtles shall be conducted by a qualified biologist to ensure that no Northwestern pond turtles or nests are in the project area. If located, the turtles could be relocated and/or a buffer established to avoid impacts.
- 4-2 To avoid impacts to bats, the following measures would be required:
 (a) <u>Preconstruction Surveys</u>: All trees and structures suitable for use by bats are to be surveyed for signs of bats no earlier than two to three days prior to project activities.
 (b) <u>Avoidance Measures</u>:
 If bats are discovered during the surveys, then a buffer of 100 to 150 feet shall be established.
 The optimal time to remove trees is September 15th through October 15th, when young would be capable of flying and February 15th to April 1st to avoid hibernating

bats and prior formation of maternity sites.

- 4-3 Riparian habitat disturbed by the placement of the bridge abutments (0.0067 acres (290 sq. ft.)) would be enhanced at a mitigation ratio of 3 to 1; 0.02 acres (870 square feet) of riparian habitat would be enhanced by planting native vegetation and/or removing invasive plants.
- 4-4 Best management erosion control practices would be used to prevent sediment from entering drainages or Paulin Creek. All construction debris would be prevented from entering the riparian area. See Mitigation Measure 7-3.
- 4-5 All work shall be performed outside of the active creek channel to avoid a "take" of rainbow trout.
- 4-6 To avoid "take" and/or further evaluate the presence or absence of birds, the following measures shall be implemented:
 (a) Grading or removal of any vegetation should be conducted outside the nesting season, which occurs between approximately February 1st and August 31st.
 (b) If grading or vegetation removal between August 31st and February 1st is infeasible and work must occur within the breeding season, a pre-construction nesting bird (generally passerine (group of mainly perching songbirds)) survey of the

grasslands and adjacent trees shall be performed by a qualified biologist within 7 days of ground breaking. If no nesting birds are observed, no further action is required and work shall occur within one week of the survey to prevent "take" of individual birds that could begin nesting after the survey.

(c) If bird nests are observed during the preconstruction survey, a disturbance-free buffer zone shall be established around the nest tree(s) until the young have fledged, as determined by a qualified biologist.

(d) The radius of the required buffer zone can vary depending on the species (i.e., generally 75-100 feet for passerines), with the dimensions of any required buffer zones to be determined by a qualified biologist in consultation with CDFG.
(e) To delineate the buffer zone around a nesting tree, orange construction fencing shall be placed at the specified radius from the base of the tree within which no machinery or workers shall intrude.

(f) After the fencing is in place, there would be no restrictions on grading or construction activities outside of the prescribed buffer.

- 4-7 Construction between October 15 April 15 would require placement of silt fencing and/or sediment barriers to prevent sediment from entering Paulin Creek.
- 4-8 Plastic tree protection fencing shall be installed at (or near) the drip-lines of trees to remain.
- 4-9 Trees removed for project construction shall be replaced in accordance with the Santa Rosa Tree Protection Ordinance (Chapter 17-24 of the City Code).

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

Discussion:

This section summarizes the Cultural Resources Survey prepared by Tom Origer & Associates (See Attachment 2). The study included archival research at the Northwest Information Center and Sonoma State University, field inspection of the project site, and contact with the Native American community.

a. Adverse Changes to the Significance of Historic Resources

Historical maps show buildings near and adjacent to the study area beginning in 1916. However, historic-era cultural resources were not found within the study area. The closest resource is the historic Fitzpatric Residence located on an adjacent property (Praetzellis). xviii Historic period site indicators generally include: fragments of glass, ceramic, and metal objects; milled and split lumber; structures and feature remains such as building foundations and discrete trash deposits (e.g., wells, privy pits, dumps). While historic resources are not anticipated at the project site, in the event of accidental discovery, implementation of Mitigation Measure 5-1 would ensure protection of resources (Less-than-Significant Impact).

b. Adverse Changes to the Significance of Archeological Resources

Archival research found that the study area had not been previously surveyed. Two studies have been conducted near the current study area-one adjacent and the other within a quarter mile (Fredrickson 1974; Kuhn 1980). There are five recorded sites within a half mile radius of the study area. There are no reported ethnographic sites¹ in the vicinity (Barrett 1908). Based on information of known cultural resources and their environmental settings, it was anticipated that prehistoric archaeological sites could be found within the study area. Freshwater resources were available in Paulin Creek. The presence of these attributes suggests that the project area would have been highly suitable to prehistoric occupants as a place to gather resources and hunt. xix Prehistoric archaeological site indicators expected to be found in the region include but are not limited to: obsidian and chert flakes and chipped stone tools; grinding and mashing implements such as slabs and handstones, and mortars and pestles; bedrock outcrops and boulders with mortar cups; and locally darkened midden

¹ Ethnography is an area of cultural and social anthropology in which sites and resources are studied for insight into the lives of particular people or ethnic groups.

soils containing some of the previously listed items plus fragments of bone, shellfish, and fire affected stones. While archaeological resources are not anticipated at the project site, creek zones are generally sensitive with respect to archaeological resources. In the event of accidental discovery, implementation of Mitigation Measure 5-1 would ensure protection of resources (Less-than-Significant Impact).

c. Unique Paleontological Resources or Unique Geologic Feature.

No paleontological resources or unique geologic features are known to be located in the project vicinity. In the event that such resources are encountered during construction, implementation of Mitigation Measure 5-1 would reduce impacts to resources to a less-than-significant level. (No Impact)

d. Disturbance to Human Remains

No human remains are known to be located on the project site. In the event that resources are encountered during construction, implementation of Mitigation Measure 5-2 would reduce the potential impact to a less-than-significant level (Less-than-Significant Impact).

Mitigation Measures:

- 5-1 If any potentially significant deposits or features are discovered, all work in the immediate vicinity of the discovery should be halted and the discovery evaluated by a qualified archeologist. The NAHC shall be contacted and area tribal monitors shall be on-site with the qualified archaeologist. Significant deposits should be removed using archaeological methods, or avoided and left in place. Prehistoric archaeological site indicators include: obsidian and chert flakes and chipped stone tools; grinding and mashing implements (e.g., slabs and handstones, and mortars and pestles); bedrock outcrops and boulders with mortar cups; and locally darkened midden soils. Midden soils may contain a combination of fire-affected stones. Historic period site indicators generally include: fragments of glass, ceramic, and metal objects; milled and split lumber; and structure and features remains such as building foundations and discrete trash deposits (e.g., wells privy pits, dumps).
- 5-2 If human remains are encountered, excavation or disturbance of the location must be halted in the vicinity of the find, and the county coroner contacted. If the coroner determines the remains are Native American, the coroner will contact the Native American Heritage Commission. The Native American Heritage Commission will identify the person or persons believed to be most likely descended from the deceased Native American. The most likely descendent makes recommendations regarding the treatment of the remains with appropriate dignity.

2.6 GREENHOUSE GAS EMISSIONS – Wo	Potentially Significant Impact uld the project	Less Than Significant With Mitigation Incorporated	Less Than Significant	No Impact
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?			\boxtimes	
b) Conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases?				\boxtimes

Discussion:

a. Generate Greenhouse Gases, Directly or Indirectly

During project construction, greenhouse gases (GHG) would be emitted by trucks traveling to and from the construction site, and by construction equipment used to build the pedestrian path and bridge. Emissions would include carbon-dioxide from use of fossil fuels in construction equipment and transporting materials to and from the site. Along the path alignment, six inches of the existing soil would be removed and off-hauled to an offsite landfill.

Following project construction, the project would be part of a network of paths and sidewalks that provide pedestrian access and improve the 'walkability' of the city. While the project would result in less-than-significant impacts related to generation of greenhouse gases, Mitigation Measure 6-1 is recommended as a condition of project approval to further reduce the level of impact (Less-than-Significant Impact). (See Sections 2.7 and 2.9)

b. Conflict with Any Applicable Plan, Policy or Regulation Adopted to Reduce Emissions of Greenhouse Gases

The project is consistent with greenhouse gas policies in the Santa Rosa 2035 General Plan which promote non-motorized travel and enhanced 'walkability' of neighborhoods. The project is also consistent with Council Resolution 26341 which establishes Citywide GHG reduction goals; further, it is consistent with the Bicycle and Pedestrian Master Plan goal of encouraging walking and bike riding throughout the City of Santa Rosa. It is also consistent with the Climate Action Plan (CAP). For example, CAP Measure 3.2 promotes Diversity and Destination Accessibility. Action Item 3.2.2 helps to implement this measure: Improve the non-vehicular transportation network serving common destinations in Santa Rosa in order to facilitate walking.^{xx} Measure 4-1 relates to the Bicycle and Pedestrian Network. Action Item 4.1.4 indicates: Continue to support Safe Routes to School (SRTS) and safe routes to transit programs in Santa Rosa.^{xxi} (No Impact)

The project would result in a less-than-significant impact related to generation of greenhouse gases (Less-than-Significant Impact; Mitigation Measure 6-1 is recommended as a condition of project approval to further reduce the level of impact).

Mitigation Measures:

- 6-1 The Contractor would implement one of the following measures, at minimum, as appropriate to the construction project:
 - (a) Substitute electrified equipment for diesel- and gasoline-powered equipment where practical.
 - (b) Use alternative fuels for construction equipment on-site, where feasible, such as compressed natural gas (CNG), liquefied natural gas (LNG), propane, or biodiesel.
 - (c) Avoid the use of on-site generators by connecting to grid electricity or utilizing solar powered equipment.

2.7	GEOLOGY and SOILS. Would the project	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant	No Impact
a)	Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:			\boxtimes	
	 Rupture of a known earthquake fault, as delineated in 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 & Geology Special Publication 42. 			\boxtimes	
	ii) Strong seismic ground shaking?			\boxtimes	
	iii) Seismic-related ground failure, including liquefaction?			\boxtimes	
	iv) Landslides?				\boxtimes
b)	Result in substantial soil erosion or the loss of topsoil?		\boxtimes		
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?			\boxtimes	
d)	Be located on expansive soils, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?			\boxtimes	
e)	Have soils incapable of adequately supporting the use of septic tanks or alternate wastewater disposal systems where sewers are not available for the disposal of wastewater?				\boxtimes

Discussion:

a. Seismicity/Seismic Related Ground Failure

The project is located in the vicinity of a potentially active fault (with displacement within the last 700,000 years).^{xxii} The wider region is also considered seismically active (Seismic Zone 4) and strong ground shaking can be expected during the life of the facility. The closest known active faults

are the Healdsburg-Rodgers Creek Fault Zone located approximately 1/4 mile to the west, and the San Andreas Fault located nearly 22 miles to the southwest. These faults are considered capable of generating earthquakes with magnitudes of 7.0 and 7.9, respectively. The project is located within an area subject to "violent ground-shaking during an earthquake on the Rodgers Creek Fault". It is located several hundred feet from an area that would experience "very violent ground-shaking during an earthquake on the Rodgers Creek Fault".

The pedestrian bridge and path would be subject to severe ground-shaking from an earthquake on the Rodgers Creek Fault; ground-shaking could result in some buckling of the asphalt concrete (AC). To withstand seismic ground-shaking that would be expected during the life of the project, the project would be constructed in accordance with the standards set forth in the California Building Code (CBC) for Seismic Design Category E, as described under mitigation below (Less-than-Significant Impact with Mitigation Incorporated).

b. Substantial Erosion or Loss of Top Soil

Soils within the study area consist of the Pleasanton clay loam (PhB) (2 to 5 percent slopes) and Haire clay loam (HcC) (0 to 9 percent slopes) (Miller 1972: Sheet 74). These soils are moderate to well-draining loams found on rolling terraces. These soils typically support the growth of annual and perennial grasses, forbs, small shrubs, wild berry vines and scattered oaks. Historically, these soils were used for vineyard and pasture.^{xxiv}

Construction of the project would involve installation of two abutments to accommodate the new pedestrian bridge. The abutments would be constructed on the top of the bank on either side of the creek. An AC dike would be placed to segregate the path from the existing bike lane and to ensure proper drainage. Where there are abrupt changes in grade, small retaining walls would be installed.

Given its location adjacent to and spanning Paulin Creek, the project site would be subject to erosion during the construction period which is expected to last several weeks. Potential impacts would be reduced to a less-than-significant level through implementation of Mitigation Measures 7-1 and 7-2 (Less-than-Significant Level with Mitigation Incorporated).

c. Unstable Geologic Units

Soil in the project area could become unstable in the event of an earthquake given its proximity to the Rodgers Creek Fault. Implementation of Mitigation Measure 7-1 would reduce the potential impact related to liquefaction to a less-than-significant level (Less-than-Significant Impact with Mitigation Incorporated).

d. Location on Expansive Soil

The California Building Code mandates that "special [foundation] design considerations be employed if the expansion index of soils is 20 or greater (CBC Table 18-1-B)." As described in (c) above, site soils are moderately well-drained loams rather than clays (*i.e. montmarillonite, illite and kaolinite are examples of active clays that have the most potential for expansion; these are not found at the project area*). Expansive soils typically arise as a result of an increase in water content in the upper few meters from the ground surface. While the PhB and HcC soils are not considered to be expansive soils, six inches of the existing soil would be removed and a soil stabilization fabric would be placed between the native soils and the compacted Class II Aggregate Base (AB2). Three inches

Chanate Road Pedestrian Bridge and Path Project 2-23

of AC would be placed over the AB2. With this treatment, impacts related to expansive soils would be less-than-significant (Less-than-Significant Impact).

e. Septic Capability of Soils

The project would not involve installation of any type of septic system (No impact).

Implementation of Mitigation Measures 7-1 through 7-3 would reduce potentially significant impacts related to seismicity and soil erosion to less-than-significant levels (Less-than-Significant impact with Mitigation (LS/M)).

Mitigation Measures:

.

- 7-1 At a minimum, all project improvements shall meet the requirements of the California Building Code (CBC) for Seismic Design Category E.
- 7-2 The project shall be constructed during periods of dry weather to every extent feasible, and in accordance with wildlife protection (See Mitigation Measures 4-2 and 4-6).
- 7-3 Best management practices shall be used to minimize erosion and to prevent construction debris from entering Paulin Creek. Any area disturbed shall be planted and/or have erosion materials installed prior to wet weather periods.

		Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant	No Impact
2.8	HAZARDS and HAZARDOUS MATERI	ALS. Woul	ld the projec	xt:	
a)	Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?			\boxtimes	
b)	Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?				
c)	Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within ¹ / ₄ mile of an existing or proposed school?				\boxtimes
d)	Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code §65962.5 and, as a result, would it create a significant hazard to the public or to the environment?				
e)	For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or a public use airport, would the project result in a safety hazard for people residing or working in the project area?				
f)	For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?				\boxtimes
g)	Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?				\boxtimes
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?				\boxtimes

a. Hazards Related to the Transport, Use or Disposal of Hazardous Materials/Waste

The project would be constructed with equipment utilizing gasoline and other petroleum products. Standard practices would be utilized to ensure that oil and gas from equipment does not enter Paulin Creek. There are no known hazardous materials or waste in the vicinity of the project area (Lessthan-Significant Impact).

b. Hazards to the Public and the Environment Related to Upset

The project would not involve the use of hazardous materials or waste. It would not result in hazards to the public or the environment related to upset (No Impact).

c. Emit Hazards in Close Proximity to Schools

The project would not emit hazardous or acutely hazardous materials, substances or waste within ¹/₄ mile of a school. Fugitive dust would be controlled at the site during the construction period (See Section 2.3). (No Impact)

d. Cortese List

There are no sites in the project vicinity listed on the Department of Toxic Substances Control Hazardous Waste and Substances List (Cortese List). Sites that previously contained underground fuel tanks (Fire Station #5 at 3480 Parker Hill Road; Sonoma County Morgue, 3336 Chanate Road) or a non-permitted discharge (former Community Hospital, 3325 Chanate Road) in the project vicinity have been cleaned up, and the cases closed.^{xxv} (No Impact)

e. and f. Airstrips

The closest airport is the Charles M. Schulz Airport (Sonoma County Airport) located approximately 8 miles northwest of the site. Other airstrips include Skypark south of the City of Sonoma, and the Petaluma Municipal Airport on the eastern edge of the City of Petaluma. (No Impact)

f. Interfere with Emergency Response or Evacuation Plan

The project would not affect emergency response or evacuation plans for the Hidden Valley neighborhood. The additional segment of sidewalk would enhance access for pedestrians. (No Impact)

g. Increase Risk of Wildland Fires

The proposed project is located within the 'Wildland-Urban Interface' area.^{xxvi} However, the project would have no impact on wildland fires. In fact, additional non-motorized access is beneficial in the event of any type of fire or other emergency. (No Impact)

Project impacts related to hazards would be less-than-significant (Less-than-Significant Impact).

Mitigation Measures:

None required.

2.9	HVD	ROLOGY & WATER QUALITY. V	Potentially Significant Impact Would the p	Less Than Significant With Mitigation Incorporated	Less Than Significant	No Impact
			rioura die p	10,000		
a)	Violate requirer	any water quality standards or waste discharge nents?		\boxtimes		
b)	substant would b the loca of pre-e would n	tially deplete groundwater supplies or interfere ially with groundwater recharge such that there e a net deficit in aquifer volume or a lowering of l groundwater table level (<i>e.g.</i> , the production rate xisting nearby wells would drop to a level which ot support existing land uses or planned uses for ermits have been granted)?				
c)	includin river, or	tially alter the existing drainage pattern of the site, g through alteration of the course of a stream or substantially increase the rate or volume of runoff in a manner that would:				
	i)	result in flooding on- or off-site				\boxtimes
	ii)	create or contribute runoff water that would exceed the capacity of existing or planned storm water discharge				\boxtimes
	iii)	provide substantial additional sources of polluted runoff			\boxtimes	
	iv)	result in substantial erosion or siltation on-or off- site?		· ·	\boxtimes	
d)	Otherv	vise substantially degrade water quality?			\boxtimes	
e)	re-dire as map	nousing or other structures that would impede or ct flood flows within a 100-yr. flood hazard area oped on a federal Flood Hazard Boundary or Flood nce Rate Map or other flood hazard delineation				
f)		e people or structures to a significant risk of loss, or death involving flooding:				
	i)	as a result of the failure of a dam or levee?				\boxtimes
	ii)	from inundation by seiche, tsunami, or mudflow?				\boxtimes
g)		the change in the water volume and/or the pattern onal flows in the affected watercourse result in:				
	i)	a significant cumulative reduction in the water supply downstream of the diversion?				\boxtimes
	ii)	a significant reduction in water supply, either on an annual or seasonal basis, to senior water right holders downstream of the diversion?				\boxtimes
	iii)	a significant reduction in the available aquatic habitat or riparian habitat for native species of plants and animals?				

iv)	a significant change in seasonal water temperatures due to changes in the patterns of water flow in the stream?		\boxtimes
v)	a substantial increase or threat from invasive, non-native plants and wildlife		\boxtimes

a. Potential Violation of Water Quality Standards

Construction of the project would require some grading and result in the potential for some erosion and sedimentation. The project would be constructed using best management practices during periods of dry weather. Impacts related to water quality would be reduced to a less-than-significant level with implementation of Mitigation Measures 9-1 through 9-3 (Less-than-Significant Impact with Mitigation).

b. Potential Impacts to Groundwater

The project would not deplete groundwater or interfere with groundwater recharge. Placement of two bridge abutments would result in some additional impervious surface. However, the abutments for the 44-foot bridge would have a negligible impact on groundwater infiltration (No/Negligible Impact).

c. Substantially Alter Drainage Patterns

Placement of the bridge abutments would result in a negligible impact on drainage patterns at the site (Less-than-Significant Impact).

d. Other Potential Degradation of Water Quality

Some facets of project construction have the potential to result in erosion and siltation. Silt fences would be placed on both sides of Paulin Creek to avoid sediment from entering the creek during construction and particularly during any storms (Less-than-Significant Impact with Mitigation).

e. Potential Impacts to Housing within the 100-Year Flood Zone

The project does not involve adding housing or affecting housing within the 100-year flood zone. (No Impact).

f. Exposure of People or Property to Flood Risks from Dam or Levee Failure, or Inundation from Seiche, Tsunami or Mudflow

The project would not result in the exposure of people or property to flood risks from dam or levee failure or inundation from a seiche, tsunami or mudflow. There are no dams or levees located upstream of the proposed project.^{xxvii} While small mudslides could occur in Paulin Creek, dense riparian vegetation would interfere with their downstream flow, so that impacts would be localized well above the project area. The site is located approximately 22 miles from the coast, and would

therefore not be subject to a seiche (a wave that oscillates in lakes, bays or gulfs as a result of seismic or atmospheric disturbances) or tsunami. (No Impact)

g. Changes in Water Pattern or Seasonal Flow

The project would not substantially affect the quantity, quality or temperature of runoff from the site. Adding a bridge over Paulin Creek would not result in changes in water pattern or seasonal flow. The bridge abutments would be constructed on top of the bank, outside of the creek channel to avoid interfering with water flow (No Impact).

Impacts related to Hydrology and Water Quality would be less-than-significant with mitigation (Less-than-Significant Impact with Mitigation Incorporated (LS/M)).

Mitigation Measures:

- 9-1 See Mitigation Measures 7-1 through 7-3.
- 9-2 A Construction Storm Water Permit shall be obtained from the RWQCB.
- 9-3 The Contractor shall prepare plans for storm water pollution prevention in accordance with Section 7-1.01G of the project specifications, and in accordance with all Federal, State and local laws. Storm water shall be managed in accordance with the Storm Water Pollution and Prevention Plan as required by the City. Appropriate Best Management Practices (BMPs) shall be applied through the construction process. The sidewalk and street at the entrances to the site shall be cleaned of any soil tracked from the site.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant	No Impact
2. 10 LAND USE AND PLANNING. Would	the project:			
a) Physically divide an established community?				\boxtimes
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?				\boxtimes
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?				\boxtimes

a. Physically Divide an Established Community

The project would not physically divide an established community; it would enhance pedestrian access within the Hidden Valley neighborhood (No Impact/Beneficial Impact).

b. Conflict with Applicable Plans

The project is consistent with the Santa Rosa General Plan 2035, the Bicycle and Pedestrian Master Plan and the Santa Rosa Citywide Creek Master Plan which all support the development of a network of bicycle and pedestrian paths and access to creek corridors (No Impact/Beneficial Impact).

c. Conflict with Habitat Conservation Plan

The project site is not within the boundaries of a Habitat Conservation Plan (HCP). (No Impact).

Mitigation Measures:

None required.

City of Santa Rosa Transportation and Public Works Department

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant	No Impact
2.11 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?				\boxtimes
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local genera plan, specific plan, or other land use plan?	.ı			\boxtimes

Discussion:

a. Loss of Mineral Resources of Future Value

There are no known State-designated (MRZ-2) mineral resources located at the project site.^{xxviii} The Sonoma County Aggregate Resources Management (ARM) Plan identifies mineral resources within the County; most of these resources include hard rock quarries or sand and gravel from large river beds. None of the designated resources are in the project vicinity (No Impact).

b. Loss of Availability of Locally-Important Mineral Resource

The project site is located within the Hidden Valley residential neighborhood. There are no locallyimportant mineral resources in the project vicinity (No Impact).

The project would not result in impacts related to mineral resources (No Impact).

Mitigation Measures:

None required.

2.	12 NOISE. Would the project result in:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant	No Impact
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?			\boxtimes	
b) Exposure of persons to, or generation of, excessive ground- borne vibration or groundborne noise levels?			\boxtimes	
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?			\boxtimes	
d)	A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?		\boxtimes		
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 in or working in the project area to excessive noise levels?				
f)	For a project within the vicinity of a private airstrip, would the project expose people residing in or working in the project area to excessive noise levels?				\boxtimes

a. Exposure of Persons to or Generation of Noise Levels in excess of Standards

According to the Community Noise Exposure – Land Use Compatibility standards, noise levels up to 70 decibels (dB) are conditionally acceptable in residential areas.^{xxix} While construction equipment would exceed these levels over the short-term, long-term use of the Chanate Road pedestrian bridge and path would comply with the City Noise Standards (Less-than-Significant Impact).

b. Exposure of Persons to or Generation of Excessive Groundborne Vibration or Noise

The project would require use of construction vehicles and equipment that would result in vibration during installation of the bridge and bridge abutments, removal of some areas of existing paving and project grading. Impacts would be short-term and not considered potentially significant (Less-than-Significant Impact).

c. Substantial Permanent Increase in Ambient Noise

Connecting two existing path and sidewalk areas along Chanate Road would increase noise slightly as students would now have non-motorized access to school, and some voices would be audible to nearby neighbors. While some increase in ambient noise would be experienced by neighbors, this increase would not be substantial particularly on this heavily traveled roadway segment. Non-motorized access could reduce vehicle travel in the project vicinity, as fewer families would need to drive to school to drop off and pick up their children (Less-than-Significant Impact).

d. Substantial Temporary Noise Generated During the Construction Period

Construction noise would exceed allowable noise standards periodically on a short-term basis. Installation of the bridge abutments and placement of the bridge across Paulin Creek are examples of construction activities that could exceed standards. While these impacts would exceed noise level requirements for short durations, implementation of Mitigation Measure 12-1 would reduce this potential impact to a less-than-significant level (Less-than-Significant with Mitigation Incorporated).

e. Result in Excessive Noise Levels within Airport Plan Area

The project is located approximately 8 miles from the Sonoma County Airport. The project would have no impact on the Airport Plan area (No Impact).

f. Exposure of People to Excessive Noise Levels within Vicinity of Private Air Strip

The nearest private air strips are located in Petaluma and Sonoma. The project would not result in any noise impacts to these air strips (No Impact).

Potentially significant noise impacts related to the proposed project would be reduced to a less-thansignificant impact with implementation of Mitigation Measure 12-1 (Less-than-Significant Impact with Mitigation Incorporated (LS/M)).

Mitigation Measures:

12-1 (a) Noise-generating construction activities, including truck traffic coming to and from the site for any purpose would be limited to daytime, weekday, non-holiday hours (8:00 am to 5:00 p.m.). Any special circumstances which necessitate performance of construction work outside the hours and days specified would require that the contractor request and the City's project manager approve such work.

(b) Construction equipment shall be properly outfitted and maintained with noise reduction devices to minimize construction-generated noise (Fit motorized equipment with proper mufflers in good working order). Unnecessary idling of internal combustion engines would be prohibited.

(c) The contractor shall locate stationary noise sources such as air compressors as far as practical from existing nearby residences and other noise-sensitive uses.

		Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant	No Impact
2.1	3 POPULATION AND HOUSING. Woul	d the project	•		
a)	Induce substantial population growth in an area either directly (<i>e.g.</i> , by proposing new homes and businesses) or indirectly (<i>e.g.</i> , through extension of roads or other infrastructure)?				\square
b)	Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?				\square
c)	Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?				\boxtimes

a, b, c. Induce Substantial Population Growth, Displace Housing, or Displace People

The project would not result in population growth, nor would it displace any housing units or people requiring housing units (No Impact).

Mitigation Measures:

None required.

Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant	No Impact
	Incorporated		

2.14 PUBLIC SERVICES. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service rations, response times or other performance objectives for any of the public services:



Discussion:

a, b, c, d, e Substantial Impact Associated with Provision of Services

The project would connect two existing path segments providing pedestrian access on the north side of Chanate Road. This access would be used by neighbors, and particularly by students attending Hidden Valley Elementary School. The project would not result in the need for any additional services including fire, policy, schools parks or other facilities. (No Impact).

Mitigation Measures:

None required.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant	No Impact
 2.15 RECREATION. Would the project: a) Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated? 				\boxtimes
c) Include recreational facilities or require the construction o expansion of recreational facilities that might have an adverse physical effect on the environment?	r			\boxtimes

a. Increase in the Use of Existing Neighborhood and Regional Parks Resulting in Deterioration

The project would not result in the demand for additional recreation services or require the construction or expansion of recreational facilities. As a project that would augment recreational resources, and provide linkages to other resources, it would result in a beneficial recreation impact (Beneficial Impact).

b. Require Construction or Expansion of Recreational Facilities

The project would not require construction or expansion of any additional recreation facilities beyond those proposed as part of the project. It would connect existing path segments in the Hidden Valley neighborhood (No Adverse Impact/ Beneficial Impact).

The project would not result in adverse impacts related to recreation. Expanding the network of pedestrian paths would be a beneficial impact of the project (No Impact).

Mitigation Measures:

None Required.

		Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant	No Impact
2.1	6 TRANSPORTATION / TRAFFIC. Wo	ould the proj	ect:		
a)	Exceed the capacity of the existing circulation system, based on an applicable measure of effectiveness (as designated in a general plan policy, ordinance etc.) taking into account all relevant components of the circulation system, including but not limited to intersections, streets highways and freeways, pedestrian and bicycle paths, and mass transit?		· 🔲		
b)	Conflict with an applicable congestion management program, including, but not limited to, level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?				
c)	Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?				\boxtimes
d)	Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?			\boxtimes	
e)	Result in inadequate emergency access?				\boxtimes
f)	Conflict with adopted policies, plans, or programs supporting alternative transportation (<i>e.g.</i> , bus turnouts, bicycle racks)?				\boxtimes

Traffic and Circulation

a. Exceed the Capacity of the Existing Circulation System

The project would have no impact on the existing circulation system. No changes would be made to the existing number or width of travel lanes through the Hidden Valley neighborhood. Improving non-motorized access would have a beneficial impact on roadway capacity, by reducing vehicle congestion around Hidden Valley Elementary School (No Impact).

b. Conflict with an Applicable Congestion Management Program

Enhancing non-motorized travel is consistent with applicable Congestion Management Programs. One of the key strategies for reducing automobile traffic is providing a network of bicycle and pedestrian paths (No Impact).

c. Result in a Change in Air Traffic Patterns

The proposed project is located approximately 8 miles from the Sonoma County Airport. The project would have no impact on air traffic patterns (No Impact).

d. Substantially Increase Hazards due to a Design Feature

The project would connect two existing path segments. It would not result in any hazards related to a design feature. While not required to reduce a potentially significant impact, signs would be used to alert motorists of project construction, and a flagger would be utilized to ensure safe access and egress of construction vehicles to and from the project site and staging area. See Mitigation Measure 16-1 below (Less-than-Significant Impact).

e. Result in Inadequate Emergency Access

The project would not have any impacts related to emergency access. Access to driveways would be maintained during the construction period. Over the long term, the pedestrian path contributes to emergency access, in the event that the Chanate Road is blocked for any reason (No Impact).

f. Conflict with Adopted Policies, Plans and/or Programs

The project is consistent with adopted plans and policies that support development of a network of bicycle and pedestrian paths for non-motorized travel, and to reduce greenhouse gas emissions that result in climate change (No Impact/Beneficial).

Project impacts related to transportation and circulation would be less-than-significant. Mitigation Measure 16-1 is included to further reduce the level of impact during the construction period, given proximity of the project to the Hidden Valley Elementary School (Less-than-Significant Impact).

Mitigation Measures:

16-1 (a) Signs would be posted alerting residents of the construction period.

(b) Flaggers would be utilized to ensure safe access / egress of construction vehicles to the project site and staging area.

(c) Construction vehicles would coordinate their movements to avoid periods of the day when students are arriving or departing Hidden Valley Elementary School.

		Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant	No Impact
2.1	17 UTILITIES AND SERVICE SYSTEMS.	Would the	project:		
a)	Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?				\boxtimes
b	e) 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 impacts?				
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 impacts?			\boxtimes	
d)	Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?				\boxtimes
e)	Result in a determination by the wastewater treatment provider that serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?				\boxtimes
f)	Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?			\boxtimes	
g)	Comply with federal, state, and local statutes and regulations related to solid waste?			\boxtimes	

a. Exceed Wastewater Treatment requirements

The proposed project would not have any impact on wastewater treatment requirements. It would not involve the installation or use of wastewater treatment facilities (No Impact).

b. Require Construction or Expansion of New Water or Wastewater Treatment Facilities

The proposed project would not require or have any impact on construction or expansion of new water or wastewater treatment facilities (No Impact).

c. Require or Result in the Construction of New Storm Water Drainage facilities

The existing storm drain system would be extended by 15' from the driveway of 3515 Chanate Road into the existing drainage ditch that extends into Paulin Creek. The storm drain system would also be extended 27' east of the driveway at 3210 Chanate Road. All existing utilities would be marked in the field so that they are not inadvertently affected by project construction. While not required to reduce a potentially significant impact, Mitigation Measures 17-1 and 17-2 are recommended as conditions of project approval to further reduce the level of impact (Less-than-Significant Impact).



Figure 7. Storm drains would be extended by 27' within the existing ditch on the north side of Chanate Road.



Figure 8. The storm drain would be extended by 15' toward Paulin Creek.

d. Have Sufficient Water Supplies to Serve the Project

The proposed project would not provide a drinking fountain or any other facility that would utilize water (No Impact).

e. Adequate Wastewater Capacity

The proposed project would not involve installation of a restroom or portable toilet facility. The project would not affect wastewater capacity (No Impact).

f. Landfill Capacity to Serve Project

Six inches of soil would be removed from the path alignment. Given the limited length of the path connection, solid waste impacts of the proposed project would be less-than-significant (Less-than-Significant Impact).

g. Comply with Federal, State and Local Statutes Related to Solid Waste

State law requires cities and/or the counties to prepare a Countywide Integrated Waste Management Plan (ColWMP). The ColWMP is the principal planning document for solid waste management in Sonoma County. Reduction of the quantity of waste deposited by landfills by 50% or greater is required after 2000 based on waste generation rates of 1990. As described in (f) above, the proposed project would result in removal of six inches of soil below the path alignment. This soil would be hauled to a landfill. Given the very limited quantity, the impact would be less than significant (Less-than-Significant Impact).

Impacts related to utilities would be less-than-significant. The following Mitigation Measure is recommended to further reduce the level of impact (Less-than-Significant Impact (LS)).

Mitigation Measures:

- 17-1 Best Management Practices would be used to minimize the amount of sediment entering the storm drain system and Paulin Creek.
- 17-2 All underground utilities should be marked in the field prior to construction. All design drawings should be evaluated by the Transportation and Public Works Department to avoid all potential conflicts during construction.

		Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant	No Impact
18.	MANDATORY FINDINGS OF SIGNIF	ICANCE.			
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?				
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)			\boxtimes	
c)	Does the project have environmental effects that will cause substantial adverse effects on human beings, either directly			\boxtimes	

OVERVIEW OF ENVIRONMENTAL IMPACTS

or indirectly?

As a project that involves the construction of a pedestrian path to connect existing path segments on both sides of Paulin Creek, many of the impacts of the project are beneficial. The project would, however, result in some impacts to the environment, as described below.

Air Quality: The project would result in some short-term air quality impacts including dust from grading and emissions from construction equipment. While not considered potentially significant impacts, mitigation measures are identified to further reduce the level of impact. Over the long term, impacts would be beneficial since the project would create greater opportunity for non-motorized travel in the Hidden Valley neighborhood (LS/M and B).

Biological Resources: Potential wildlife affected by the project includes rainbow trout, Northwestern pond turtle, nesting birds, and hoary bats. Mitigation measures are identified to protect these species during project construction. Mitigation measures including field surveys and use of buffers around nests are identified to avoid impacts to birds nesting in the project area. Riparian habitat disturbed would be enhanced at a mitigation ratio of 3:1. Trees removed would also be replaced in accordance with the Santa Rosa Tree Ordinance. Potentially significant impacts to biological resources would be reduced to a less-than-significant level with the identified mitigation measures (**PS/M**).

Cultural Resources: Creek zones are sensitive with respect to cultural resources due to the availability of water and their use by wildlife. Tom Origer & Associates reported that there are five recorded sites within a half mile radius of the study area. However, no archaeological resources were identified within the study area during the field inspection. Historical maps show buildings near and adjacent to the study area beginning in 1916. However, historic-era cultural resources were not

found within the study area. Mitigation measures are identified in the event that cultural resources are unearthed during the construction process (LS).

Greenhouse Gases: During construction, greenhouse gases would be emitted from trucks traveling to and from the construction site, and from construction equipment. Given the very limited size and short duration of the construction process, impacts related to greenhouse gas emissions would be less-than-significant. Over the long-term, impacts of the project would be beneficial because the project would add to the network of paths for alternative modes of transportation (LS and B).

Geology/Soils: The project is located within approximately ¹/₄ mile of the Rodgers Creek Fault and is likely to experience ground-shaking during the life of the project. Project construction also has the potential to result in erosion. Mitigation measures including soil stabilization fabric under the AC path, and use of best management practices during construction are identified to reduce potentially significant impacts to less-than-significant levels (LS/M).

Hazards and Hazardous Materials: The project would be constructed with the use of petroleum products in proximity to the creek zone. Standard practices would be utilized to ensure that oil and gas from equipment does not enter Paulin Creek. There are no known hazardous materials or waste in the vicinity of the project. Impacts related to hazards and hazardous materials would be less-than-significant (LS).

Hydrology/Water Quality: Construction of the project would require some grading and result in the potential for some erosion and sedimentation. The project would be constructed using best management practices. Impacts related to water quality would be reduced to a less-than-significant level with mitigation measures identified (LS/M).

Noise: The project would result in some potentially significant noise impacts during the construction period. Installation of the bridge abutments and placement of the bridge across Paulin Creek are examples of construction activities that could exceed standards. Mitigation is identified to reduce these impacts to a less-than-significant level (LS/M).

Transportation and Circulation: The project would result in a beneficial impact related to transportation and circulation by connecting two existing path segments, and providing access to Hidden Valley Elementary School. While not required to reduce a potentially significant impact, signs would be posted notifying the public of the construction period, and a flagger would be used as needed to ensure safe access and egress from the project site (LS, B).

Utilities: The project would require extension of the storm drainage facilities that drain to Paulin Creek, and extension of storm drain facilities east of 3510 Chanate Road. Mitigation is included to ensure that installation of storm drain facilities does not result in sediment entering Paulin Creek. Mitigation is also included requiring that all plans be checked by Transportation and Public Works Department staff and that utilities be marked and in the field to avoid inadvertent conflicts (LS).

(Form updated 7/06/04)

Authority: Public Resources Code Sections 21083, 21084, 21084.1, and 21087.

Reference: Public Resources Code Sections 21080(c), 21080.1, 21080.3, 21082.1, 21083, 21083.1 through 21083.3, 21083.6 through 21083.9, 21084.1, 21093, 21094, 21151; *Sundstrom v. County of Mendocino*, 202 Cal. App. 3d 296 (1988); *Leonoff v. Monterey Board of Supervisors*, 222 Cal. App. 3d 1337 (1990).

Endnotes/Information Sources

ⁱ City of Santa Rosa General Plan 2035 Land Use Diagram (<u>http://ci.santa-</u>

rosa.ca.us/doclib/Documents/CDAP_GeneralPlan_Diagram_20110927.pdf) accessed April 18, 2012.

¹¹ City of Santa Rosa GIS Map, Zoning (<u>http://imaps.ci.santa-rosa.ca.us/index.cfm</u>) accessed April 18, 2012

ⁱⁱⁱ Biological Assessment for the Chanate Road Pedestrian Path, Steve Brady, City of Santa Rosa, January, 2012, p.4.

^{iv} Telephone communication with Adam McKannay, Environmental Specialist, California Department of Fish and Game, May 4, 2012.

^v Important Farmlands Map, California Department of Conservation – Division of Resource Protection, 2008 (<u>ftp://ftp.consrv.ca.gov/pub/dlrp/FMMP/pdf/</u>).

^{vi} Sonoma County Agricultural Preserve Lands Subject to Enforceable Restrictions, Sonoma County Planning Department, May 2000.

vii Bay Area Air Quality Management District, CEQA Guidelines, April 13, 2012.

^{viii} Bay Area Air Quality Management District (BAAQMD), Ambient Air Quality Standards and Bay Area Attainment Status, (<u>http://hank.baaqmd.gov/pln/air_quality/ambient_air_quality.htm</u>)

^{1x} Bay Area Air Quality Management District (BAAQMD), Particulate Matter Overview (http://www.baaqmd.gov/Divisions/Planning-and-Research/Particulate-Matter.aspx) February 5, 2010.

* Bay Area Air Quality Management District (BAAQMD) CEQA Guidelines, April 1996; Revised

December 1999. BAAQMD Office: 939 Ellis Street, San Francisco, CA 94109.

^{xi} Brady, Steve, Senior Environmental Specialist, City of Santa Rosa Public Works Department, *Biological Assessment for the Chanate Road Pedestrian Path*, January 5, 2012, p. 7.

^{xii} Brady, Steve, Senior Environmental Specialist, City of Santa Rosa Public Works Department, *Biological* Assessment for the Chanate Road Pedestrian Path, January 5, 2012, p. 9.

^{xiii} Brady, Steve, Senior Environmental Specialist, City of Santa Rosa Public Works Department, January 5, 2012, pp. 8-9.

xiv Brady, Steve, Senior Environmental Specialist, City of Santa Rosa Public Works Department, *Biological Assessment of the Chanate Pedestrian Path*, January 5, 2012, p. 11.

^{xv} Brady, Steve, Senior Environmental Specialist, City of Santa Rosa Public Works Department, *Biological* Assessment of the Chanate Pedestrian Path, January 5, 2012, p. 6.

^{xvi} Brady, Steve, Senior Environmental Specialist, City of Santa Rosa Public Works Department, *Biological* Assessment of the Chanate Pedestrian Path, January 5, 2012, p. 4.

xvii Brady, Steve, Senior Environmental Specialist, City of Santa Rosa Public Works Department,

Biological Assessment of the Chanate Road Pedestrian Path, January 5, 2012, p. 6.

^{xviii} Origer, Tom, A Cultural Resources Study for the Pedestrian Bridge and Path Project, Chanate Road, Sonoma County, December 20, 2011, pp. 6-7.

xix Origer, Tom, A Cultural Resources Study for the Pedestrian Bridge and Path Project, Chanate Road, Sonoma County, December 20, 2011, pp. 3-5.

xx Santa Rosa Climate Action Plan, PMC, p. 4-13. (http://ci.santa-

rosa.ca.us/doclib/Documents/20120120_Draft_CAP.pdf)

^{xxi} Ibid., p. 72.

xxiiSanta Rosa 2035 General Plan (Adopted November 3, 2009), Geologic and Seismic Hazards, Figure 12-3, p. 12-7. ^{xxiii} Ibid. p. 12-7.

xxiv Origer, Tom, A Cultural Resources Study for the Pedestrian Bridge and Path Project, Chanate Road, Sonoma County, December 20, 2011, p. 3.

^{xxv} Department of Toxic Substances Control Hazardous Waste and Substances Site List (Cortese List), accessed April 26, 2012 (http://www.dtsc.ca.gov/database/Calsites/Cortese List.cfm);

xxvi City of Santa Rosa Wildland-Urban Interface Map, accessed April 26, 2012 (http://ci.santarosa.ca.us/doclib/Documents/wildland-urbaninterface.pdf)

xxvii City of Santa Rosa, Santa Rosa General Plan 2035 (Adopted November 3, 2009), FEMA Floodplain and Dam Inundation Map, Figure 12-4.

xxviii Sonoma County General Plan, September, 2008, Figure RC-2i (www.sonomacounty.org/prmd/docs/gp/index.htm).

xxix City of Santa Rosa, Santa Rosa General Plan 2035 (Adopted November 3, 2009), Land Use Compatibility Standards, Figure 12-1.

AM	Project on Constructed/Installed Remarks				
NG PROGR	ge and Path Pro g Shown on Plans				
Table 1 MONITORI	lestrian Bridg Monitoring Agency	R			SR
Table 1 MITIGATION MONITORING PROGRAM	Chanate Road Pedestrian Bridge and Path Project Mitigation Measures Monitoring Shown on Agency Plans	Air Quality 3-1: Implementing the following measures (as specified by the 1996 BAAQMD CEQA Guidelines) would reduce construction-related air quality impacts to an insignificant level.	 Water all active construction areas at least twice daily. Cover all trucks hauling soil, sand and other loose materials, or require trucks to maintain at least two feet of freeboard. Pave, apply water three times daily, or apply (non-toxic) soil stabilizers on all unpaved access roads, parking areas and staging areas at construction sites. Sweep daily (with water sweepers) all paved access roads, parking areas and staging areas at construction sites. Sweep streets daily (with water sweepers) if visible soil material is carried onto adjacent public streets. The contractor shall be responsible for ensuring that all construction equipment and vehicles are maintained in good operating order and that all factory installed emission control devices are installed and functioning properly. All when not in use to minimize emissions. 	Biological Resources	 4-1 A preconstruction survey for Northwestern western pond turtles shall be conducted by a qualified biologist to ensure that no Northwestern pond turtles or nests are in the project area. If located, the turtles could be relocated and/or a buffer established to avoid impacts.

PROGRAM d Path Project	Shown on Constructed/Installed Remarks Plans		· ·	
Table 1 TIGATION MONITORING PROGRAM ate Road Pedestrian Bridge and Path Proj	Monitoring Agency			
Table 1 MITIGATION MONITORING PROGRAM Chanate Road Pedestrian Bridge and Path Project	Mitigation Measures	 To avoid impacts to bats, the following measures would be required: (a) <u>Preconstruction Surveys</u>: All trees and structures suitable for use by bats are to be surveyed for signs of bats no earlier than two to three days prior to project activities. (b) <u>Avoidance Measures</u>: If bats are discovered during the surveys, then a buffer of 100 to 150 feet shall be established. The optimal time to remove trees is September 15th through October 15th, when young would be capable of flying and February 15th to April 1st to avoid hibernating bats and prior formation of maternity sites. 	4-3 Riparian habitat disturbed by the placement of the bridge abutments (0.0067 acres (290 sq. ft.)) would be enhanced at a mitigation ratio of 3 to 1; 0.02 acres (870 square feet) of riparian habitat would be enhanced by planting native vegetation and/or removing invasive plants.	 4-4 Best management erosion control practices would be used to prevent sediment from entering drainages or Paulin Creek. All construction debris would be prevented from entering the riparian area. See Mitigation Measure 7-3.

		Table 1			
	MITIGATION MONITORING PROGRAM	MONITORING	PROGRAM		
NA:4:20	Chanate Road Pedestrian Bridge and Path Project	strian Bridge a	nd Path Projec		-
RIJITAT	IVIILIBALIOII IVICASUITES	Monitoring Agency	Snown on Plans	Constructed/Installed	Kemarks
4-5	All work shall be performed outside of the creek channel to avoid a "take" of rainbow trout.				
4-6	To avoid "take" and/or further evaluate the presence or absence of birds, the following measures shall be implemented:				
	 (a) Grading or removal of any vegetation should be conducted outside the nesting season, which occurs between approximately February 1st and August 31st. (b) If grading or vegetation removal between August 31st and February 1st is infeasible and work must occur within the breeding season, a pre-construction nesting bird survey of the grasslands and adjacent trees shall be performed by a qualified biologist within 7 days of ground breaking. If no nesting birds are observed, no further action is required and work shall occur within one week of the survey to prevent "take" of individual birds that could begin nesting after the survey. (c) If bird nests (either passerine and/or raptor) are observed during the preconstruction survey, a disturbance-free buffer zone shall be established around the nest tree(s) until the young have fledged, as determined by a qualified biologist. 				

Mitigation Monitoring Program - Page 3-3

•

	Table 1 MITIGATION MONITORING PROGRAM Chanate Road Pedestrian Bridge and Path Project	Table 1 MONITORING estrian Bridge al	PROGRAM nd Path Proje	ct	
Miti	Mitigation Measures	Monitoring Agency	Shown on Plans	Constructed/Installed	Remarks
	vary depending on the species, (i.e., generally, 75-100 feet for passerines (perching or song birds)), with the dimensions of any required buffer zones to be determined by a qualified biologist in consultation with CDFG. (e) To delineate the buffer zone around a nesting tree, orange construction fencing shall be placed at the specified radius from the base of the tree within which no machinery or workers shall intrude. (f) After the fencing is in place, there would be no restrictions on grading or construction activities outside of the prescribed buffer.				
4-7	Construction between October 15 and April 15 would require placement of silt fencing and/or sediment barriers to prevent sediment from entering Paulin Creek.				
4-8	Plastic tree protection fencing shall be installed at (or near) the drip-lines of trees to remain.				
4-9	Trees removed for project construction shall be replaced in accordance with the Santa Rosa Tree Protection Ordinance (Chapter 17-24 of the City Code).				

	MITIGATION	Table 1 TIGATION MONITORING PROGRAM	PROGRAM		
	Chanate Road Pedestrian Bridge and Path Project	strian Bridge aı	nd Path Projee	ct	
Mitiş	Mitigation Measures	Monitoring Agency	Shown on Plans	Constructed/Installed	Remarks
	а -				
Cultu	Cultural Resources				
5-1	If any potentially significant deposits or features are discovered, all work in the immediate vicinity of the discovery should be halted and the discovery evaluated by a qualified archeologist. The NAHC shall be contacted and area tribal monitors shall be on-site with the qualified archaeologist. Significant deposits should be removed using archaeological methods, or avoided and left in place. Prehistoric archaeological site indicators include: obsidian and chert flakes and chipped stone tools; grinding and mashing implements (e.g., slabs and handstones, and mortars and pestles); bedrock outcrops and boulders with mortar cups; and locally darkened midden soils. Midden soils may contain a combination of fire-affected stones. Historic period site indicators generally include: fragments of glass, ceramic, and metal objects; milled and split lumber; and structure and features remains such as building foundations and discrete trash deposits (e.g., wells privy pits, dumps).	S			
5-2	If human remains are encountered, excavation or disturbance of the location must be halted in the vicinity of the find, and the county coroner contacted. If the coroner determines the remains are Native American, the coroner will contact the Native American Heritage Commission. The Native American Heritage Commission will identify the person or persons believed to be most likely descended from the deceased Native				

	MITIGATION N Chanate Road Pede	Table 1 FIGATION MONITORING PROGRAM te Road Pedestrian Bridge and Path Project	PROGRAM nd Path Proie	ct.	
Mit	Mitigation Measures	Monitoring Agency	Shown on Plans	Constructed/Installed	Remarks
	American. The most likely descendent makes recommendations regarding the treatment of the remains with appropriate dignity.				
Gre	Greenhouse Gas Emissions				
6-1	The Contractor would implement one of the following measures, at minimum, as appropriate to the construction project: (a) Substitute electrified equipment for diesel- and gasoline-powered equipment where practical. (b) Use alternative fuels for construction equipment on- site, where feasible, such as compressed natural gas (CNG), liquefied natural gas (LNG), propane, or biodiesel. (c) Avoid the use of on-site generators by connecting to grid electricity or utilizing solar powered equipment.	SR			
Geo	Geology, Soils and Seismicity				
7-1	At a minimum, all project improvements shall meet the requirements of the California Building Code (CBC) for Seismic Design Category E.	SR			
7-2	The project shall be constructed during periods of dry weather, and in accordance with wildlife protection (See				

	Constructed/Installed Remarks					
PROGRAM	Shown on Plans					
Table 1 [TIGATION MONITORING PROGRAM ate Road Pedestrian Bridge and Path Proi	Monitoring Agency			SR		
Table 1 MITIGATION MONITORING PROGRAM Chanate Road Pedestrian Bridge and Path Project	Mitigation Measures	Mitigation Measures 4-2 and 4-6). 7-3 Best management practices shall be used to minimize erosion and to prevent construction debris from entering Paulin Creek. Any area disturbed shall be planted and/or have erosion materials installed prior to the winter rains.	Hydrology and Water Quality	See Mitigation Measures 7-1 through 7-3	from the RWQCB.	

Mitigation Measures Monitoring Shown on Agency Constructed/Installed Remarks Noise Noise Shown on Agency Constructed/Installed Remarks Noise 1(3) Noise generating construction activities, including truck traffic coming to add from the site for any purpose would be limited to daytime, weedery, non-holiday hours (800 ant 0: 500 pm.). Any special circumstances which necessful the low and days specified would require that the connector request and the City's project manager approve such work. SR SR (b) Construction end days specified would require that the connector request and the City's project manager approve such work. Construction end days specified would require that the construction-generated noise (Tit monitorized equipment with proper multifiers in good working order). SR SR (b) Construction equipment shall be properly outfitted approve such work. (c) The contractor equipment shall be proper sources and a site approves sources such as atir compressons as fit as particular for equipment with proser multifiers in good working order). (c) The contractor equipment shall be proper sources such as atir compressons as fit as particular for equipment with proser multifiers unsec. (c) The contractor sources such as atir compressons as fit as particular for entractor unsec.		Table 1 MITIGATION MONITORING PROGRAM Chanate Road Pedestrian Bridge and Path Project	Table 1 [TIGATION MONITORING PROGRAM ate Road Pedestrian Bridge and Path Proi	PROGRAM nd Path Proiec		
 (a) Noise-generating construction activities, including truck traffic coming to and from the site for any purpose would be limited to daytime, weekday, non-holiday hours (8:00 am to 5:00 p.m.). Any special circumstances which necessitate performance of construction work outside the hours and days specified would require that the contractor request and the City's project manager approve such work. (b) Construction equipment shall be properly outfitted and maintained with noise reduction devices to minimize construction-generated noise (Fit motorized equipment with proper mufflers in good working order). Unnecessary idling of internal combustion engines would be prohibited. (c) The contractor shall locate stationary noise sources such as air compressors as far as practical from existing nearby residences and other noise-sensitive uses. 	Mitig		Monitoring	Shown on Plans	Constructed/Installed	Remarks
 (a) Noise-generating construction activities, including truck traffic coming to and from the site for any purpose would be limited to daytime, weekday, non-holiday hours (8:00 am to 5:00 p.m.). Any special circumstances which necessitate performance of construction work outside the hours and days specified would require that the contractor request and the City's project manager approve such work. (b) Construction equipment shall be properly outfitted and maintained with noise reduction devices to minimize construction-generated noise (Fit motorized equipment with proper mufflers in good working order). Unnecessary idling of internal combustion engines would be prohibited. (c) The contractor shall locate stationary noise sources such as air compressors as far as practical from existing nearby residences and other noise-sensitive uses. 			1			
 (a) Noise-generating construction activities, including truck traffic coming to and from the site for any purpose would be limited to daytime, weekday, non-holiday hours (8:00 am to 5:00 p.m.). Any special circumstances which necessitate performance of construction work outside the hours and days specified would require that the contractor request and the City's project manager approve such work. (b) Construction equipment shall be properly outfitted and maintained with noise reduction devices to minimize construction-generated noise (Fit motorized equipment with proper mufflers in good working order). Unnecessary idling of internal combustion engines would be prohibited. (c) The contractor shall locate stationary noise sources such as air compressors as far as practical from existing nearby residences and other noise-sensitive uses. 	Nois	C.				
 (b) Construction equipment shall be properly outfitted and maintained with noise reduction devices to minimize construction-generated noise (Fit motorized equipment with proper mufflers in good working order). Unnecessary idling of internal combustion engines would be prohibited. (c) The contractor shall locate stationary noise sources such as air compressors as far as practical from existing nearby residences and other noise-sensitive uses. 	12-1	(a) Noise-generating construction activities, including truck traffic coming to and from the site for any purpose would be limited to daytime, weekday, non-holiday hours (8:00 am to 5:00 p.m.). Any special circumstances which necessitate performance of construction work outside the hours and days specified would require that the contractor request and the City's project manager approve such work.	SR			
(c) The contractor shall locate stationary noise sources such as air compressors as far as practical from existing nearby residences and other noise-sensitive uses.		(b) Construction equipment shall be properly outfitted and maintained with noise reduction devices to minimize construction-generated noise (Fit motorized equipment with proper mufflers in good working order). Unnecessary idling of internal combustion engines would be prohibited.	· ·			
		(c) The contractor shall locate stationary noise sources such as air compressors as far as practical from existing nearby residences and other noise-sensitive uses.				

		Table 1	na barda na manga na		
	MITIGATION MONITORING PROGRAM Chanate Road Pedestrian Bridge and Path Proj	FIGATION MONITORING PROGRAM te Road Pedestrian Bridge and Path Project	PROGRAM nd Path Proje	ct	
Miti	Mitigation Measures	Monitoring	Shown on	Constructed/Installed	Remarks
		Agency	Plans		
Tran	Transportation and Circulation				
16-1	 (a) Signs would be posted alerting residents of the construction period. (b) Flaggers would be utilized to ensure safe access / 	SR			
	egress of construction vehicles to the project site and staging area.				<u></u>
	(c) Construction vehicles would coordinate their movements to avoid periods of the day when students are	SR			
	and repained travely and remained of the				
Utilities	ies				
•		SR			
17-1	Best Management Practices would be used to minimize the amount of sediment entering the storm drain system and Paulin Creek.				
17-2	All underground utilities should be marked in the field prior to construction. All design drawings should be evaluated by the Transportation and				
	rubuc works Department to avoid all potential conflicts during construction.				
1					

4. Agencies and Organizations Consulted

- Ē
- 8
- California Department of Fish and Game Regional Water Quality Control Board Federated Indians of the Graton Rancheria 1

5. Report Preparation

Report Personnel

City of Santa Rosa Transportation and Public Works Department

Richard Moshier, Director Colleen Ferguson, Deputy Director Steve Dittmer, Supervising Engineer Danny Chen, Assistant Engineer Steve Brady, Senior Environmental Specialist Also prepared the Environmental Assessment

City of Santa Rosa Department of Community Development

Charles J. Regalia, Community Development Director Gillian Hayes, City Planner and Environmental Coordinator

Consultants

Nancy Dakin Woltering Environmental Planning Consultant 4739 Sullivan Way Santa Rosa, CA 95409 (707) 291-6197 ndakinep@aol.com

Tom Origer & Associates Post Office Box 1531 Rohnert Park, CA 94927 (707) 584-8200

Attachments

Attachment A:	Biological Assessment, Steve Brady, Senior Environmental Specialist, City of Santa Rosa, January 5, 2012
Attachment B:	Cultural Resources Survey, Tom Origer & Associates, December 20, 2011

Attachment A: Biological Assessment, Steve Brady, Senior Environmental Specialist, City of Santa Rosa, January 5, 2012

BIOLOGICAL ASSESSMENT

FOR

CHANATE ROAD PEDESTRIAN PATH

Prepared by:

Steve Brady Senior Environmental Specialist Engineering Services – Asset Management City of Santa Rosa

January 5, 2012

BIOLOGICAL ASSESSMENT FOR CHANATE ROAD PEDESTRIAN PATH

frank	abl	e of	f Contents	
1]	INT	RODUCTION	4
	1.1		PROJECT DESCRIPTION	4
	1.2	2	PROJECT LOCATION	5
2]	BIO	DLOGICAL SETTING	5
	2.1		VEGETATION AND SOILS	5
	2.2		WETLANDS AND WATERS OF THE U.S.	6
3	ç	SPE	ECIAL-STATUS SPECIES	7
	3.1]	FEDERALLY-PROTECTED SPECIES	7
		3.1.1 calif	1 Santa Rosa Plain plant species and the California tiger salamander (<i>Ambystoma forniese</i>)	7
		3.1.2	2 Sonoma White Sedge (Carex albida)	8
	2	3.1.3	3 Sonoma alopecurus (Alopecurus aequalis var. sonomensis)	8
		3.1.4	4 Pitkin Marsh lily (Lilium pardalinum ssp. pitkinense)	8
			5 Chinook Salmon (<i>Oncorhynchus tshawytscha</i>), Coho Salmon (<i>O. kisutch</i>), and elhead/Rainbow Trout (<i>O. mykiss</i>)	8
	3	3.1.6	6 California freshwater shrimp (Syncaris pacifica)	9
	2	3.1.7	7 Northwestern Pond Turtle (<i>Clemmys marmorata marmorata</i>)	9
	3	3.1.8	8 California red-legged frog (Rana aurora draytonii)	9
	3	3.1.9	9 Northern spotted owl (Strix occidentalis caurina)	0
	3.2	. (OTHER SPECIAL-STATUS SPECIES 10	0
4	ł	REG	GULATORY APPROVALS 10	0
	4.1	1	ARMY CORPS OF ENGINEERS 10	0
	4.2]	NOAA FISHERIES AND US FISH AND WILDLIFE SERVICE 10	0
	4.3 (NC		NORTH COAST REGIONAL WATER QUALITY CONTROL BOARD WQCB)1	1
	4.4	(CALIFORNIA DEPARTMENT OF FISH AND GAME (CDFG) 1	
	4.5	(CITY OF SANTA ROSA TREE ORDINANCE	1
	4.6]	LOW IMPACT DESIGN (LID)1	1
	5	EN 11	NVIRONMENTAL IMPACTS AND RECOMMENDED MITIGATION MEASURES	
	5.1	١	WETLANDS AND WATERS OF THE U.S	1

4

5.1.1	Seasonal Wetlands 1	1
5.1.2	Waters of the U.S 1	11
5.2 SPI	ECIAL STATUS SPECIES 1	12
5.2.1	Listed Plant Species 1	12
5.2.2	California Tiger Salamander 1	12
5.2.3	Northwestern Pond Turtle 1	12
5.2.4	Nesting Birds 1	12
5.2.5	Bats 1	13
SUMMARY		14
REFERENC	ES 1	15

TABLE

TABLE 1. POTENTIAL IMPACTS AND MITIGATION MEASURES

APPENDICES

- APPENDIX A. PROJECT LOCATION
- APPENDIX B. SOIL SURVEY REPORT
- APPENDIX C. SPECIES LIST FROM U.S. FISH AND WILDLIFE SERVICE
- APPENDIX D. SPECIAL STATUS SPECIES WITHIN 2 MILES OF THE PROJECT SITE

1 INTRODUCTION

1.1 **PROJECT DESCRIPTION**

The Chanate Road Pedestrian Path is located near 3515 - 3545 Chanate Road within the City of Santa Rosa. The area consists mainly of medium density residential zoned properties. The proposed pathway will be constructed along the north side of Chanate Road beyond the existing westbound bike lane and within the City's right of way. The approximately 420 foot pathway will connect two existing sidewalk sections and will ensure the safety of pedestrians, including those traveling to nearby Hidden Valley Elementary School. The pathway will begin approximately 100' east of Parker Hill Road connecting to an existing sidewalk at Fitzpatrick Court. The pathway project will cross Paulin Creek and will require two bridge abutments to accommodate the new pedestrian bridge. The abutments will be constructed on the top of bank on either side of the creek.

	<u> </u>
Tree Species	Treatment
Live Oak (Quercus agrifolia) - 10" dia.	Removal
Valley Oak (Quercus lobata) - 3" dia.	Removal
Yellow Willow (Salix lutea) - 3" dia.	Removal
Yellow Willow (<i>Salix lutea</i>) - 6" dia.	Removal
Plum (<i>Prunus sp</i> .) - 6" dia.	Removal
Valley Oak (Quercus lobata) - sapling 1" dia.	Removal
California Walnut (Juglans californica) - 3" dia.	Removal
Liquidambar (Liquidambar styraciflua) - sapling 1" dia.	Removal
Privet (<i>Ligustrum sp.</i>) - multi-trunk each <1" dia.	Removal
Liquidambar (Liquidambar styraciflua) - 4 @ 2" dia.	Removal
Live Oak (Quercus agrifolia) - saplings 3 @ 1" dia.	Removal
Valley Oak (Quercus lobata) - sapling 1" dia.	Removal
Butterfly bush (<i>Buddleja sp</i> .) - 2 multi-trunk	Removal
Yellow Willow (<i>Salix lutea</i>) - 2	Trim
Fruitless Mulberry (Morus alba)	Trim
Flowering Cherry (Prunus sp.)	Trim

Construction near Paulin Creek will require tree removal and trimming to construct the proposed improvements. Specific trees proposed for removal or trimming are listed below.

The proposed pathway consists of an approximately 44' prefabricated bridge and 380' long asphalt concrete (AC) path (less than 0.05 acre). AC dike will be placed to segregating the path from the existing bike lane and to ensure proper drainage. Small retaining walls at various locations will be constructed at the location where there are abrupt changes in grade. The existing storm drain system will be extended from the Chanate Road driveway of 3515 Chanate

Road approximately 15' into the existing drainage ditch toward Paulin Creek and upstream approximately 27' east of the driveway at 3210 Chanate Road.

Where AC pathway lies, 6" of the existing soil will be removed and off hauled to an offsite landfill. A soil stabilization fabric will be placed between the native soil and the compacted Class II Aggregate Base (AB2). 3" of AC will be placed over the AB2. Temporary construction noise is anticipated to occur but it shall not continue after the completion of the project. Since the proposed pathway will be located outside of the existing roadway, it will not create any sight disturbance issue upon the completion of the project.

1.2 PROJECT LOCATION

The project is located in northeast Santa Rosa along 3515-3545 Chanate Road, Sonoma County, California. The site corresponds to Section 12, Township 7 North and Range 8 West of the U.S. Geological Survey topographic quadrangle for Santa Rosa, California (USGS, 1980). Latitude and longitude are 38.471416 N, -122.701458 W, respectively. Elevation is about 265 feet. The project area is located within City of Santa Rosa right-of-way along the north side of Chanate Road adjacent to residential land uses. The project area is located outside the Santa Rosa Plain Conservation Strategy study area (USFWS 2005). A location map is included as Appendix A.

Driving directions to the site are as follows: From U.S. Highway 101 take exit 491 for Steele Lane/Guerneville Road. Turn right and travel 0.5 mi to Mendocino Avenue. Turn left and travel 0.3 mi to Chanate Road. Turn right and travel 0.3 mi. Turn left onto Chanate Road and travel 0.9 mi to the project location.

2 BIOLOGICAL SETTING

The project site includes paved and upland areas along Chanate Road, Paulin Creek, and drainage ditches upstream and downstream of an existing drainage system. The site was evaluated by Steve Brady, Senior Environmental Specialist, on December 14, 2011 and January 3, 2012.

2.1 VEGETATION AND SOILS

Vegetation is dominated by native and nonnative trees and shrubs. Species observed include butterfly bush (*Buddleja sp.*), California walnut (*Juglans californica*), flowering cherry (*Prunus sp.*), fruitless mulberry (*Morus alba*), Himalayan blackberry (*Rubus procerus*), Liquidambar (*Liquidambar styraciflua*), live oak (*Quercus agrifolia*), periwinkle (*Vinca major*), plum (*Prunus sp.*), Privet (*Ligustrum sp.*), valley oak (*Quercus lobata*), yellow willow (*Salix lutea*) and wild onion (*Allium sp.*).

Soil types include Pleasanton Clay Loam, 2 to 5% slopes and Haire Clay Loam, 0 to 9% slopes (USDA NRCS 1992 & 2009). These soil types are well drained and not considered hydric soils. These soil types are also found in terraces, slopes, and alluvial fans. A soil survey report is included as Appendix B.

2.2 WETLANDS AND WATERS OF THE U.S.

The site was evaluated for presence of jurisdictional wetlands and/or waters of the U.S., using methods of the U.S. Army Corps of Engineers 1987 Wetland Delineation Manual and the Arid West Regional Supplement to the 1987 Manual. A site visit was conducted on January 3, 2012 to collect data for a preliminary delineation by Steve Brady (Senior Environmental Specialist) and Sean McNeil (Environmental Specialist). This project was designed to avoid and/or minimize impacts to the jurisdictional Waters of the United States.

Paulin Creek

The western portion of the project will cross Paulin Creek, a perennial stream. Paulin Creek is tributary to Piner Creek, which flows into Santa Rosa Creek before flowing in the Laguna de Santa Rosa, which eventually flows into the Russian River. Vegetation along the stream includes Himalayan blackberry (*Rubus procerus*), and periwinkle (*Vinca major*), Privet (*Ligustrum sp.*), and willow (*Salix sp.*). Vegetation here is typical of the mixed willow series (Sawyer and Keeler-Wolf 2009).

The channel has a defined bed and bank, with evidence of scour, shelving, and a change in vegetation indicating the Ordinary High Water (OHW) mark. Due to the presence of these indicators, no samples were evaluated within the creek and it is considered a jurisdictional Water of the U.S. The OHW channel is 14 feet wide on average.

Seasonal Wetlands

Roadside ditches occur from 3515 Chanate Road west toward Paulin Creek and upstream (east) of the driveway at 3210 Chanate Road, conveying road drainage and overland flow. Portions of both ditches are proposed to be permanently impacted by extending the drainage system to facilitate construction of the pathway. The ditches appear to have been created to drain the roadway and surrounding areas. The upstream ditch is asphalt lined except for the last 6 feet before entering the storm drain system. The downstream ditch appears to be managed to maintain flow and lacks vegetative cover other than a single wild onion (*Allium crispum*) plant. Soil characteristics and vegetation present within both ditches are not consistent with wetland areas. A preliminary wetland delineation indicated these ditches do not qualify as wetlands and/or Waters of the U.S.

SUMMARY OF JURISDICTIONAL WETLANDS AND WATERS OF THE U.S.

Paulin Creek is a jurisdictional Water of the U.S., however and the channel and banks will be avoided during construction. The roadside ditches do not appear to meet wetland criteria and would not be considered jurisdictional wetlands.

3 SPECIAL-STATUS SPECIES

Special-status species are protected through the California Environmental Quality Act, the Native Plant Protection Act, and the California and federal Endangered Species Acts.

The Endangered Species Division of U.S. Fish and Wildlife Service (Appendix C) and the California Department of Fish and Game's California Natural Diversity Database (CNDDB) records (December 2011) were consulted to determine if any special-status species may be impacted by the project. Appendix D lists special-status species with potential to occur or that have been recorded within 2 miles of the project site.

3.1 FEDERALLY-PROTECTED SPECIES

3.1.1 Santa Rosa Plain plant species and the California tiger salamander (*Ambystoma californiese*)

The project is outside the Santa Rosa Plain Conservation Strategy study area (USFWS 2005). Santa Rosa Plain listed plant species include Burke's goldfields (*Lasthenia burkei*), Sebastopol meadowfoam (*Limnanthes vinculans*), Sonoma sunshine (*Blennosperma bakeri*), and many-flowered navarretia (*Navarretia leucocephala spp. plieantha*). Dwarf downingia (*Downingia pusilla*) is not federally protected but occurs within similar habitats.

CTS is federally listed as endangered and is listed by the State of California as threatened under the California Endangered Species Act. Critical habitat has been designated for this species.

CTS habitat needs include grasslands and low (typically below 2000 feet/610 meters) foothill regions where lowland aquatic sites are available for breeding. They prefer natural ephemeral pools or ponds that mimic them (stock ponds that are allowed to go dry). Larvae require significantly more time to transform into juvenile adults than other amphibians such as the western spadefoot toad (*Scaphiopus hammondii*) and Pacific tree frog (*Pseudacris regilla*). Compared to the western toad (*Bufo boreas*) or western spadefoot toad, CTS are poor burrowers. They require refuges provided by ground squirrels and other burrowing mammals in which to enter a dormant state called aestivation during the dry months.

All of these species are found in vernal pools or slow-moving seasonal wetlands. Given the project location it is unlikely the project would affect the California tiger salamander (CTS) or list plant species of the Santa Rosa Plain.

3.1.2 Sonoma White Sedge (Carex albida)

Sonoma white sedge is federally and state listed as Endangered. This species occurs in bogs and fens, marshes and swamps (freshwater) at elevations from 15 to 90 meters. Flowering occurs between May and July. There is only one known occupied occurrence at Pitkin Marsh near Forestville, California. A historic occurrence from Santa Rosa Creek (Occ. 2) is located within 2 miles of the project site. The habitat requirements of this species are not present in Paulin Creek and the species is not likely to occur within or near the project site.

3.1.3 Sonoma alopecurus (Alopecurus aequalis var. sonomensis)

This species is federally listed as Endangered. Sonoma alopecurus occurs in marshes and swamps (freshwater), and riparian scrub, at elevations of 5 to 210 meters. Flowering occurs between May and July. No occurrences are within 2 miles of the project site and habitat requirements of this species are not present within or near the project site. It is not likely for this species to occur within or near the project site.

3.1.4 Pitkin Marsh Iily (Lilium pardalinum ssp. pitkinense)

This species is federally and state listed as Endangered. The Pitkin Marsh lily occurs in cismontane woodland, meadows and seeps, marshes and swamps (freshwater)/ mesic, in sandy soils, at elevations of 35 to 65 meters. Flowering occurs between June and July. This species is known from only two occurrences near Sebastopol, both of which are more than 2 miles away from the project site. Given the species habitat requirements, if is not likely for this species to occur within or near the project site.

3.1.5 Chinook Salmon (*Oncorhynchus tshawytscha*), Coho Salmon (*O. kisutch*), and Steelhead/Rainbow Trout (*O. mykiss*)

These anadromous fish species are listed as threatened and endangered (Coho) species in the Russian River basin. Steelhead/rainbow trout exist within Paulin Creek downstream of the project site. Paulin Creek is tributary to Piner Creek which flows into Santa Rosa Creek, which flows in the Laguna de Santa Rosa, which flows into Mark West Creek and eventually in the Russsian River near Forestville, California. The Sonoma County Water Agency operates the Paulin Creek reservoir downstream of the site which is a barrier to anadromous fish migration. The Santa Rosa Creek watershed has been excluded from critical habitat by the National Marine Fisheries Service due to economic reasons. Chinook and coho salmon are not known to occur within the Paulin or Piner Creek watersheds. There is a potential for resident rainbow trout to

City of Santa Rosa

occur with Paulin Creek adjacent to the project site. All work will be performed outside the creek channel and will not result in "take" of these species.

3.1.6 California freshwater shrimp (Syncaris pacifica)

This species is federally and state listed as Endangered. California freshwater shrimp have evolved to survive a broad range of stream and water temperature conditions characteristic of small, perennial coastal streams. They have been found only in low-elevation (less than 380-foot) and low-gradient (generally less than 1 percent) streams. Excellent habitat conditions include streams of 12 to 36 inches in depth with exposed live roots of trees such as alder and willow, along undercut banks greater than 6 inches with overhanging woody debris or stream vegetation and vines, such as stinging nettles, grasses, vine maple and mint. Such areas may provide refuges from swift currents as well as some protection from high sediment concentrations associated with high stream flows. During the winter, the shrimp is found in undercut banks with exposed fine root systems or dense, overhanging vegetation. These shrimp were historically present in Santa Rosa Creek, however now are known to occur in the Mark West Creek watershed and tributaries to the Laguna de Santa Rosa south of Sebastopol, California. Both known occurrences are most than 2 miles from the project site and their presence is not likely within or near the project site.

3.1.7 Northwestern Pond Turtle (*Clemmys marmorata marmorata*)

Northwestern pond turtle is a federal and state species of concern. They are typically found in slow moving aquatic habitat, including ponds, marshes, rivers, and streams with rocky or muddy substrates and extensive aquatic and emergent vegetation. Pond turtles prefer areas with adequate basking sites and egg laying areas within 200 m (656 feet) of aquatic areas.

This species has been found in adjacent watersheds (Occ. 403, 432 and 513) and it is possible that this species occurs within or near the project area. Preconstruction surveys for the Northwestern pond turtle are recommended to avoid impacts within the riparian area.

3.1.8 California red-legged frog (Rana aurora draytonii)

California red-legged frog is federally listed as threatened and critical habitat has been designated. They are typically found in perennial to intermittent ponds, streams and wetlands, and prefer dense, shrubby riparian vegetation associated with deep, still or slow-moving water. The shrubby riparian vegetation that structurally seems to be most suitable for California red-legged frogs is that provided by arroyo willow (*Salix lasiolepis*), while cattails (*Typha* spp.) and bulrushes (*Scirpus* spp.) also provide suitable habitat. Populations probably cannot be maintained in ephemeral streams in which surface water disappears. The closest documented occurrence is located over 6.5 miles (10.5 km) east of the project site.

3.1.9 Northern spotted owl (*Strix occidentalis caurina*)

This species is federally-listed as Threatened. Scientific research and monitoring indicate that spotted owls generally rely on mature and old-growth forests because these habitats contain the structures and characteristics required for nesting, roosting, and foraging. The project area does not include this type of habitat, and therefore is not likely to support this species.

3.2 OTHER SPECIAL-STATUS SPECIES

Additional special-status plant and animal species that may occur within the project vicinity are included in Appendix D.

4 REGULATORY APPROVALS

The Project is located over and adjacent to Paulin Creek and may be required to submit the following permit applications to the appropriate agencies.

4.1 ARMY CORPS OF ENGINEERS

This project will avoid adding fill or dredge materials into wetland and riparian areas that are adjacent to the project area and will likely not require a Section 404 permit of the Clean Water Act. This act requires approval prior to discharging dredged or fill material into the waters of the United States. Projects must obtain a Nationwide or Individual Permit from this agency. Impacts from wetlands and /or waters of the U.S. would be based on a Corps verified jurisdictional wetland delineation.

4.2 NOAA FISHERIES AND US FISH AND WILDLIFE SERVICE

Section 7 of the Endangered Species Act (ESA) outlines the procedures for Federal interagency cooperation to conserve federally listed species and designated critical habitat. Federal agencies must consult with NOAA Fisheries or USFWS on activities that may affect a listed species. These interagency, or Section 7, consultations are designed to assist federal agencies in fulfilling their duty to ensure any action they authorize, fund, or carry out is not likely to jeopardize the continued existence of a listed species or result in the destruction or adverse modification of designated critical habitat. In fulfilling these requirements, each agency must use the best scientific and commercial data available.

4.3 NORTH COAST REGIONAL WATER QUALITY CONTROL BOARD (NCRWQCB)

This project will be adding fill material into the riparian area that is adjacent to Paulin Creek and will most likely require a Clean Water Act Section 401/Waste Discharge Requirement Permit.

4.4 CALIFORNIA DEPARTMENT OF FISH AND GAME (CDFG)

Impacts to the riparian area will likely require a Lake or Streambed Alteration Agreement issued by the CDFG.

4.5 CITY OF SÁNTA ROSA TREE ORDINANCE

Permits are required for removal, alteration or relocation of all trees with a 4" or greater diameter in all zoning districts.

4.6 LOW IMPACT DESIGN (LID)

LID is required are part of the City's municipal storm water National Pollutant Discharge Elimination System (NPDES) permit and/or Clean Water Act Section 401 Water Quality Certifications/Waste Discharge Requirements all issued by the North Coast Regional Water Quality Control Board . The City has drafted a technical guidance manual for design measures that reduce water quality impacts from development or redevelopment projects.

5 ENVIRONMENTAL IMPACTS AND RECOMMENDED MITIGATION MEASURES

Impacts identified and recommended mitigation measures are listed below for all resources with the potential to be impacted by the project.

5.1 WETLANDS AND WATERS OF THE U.S.

5.1.1 Seasonal Wetlands

Impact: The project area will not impact seasonal wetlands.

5.1.2 Waters of the U.S.

Impact: The project will not impact Waters of the U.S.

5.2 SPECIAL STATUS SPECIES

5.2.1 Listed Plant Species

Impact: The project will not impact listed plant species.

5.2.2 California Tiger Salamander

Impact: The project will not impact CTS.

5.2.3 Northwestern Pond Turtle

Impact: The northwestern pond turtle has been found in adjacent watersheds to Paulin Creek. It is possible that this species occurs within the project area and could be impacted by the project.

Mitigation Measure: A preconstruction survey will be conducted by a qualified biologist to ensure that no northwestern pond turtles or nests are in the project area. If located the turtles could be relocated and/or a buffer would be established to avoid impacts.

5.2.4 Nesting Birds

Impact: The proposed projects could result in disturbance to nesting birds if work is to be conducted between February 1 and August 31, or when eggs or young are occupying the nest. Disturbance during the nesting season may result in the potential nest abandonment and mortality of young.

Mitigation Measure: To avoid "take" and/or further evaluate presence or absence of birds, the following measures are recommended:

- Grading or removal of any vegetation should be conducted outside the nesting season, which occurs between approximately February 1 and August 31.
- If grading or vegetation removal between August 31 and February 1 is infeasible and work must occur within the breeding season, a pre-construction nesting bird (both passerine and raptor) survey of the grasslands and adjacent trees shall be performed by a qualified biologist within 7 days of ground breaking. If no nesting birds are observed no further action is required and work shall occur within one week of the survey to prevent "take" of individual birds that could begin nesting after the survey.
- If bird nests (either passerine and/or raptor) are observed during the preconstruction survey, a disturbance-free buffer zone shall be established around the nest tree(s) until the young have fledged, as determined by a qualified biologist.

- The radius of the required buffer zone can vary depending on the species, (i.e., 75-100 feet for passerines and 200-300 feet for raptors), with the dimensions of any required buffer zones to be determined by a qualified biologist in consultation with CDFG.
- To delineate the buffer zone around a nesting tree, orange construction fencing shall be placed at the specified radius from the base of the tree within which no machinery or workers shall intrude.
- After the fencing is in place there will be no restrictions on grading or construction activities outside the prescribed buffer zones.

5.2.5 Bats

Impact: There is potential for the hoary bats and other sensitive bat species to utilize the site. If any mature trees or structures are removed, there may be impacts to bats utilizing these areas. Construction activities may also disturb roosting bats.

Mitigation Measure: The following recommended mitigation measures will result in a less than significant impact to roosting bats.

Preconstruction Surveys

• All trees and structures suitable for use by bats are to be surveyed for signs of bats no earlier than two to three days prior to project activities.

Avoidance Measures

- If bats are discovered during the surveys then a buffer of 100 to 150 feet should be established.
- The optimal time to remove trees is September 15 through October 15, when young would be capable of flying and February 15 to April 1 to avoid hibernating bats and prior formation of maternity sites.

All resources requiring mitigation measures are listed below (Table 1).

Measure	Resource	Acres	Mitigation Ratio	Proposed Mitigation
	Wetlands and waters of			
1	the U.S.			
				Sediment and erosion control
1.1	Seasonal wetlands	None	N/A	BMPs to protect ditches.
				Measures to keep debris from
	_			construction from impacting
1.2	Waters of the U.S.	None	N/A	creek area.
2	Special-status species			
				Preconstruction surveys,
				relocation or buffer if
2.1	Western pond turtle			necessary.
				Construction timing or
				preconstruction surveys
2.2	Nesting birds			and/or buffer.
				Construction timing or
				preconstruction surveys
2.3	Bats			and/or buffer.
3	Trees			
				Planting of one tree for every
3.1	Trees			6 inches dbh removed.
4	Riparian Habitat			
				Enhance 0.02 acres (870 ft ²)
	Riparian area impacted			of riparian habitat by planting
	by abutment and path	0.0067		native vegetation and/or
4.1	construction.	(290 ft ²)	3 to 1	removing invasives.
5	Low Impact Design			
	To capture and treat			
	increased runoff off the			Consistent with the City's
	site after project			Storm Water LID Technical
5.1	completion.			Guidance Manual.

 Table 1: Potential impacts and mitigation measures

SUMMARY

- The Chanate Road Pedestrian Path Project includes construction of a new pathway along the roadway and a bridge over Paulin Creek.
- The project has been designed to avoid adding fill or dredge materials to wetlands and the waters of the U.S.

- The project will not affect Federally or State protected plant or animals species.
- The project is expected to permanently impact 0.0067 acres of riparian habitat.
- The project will likely need to enhance riparian habitat at a 3 to 1 ratio.

REFERENCES

Sawyer, and T. Keeler-Wolf, 2009. *A Manual of California Vegetation*. Online version at http://www.ice.ucdavis.edu/cnps/. California Native Plant Society, Sacramento, CA. Viewed on March 23.

U.S. Army Corps of Engineers, 1987. *Corps of Engineers Wetland Delineation Manual*. Technical Report Y-87-1. Department of the Army, Waterways Experiment Station, Vicksburg, MS.

U.S. Army Corps of Engineers, 2008. *Regional Supplement to the Corps of Engineers Wetland Delineation manual: Arid West Region (Version 2.0).* U.S. Army Engineer Research and Development Center, Vicksburg, MS. September.

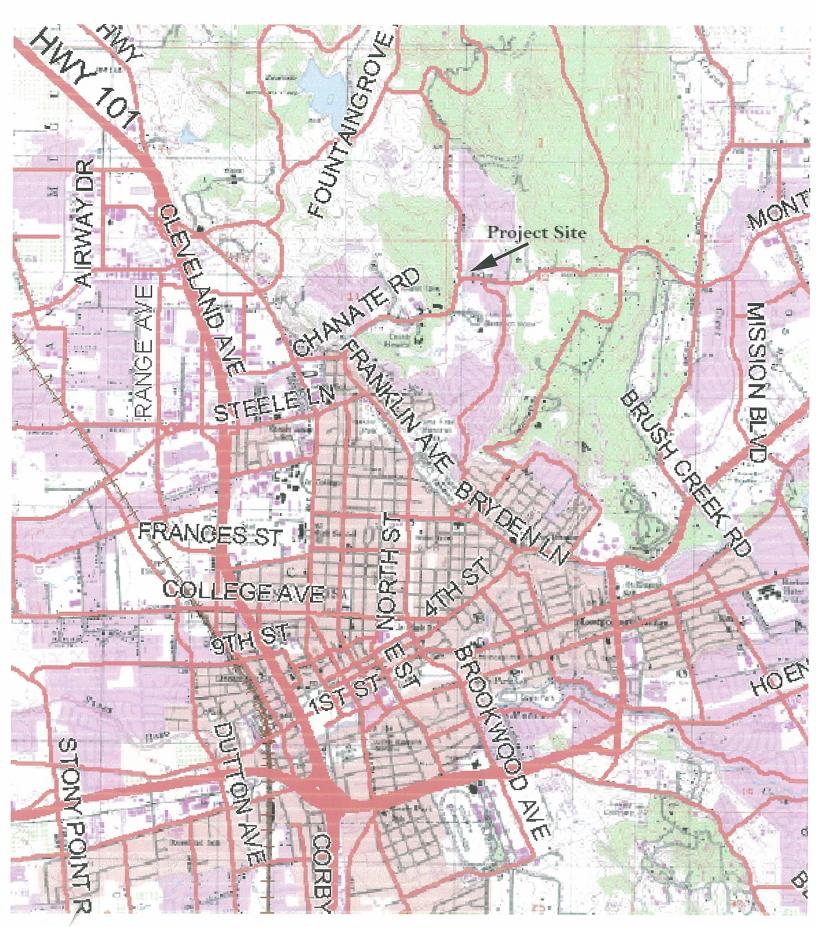
U.S. Department of Agriculture, Natural Resource Conservation Service, 1992. *Hydric Soils List for Sonoma County.*

U.S. Department of Agriculture, Natural Resource Conservation Service, 2009. Custom Soil Resoruce Report for Sonoma County, California. *Web Soil Survey.* Available online at http://websoilsurvey.nrcs.usda.gov/. Accessed December 2011.

U.S. Fish and Wildlife Service, 2005. Santa Rosa Plain Conservation Strategy. Sacramento, CA.

U.S. Geological Survey, 1980. 7.5 minute topographic quadrangle for "Santa Rosa, California." Photorevised.

Appendix A Chanate Road Pedestrian Path



Appendix B.



Natural Resources Conservation Service A product of the National Cooperative Soil Survey, a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local participants

Custom Soil Resource Report for Sonoma County, California

Chanate Road Ped Path



December 21, 2011

Preface

Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (http://soils.usda.gov/sqi/) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (http://offices.sc.egov.usda.gov/locator/app? agency=nrcs) or your NRCS State Soil Scientist (http://soils.usda.gov/contact/ state_offices/).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Soil Data Mart Web site or the NRCS Web Soil Survey. The Soil Data Mart is the data storage site for the official soil survey information.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, age, disability, and where applicable, sex, marital status, familial status, parental status, religion, sexual orientation, genetic information, political beliefs, reprisal, or because all or a part of an individual's income is derived from any public assistance program. (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at (202) 720-2600 (voice and TDD). To file a complaint of discrimination, write to USDA, Director, Office of Civil Rights, 1400 Independence Avenue, S.W., Washington, D.C. 20250-9410 or call (800) 795-3272 (voice) or (202) 720-6382 (TDD). USDA is an equal opportunity provider and employer.

Contents

Preface	2
How Soil Surveys Are Made	
Soil Map	
Soil Map	
Legend	
Map Unit Legend	
Map Unit Descriptions	
Sonoma County, California	
HcC-HAIRE CLAY LOAM, 0 TO 9 PERCENT SLOPES	12
PhB-PLEASANTON CLAY LOAM, 2 TO 5 PERCENT SLOPES	13
References	15

How Soil Surveys Are Made

Soil surveys are made to provide information about the soils and miscellaneous areas in a specific area. They include a description of the soils and miscellaneous areas and their location on the landscape and tables that show soil properties and limitations affecting various uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They observed and described many soil profiles. A soil profile is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed or from the surface down to bedrock. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

Currently, soils are mapped according to the boundaries of major land resource areas (MLRAs). MLRAs are geographically associated land resource units that share common characteristics related to physiography, geology, climate, water resources, soils, biological resources, and land uses (USDA, 2006). Soil survey areas typically consist of parts of one or more MLRA.

The soils and miscellaneous areas in a survey area occur in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landform or with a segment of the landform. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landform, a soil scientist develops a concept, or model, of how they were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil scientists classified and named the soils in the survey area, they compared the

individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

The objective of soil mapping is not to delineate pure map unit components; the objective is to separate the landscape into landforms or landform segments that have similar use and management requirements. Each map unit is defined by a unique combination of soil components and/or miscellaneous areas in predictable proportions. Some components may be highly contrasting to the other components of the map unit. The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The delineation of such landforms and landform segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, onsite investigation is needed to define and locate the soils and miscellaneous areas.

Soil scientists make many field observations in the process of producing a soil map. The frequency of observation is dependent upon several factors, including scale of mapping, intensity of mapping, design of map units, complexity of the landscape, and experience of the soil scientist. Observations are made to test and refine the soillandscape model and predictions and to verify the classification of the soils at specific locations. Once the soil-landscape model is refined, a significantly smaller number of measurements of individual soil properties are made and recorded. These measurements may include field measurements, such as those for color, depth to bedrock, and texture, and laboratory measurements, such as those for content of sand, silt, clay, salt, and other components. Properties of each soil typically vary from one point to another across the landscape.

Observations for map unit components are aggregated to develop ranges of characteristics for the components. The aggregated values are presented. Direct measurements do not exist for every property presented for every map unit component. Values for some properties are estimated from combinations of other properties.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Some interpretations are modified to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

Soil Map

The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.



Custom Soil Resource Report Soil Map **Custom Soil Resource Report**

MAP INFORMATION	Map Scale: 1:640 if printed on A size (8.5" × 11") sheet. The coil survey that commiss your AAI were appred of 4.20 000	וווכ אמו אמו אבאא ווומו כטוווטואכ אממו אכו אבוב ווומטאבמ מו ו.צטיטטט.	Warning: Soil Map may not be valid at this scale.	Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line	placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.		Please rely on the bar scale on each map sheet for accurate map	ilidadu chichis.	Source of Map: Natural Resources Conservation Service	Web Soil Survey URL: http://websoilsurvey.nrcs.usda.gov Coordinate Svstem: 1JTM Zone 10N NADB3		This product is generated from the USDA-NRCS certified data as of the varsion data(s) listed helow	the version date(s) instea below.	Soil Survey Area: Sonoma County, California Survey Area Data: Version 4 Dec 12 2007		Date(s) aerial images were photographed: 6/22/2005	The orthophoto or other base map on which the soil lines were	compiled and digitized probably differs from the background	imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.					
MAP LEGEND	Area of Interest (AOI) (C) Very Stony Spot	Soil Man Units Other	al Po		X Clay Spot	Closed Depression Cities Cities	🔀 Gravel Pit Water Features	Gravelly Spot	Landfill Transportation	Λ Lava Flow ++++ Rails	Marsh or swamp اnterstate Highways المعالمة معالمة معالمة المعالمة م	Mine or Quarry US Routes	Miscellaneous Water Major Roads	Perennial Water Local Roads	 Rock Outcrop 	+ Saline Spot	Sandy Spot	= Severely Eroded Spot	♦ Sinkhole	3. Slide or Slip	ø Sodic Spot	Spoil Area	Stony Spot Spot	

Map Unit Legend

Sonoma County, California (CA097)										
Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI							
HcC	HAIRE CLAY LOAM, 0 TO 9 PERCENT SLOPES	0.0	36.1%							
PhB	PLEASANTON CLAY LOAM, 2 TO 5 PERCENT SLOPES	0.0	64.0%							
Totals for Area of Interes	st	0.1	100.0%							

Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An association is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

Sonoma County, California

HcC—HAIRE CLAY LOAM, 0 TO 9 PERCENT SLOPES

Map Unit Setting

Elevation: 20 to 2,400 feet *Mean annual precipitation:* 30 inches *Mean annual air temperature:* 57 degrees F *Frost-free period:* 200 to 300 days

Map Unit Composition

Haire and similar soils: 85 percent Minor components: 15 percent

Description of Haire

Setting

Landform: Terraces Landform position (two-dimensional): Footslope Landform position (three-dimensional): Base slope Down-slope shape: Linear Across-slope shape: Concave Parent material: Alluvium derived from sedimentary rock

Properties and qualities

Slope: 0 to 9 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Moderately well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water capacity: Moderate (about 7.3 inches)

Interpretive groups

Land capability classification (irrigated): 3e Land capability (nonirrigated): 3e Ecological site: CLAYPAN (R014XC010CA)

Typical profile

0 to 24 inches: Clay loam 24 to 36 inches: Clay 36 to 60 inches: Very cobbly clay loam

Minor Components

Unnamed

Percent of map unit: 5 percent *Landform:* Basin floors

Diablo

Percent of map unit: 4 percent

Clear lake

Percent of map unit: 2 percent Landform: Depressions

Arbuckle

Percent of map unit: 2 percent

Zamora

Percent of map unit: 2 percent

PhB—PLEASANTON CLAY LOAM, 2 TO 5 PERCENT SLOPES

Map Unit Setting

Elevation: 2,400 feet *Mean annual precipitation:* 25 inches *Mean annual air temperature:* 59 degrees F *Frost-free period:* 260 to 280 days

Map Unit Composition

Pleasanton and similar soils: 85 percent Minor components: 15 percent

Description of Pleasanton

Setting

Landform: Alluvial fans, terraces Landform position (two-dimensional): Backslope Landform position (three-dimensional): Tread Down-slope shape: Linear Across-slope shape: Linear Parent material: Alluvium derived from sedimentary rock

Properties and qualities

Slope: 2 to 5 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high (0.20 to 0.57 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water capacity: Moderate (about 8.5 inches)

Interpretive groups

Land capability classification (irrigated): 2e Land capability (nonirrigated): 3e

Typical profile

0 to 27 inches: Gravelly clay loam 27 to 72 inches: Gravelly clay loam

Minor Components

Arbuckle

Percent of map unit: 5 percent

Cortina

Percent of map unit: 5 percent

Zamora

Percent of map unit: 5 percent

References

American Association of State Highway and Transportation Officials (AASHTO). 2004. Standard specifications for transportation materials and methods of sampling and testing. 24th edition.

American Society for Testing and Materials (ASTM). 2005. Standard classification of soils for engineering purposes. ASTM Standard D2487-00.

Cowardin, L.M., V. Carter, F.C. Golet, and E.T. LaRoe. 1979. Classification of wetlands and deep-water habitats of the United States. U.S. Fish and Wildlife Service FWS/OBS-79/31.

Federal Register. July 13, 1994. Changes in hydric soils of the United States.

Federal Register. September 18, 2002. Hydric soils of the United States.

Hurt, G.W., and L.M. Vasilas, editors. Version 6.0, 2006. Field indicators of hydric soils in the United States.

National Research Council. 1995. Wetlands: Characteristics and boundaries.

Soil Survey Division Staff. 1993. Soil survey manual. Soil Conservation Service. U.S. Department of Agriculture Handbook 18. http://soils.usda.gov/

Soil Survey Staff. 1999. Soil taxonomy: A basic system of soil classification for making and interpreting soil surveys. 2nd edition. Natural Resources Conservation Service, U.S. Department of Agriculture Handbook 436. http://soils.usda.gov/

Soil Survey Staff. 2006. Keys to soil taxonomy. 10th edition. U.S. Department of Agriculture, Natural Resources Conservation Service. http://soils.usda.gov/

Tiner, R.W., Jr. 1985. Wetlands of Delaware. U.S. Fish and Wildlife Service and Delaware Department of Natural Resources and Environmental Control, Wetlands Section.

United States Army Corps of Engineers, Environmental Laboratory. 1987. Corps of Engineers wetlands delineation manual. Waterways Experiment Station Technical Report Y-87-1.

United States Department of Agriculture, Natural Resources Conservation Service. National forestry manual. http://soils.usda.gov/

United States Department of Agriculture, Natural Resources Conservation Service. National range and pasture handbook. http://www.glti.nrcs.usda.gov/

United States Department of Agriculture, Natural Resources Conservation Service. National soil survey handbook, title 430-VI. http://soils.usda.gov/

United States Department of Agriculture, Natural Resources Conservation Service. 2006. Land resource regions and major land resource areas of the United States, the Caribbean, and the Pacific Basin. U.S. Department of Agriculture Handbook 296. http://soils.usda.gov/

Custom Soil Resource Report

United States Department of Agriculture, Soil Conservation Service. 1961. Land capability classification. U.S. Department of Agriculture Handbook 210.

Appendix C. United States Department of the Interior



FISH AND WILDLIFE SERVICE



Sacramento Fish and Wildlife Office 2800 Cottage Way, Room W-2605 Sacramento, California 95825

December 21, 2011

Document Number: 111221114618

Steve Brady City of Santa Rosa 69 Stony Circle Santa Rosa, CA 95401

Subject: Species List for Chanate Road Pedestrian Pathway

Dear: Mr.

We are sending this official species list in response to your December 21, 2011 request for information about endangered and threatened species. The list covers the California counties and/or U.S. Geological Survey 7¹/₂ minute quad or quads you requested.

Our database was developed primarily to assist Federal agencies that are consulting with us. Therefore, our lists include all of the sensitive species that have been found in a certain area *and also ones that may be affected by projects in the area*. For example, a fish may be on the list for a quad if it lives somewhere downstream from that quad. Birds are included even if they only migrate through an area. In other words, we include all of the species we want people to consider when they do something that affects the environment.

Please read Important Information About Your Species List (below). It explains how we made the list and describes your responsibilities under the Endangered Species Act.

Our database is constantly updated as species are proposed, listed and delisted. If you address proposed and candidate species in your planning, this should not be a problem. However, we recommend that you get an updated list every 90 days. That would be March 20, 2012.

Please contact us if your project may affect endangered or threatened species or if you have any questions about the attached list or your responsibilities under the Endangered Species Act. A list of Endangered Species Program contacts can be found <u>here</u>.

Endangered Species Division

Sacramento Fish & Wildlife Office Species List

These buttons will not appear on your list.

Revise Selection

Print this page

Print species list before going on to letter.

Make Official Letter

U.S. Fish & Wildlife Service

Sacramento Fish & Wildlife Office

Federal Endangered and Threatened Species that Occur in or may be Affected by Projects in the Counties and/or U.S.G.S. 7 1/2 Minute Quads you requested

Document Number: 111221115150

Database Last Updated: September 18, 2011

Quad Lists

Listed Species

Invertebrates

- Syncaris pacifica
 - California freshwater shrimp (E)

Fish

- Oncorhynchus kisutch
 - coho salmon central CA coast (E) (NMFS)
- Oncorhynchus mykiss
 - Central California Coastal steelhead (T) (NMFS)
 - Central Valley steelhead (T) (NMFS)
- Oncorhynchus tshawytscha
 - California coastal chinook salmon (T) (NMFS)
 - Central Valley spring-run chinook salmon (T) (NMFS)
 - winter-run chinook salmon, Sacramento River (E) (NMFS)

Amphibians

- Ambystoma californiense
 - California tiger salamander, central population (T)
 - California tiger salamander, Sonoma Co. pop (E)

Sacramento Fish & Wildlife Office Species List

- Rana draytonii
 - California red-legged frog (T)
 - Critical habitat, California red-legged frog (X)

Birds

- Strix occidentalis caurina
 - northern spotted owl (T)

Plants

- Astragalus clarianus

 Clara Hunt's milk-vetch (E)
- Blennosperma bakeri
 - Baker's stickyseed [=Sonoma Sunshine] (E)
- Limnanthes vinculans
 - Sebastopol meadowfoam (E)

Proposed Species

Amphibians

- Rana draytonii
 - Critical habitat, California red-legged frog (PX)

Quads Containing Listed, Proposed or Candidate Species:

SANTA ROSA (501B)

County Lists

Listed Species

Invertebrates

- Haliotes cracherodii
 - black abalone (E) (NMFS)
- Haliotes sorenseni
 - white abalone (E) (NMFS)
- Speyeria zerene behrensii
 - Behren's silverspot butterfly (E)
- Speyeria zerene myrtleae

Sacramento Fish & Wildlife Office Species List

- Myrtle's silverspot butterfly (E)
- Syncaris pacifica
 - California freshwater shrimp (E)

Fish

- Acipenser medirostris

 green sturgeon (T) (NMFS)
- Eucyclogobius newberryi
 - critical habitat, tidewater goby (X)
 - tidewater goby (E)
- Oncorhynchus kisutch
 - coho salmon central CA coast (E) (NMFS)
 - Critical habitat, coho salmon central CA coast (X) (NMFS)
- Oncorhynchus mykiss
 - Central California Coastal steelhead (T) (NMFS)
 - Critical habitat, Central California coastal steelhead (X) (NMFS)
 - Critical habitat, Northern California steelhead (X) (NMFS)
 - Northern California steelhead (T) (NMFS)
- Oncorhynchus tshawytscha
 - California coastal chinook salmon (T) (NMFS)
 - Central Valley spring-run chinook salmon (T) (NMFS)
 - Critical habitat, California coastal chinook salmon (X) (NMFS)
 - Critical habitat, winter-run chinook salmon (X) (NMFS)
 - winter-run chinook salmon, Sacramento River (E) (NMFS)

Amphibians

- Ambystoma californiense
 - California tiger salamander, Sonoma Co. pop (E)
- Rana draytonii
 - California red-legged frog (T)

Reptiles

- Caretta caretta

 loggerhead turtle (T) (NMFS)
- Chelonia mydas (incl. agassizi)
 green turtle (T) (NMFS)
- Dermochelys coriacea

 leatherback turtle (E) (NMFS)
- Lepidochelys olivacea

 olive (=Pacific) ridley sea turtle (T) (NMFS)

Birds

- Brachyramphus marmoratus
 - Critical habitat, marbled murrelet (X)
 - marbled murrelet (T)
- Charadrius alexandrinus nivosus

 western snowy plover (T)
- Diomedea albatrus

 short-tailed albatross (E)
- Pelecanus occidentalis californicus

 California brown pelican (E)
- Rallus longirostris obsoletus

 California clapper rail (E)
- Strix occidentalis caurina
 - northern spotted owl (T)

Mammals

- Arctocephalus townsendi

 Guadalupe fur seal (T) (NMFS)
- Balaenoptera borealis

 sei whale (E) (NMFS)
- Balaenoptera musculus

 blue whale (E) (NMFS)
- Balaenoptera physalus

 finback (=fin) whale (E) (NMFS)
- Eubalaena (=Balaena) glacialis
 right whale (E) (NMFS)
- Eumetopias jubatus

 Steller (=northern) sea-lion (T) (NMFS)
- Megaptera novaeangliae

 humpback whale (E) (NMFS)
- Physeter catodon (=macrocephalus)
 sperm whale (E) (NMFS)
- Reithrodontomys raviventris

 salt marsh harvest mouse (E)

Plants

- Alopecurus aequalis var. sonomensis
 Sonoma alopecurus (E)
- Astragalus clarianus
 - Clara Hunt's milk-vetch (E)

Sacramento Fish & Wildlife Office Species List

- Blennosperma bakeri
 Baker's stickyseed [=Sonoma Sunshine] (E)
- Carex albida

 white sedge (E)
- Clarkia imbricata
 - Vine Hill clarkia (E)
- Cordylanthus tenuis ssp. capillaris

 Pennell's bird's-beak (E)
- Delphinium bakeri

 Critical habitat, Baker's larkspur (X)
- Delphinium luteum
 - Critical habitat, yellow larkspur (X)
 - yellow larkspur (E)
- Eryngium constancei
 Loch Lomond coyote-thistle (=button-celery) (E)
- Lasthenia burkei
 - Burke's goldfields (E)
- Lilium pardalinum ssp. pitkinense
 Pitkin Marsh lily (E)
- Limnanthes vinculans

 Sebastopol meadowfoam (E)
- Lupinus tidestromii
 - clover lupine [Tidestrom's lupine] (E)
- Navarretia leucocephala ssp. plieantha

 many-flowered navarretia (E)

- Sidalcea oregana ssp. valida
 - Kenwood Marsh checkermallow (=checkerbloom) (E)

Proposed Species

Amphibians

- Rana draytonii
 - Critical habitat, California red-legged frog (PX)

Key:

- (E) Endangered Listed as being in danger of extinction.
- (T) Threatened Listed as likely to become endangered within the foreseeable future.
- (P) Proposed Officially proposed in the Federal Register for listing as endangered or threatened.
- (NMFS) Species under the Jurisdiction of the <u>National Oceanic & Atmospheric</u> <u>Administration Fisheries Service</u>. Consult with them directly about these species.
- Critical Habitat Area essential to the conservation of a species.
- (PX) Proposed Critical Habitat The species is already listed. Critical habitat is being proposed for it.
- (C) Candidate Candidate to become a proposed species.
- (V) Vacated by a court order. Not currently in effect. Being reviewed by the Service.
- (X) Critical Habitat designated for this species

Important Information About Your Species List

How We Make Species Lists

We store information about endangered and threatened species lists by U.S. Geological Survey 7½ minute quads. The United States is divided into these quads, which are about the size of San Francisco.

The animals on your species list are ones that occur within, or may be affected by projects within, the quads covered by the list.

- Fish and other aquatic species appear on your list if they are in the same watershed as your quad or if water use in your quad might affect them.
- Amphibians will be on the list for a quad or county if pesticides applied in that area may be carried to their habitat by air currents.
- Birds are shown regardless of whether they are resident or migratory. Relevant birds on the county list should be considered regardless of whether they appear on a quad list.

Plants

Any plants on your list are ones that have actually been observed in the area covered by the list. Plants may exist in an area without ever having been detected there. You can find out what's in Sacramento Fish & Wildlife Office Species List

the surrounding quads through the California Native Plant Society's online <u>Inventory of Rare and</u> <u>Endangered Plants</u>.

Surveying

Some of the species on your list may not be affected by your project. A trained biologist and/or botanist, familiar with the habitat requirements of the species on your list, should determine whether they or habitats suitable for them may be affected by your project. We recommend that your surveys include any proposed and candidate species on your list. See our <u>Protocol</u> and <u>Recovery Permits</u> pages.

For plant surveys, we recommend using the <u>Guidelines for Conducting and Reporting Botanical</u> <u>Inventories</u>. The results of your surveys should be published in any environmental documents prepared for your project.

Your Responsibilities Under the Endangered Species Act

All animals identified as listed above are fully protected under the Endangered Species Act of 1973, as amended. Section 9 of the Act and its implementing regulations prohibit the take of a federally listed wildlife species. Take is defined by the Act as "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect" any such animal.

Take may include significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding, or shelter (50 CFR §17.3).

Take incidental to an otherwise lawful activity may be authorized by one of two procedures:

- If a Federal agency is involved with the permitting, funding, or carrying out of a project that may result in take, then that agency must engage in a formal <u>consultation</u> with the Service.
- During formal consultation, the Federal agency, the applicant and the Service work together to avoid or minimize the impact on listed species and their habitat. Such consultation would result in a biological opinion by the Service addressing the anticipated effect of the project on listed and proposed species. The opinion may authorize a limited level of incidental take.
- If no Federal agency is involved with the project, and federally listed species may be taken as part of the project, then you, the applicant, should apply for an incidental take permit. The Service may issue such a permit if you submit a satisfactory conservation plan for the species that would be affected by your project.
- Should your survey determine that federally listed or proposed species occur in the area and are likely to be affected by the project, we recommend that you work with this office and the California Department of Fish and Game to develop a plan that minimizes the project's direct and indirect impacts to listed species and compensates for project-related loss of habitat. You should include the plan in any environmental documents you file.

Critical Habitat

When a species is listed as endangered or threatened, areas of habitat considered essential to its conservation may be designated as critical habitat. These areas may require special management considerations or protection. They provide needed space for growth and normal behavior; food, water, air, light, other nutritional or physiological requirements; cover or shelter; and sites for breeding, reproduction, rearing of offspring, germination or seed dispersal.

Although critical habitat may be designated on private or State lands, activities on these lands

are not restricted unless there is Federal involvement in the activities or direct harm to listed wildlife.

If any species has proposed or designated critical habitat within a quad, there will be a separate line for this on the species list. Boundary descriptions of the critical habitat may be found in the Federal Register. The information is also reprinted in the Code of Federal Regulations (50 CFR 17.95). See our <u>Map Room</u> page.

Candidate Species

We recommend that you address impacts to candidate species. We put plants and animals on our candidate list when we have enough scientific information to eventually propose them for listing as threatened or endangered. By considering these species early in your planning process you may be able to avoid the problems that could develop if one of these candidates was listed before the end of your project.

Species of Concern

The Sacramento Fish & Wildlife Office no longer maintains a list of species of concern. However, various other agencies and organizations maintain lists of at-risk species. These lists provide essential information for land management planning and conservation efforts. <u>More info</u>

Wetlands

If your project will impact wetlands, riparian habitat, or other jurisdictional waters as defined by section 404 of the Clean Water Act and/or section 10 of the Rivers and Harbors Act, you will need to obtain a permit from the U.S. Army Corps of Engineers. Impacts to wetland habitats require site specific mitigation and monitoring. For questions regarding wetlands, please contact Mark Littlefield of this office at (916) 414-6520.

Updates

Our database is constantly updated as species are proposed, listed and delisted. If you address proposed and candidate species in your planning, this should not be a problem. However, we recommend that you get an updated list every 90 days. That would be March 20, 2012.

Appendix D. Sensitive species occuring within 2 miles of the project site (CNDDB December 2011).

		Occ.					
Common Name	Scientific Name	Number	Quad Name	Presence	Date	Fed. Listed	CA Listed
white sedge	Carex albida	2	Sebastopol	Possibly Extirpated	1977XXXX	1977XXXX Endangered	Endangered
	Brodiaea californica var.						
narrow-anthered California brodiaea	leptandra	8	Santa Rosa	Presumed Extant	XXXXXXX	None	None
Jepson's leptosiphon	Leptosiphon jepsonii	3	Santa Rosa	Presumed Extant	19310424	None	None
	Arctostaphylos canescens ssp.			-			
Sonoma canescent manzanita	sonomensis	20	Santa Rosa	Presumed Extant	19390318	None	None
Rincon Ridge ceanothus	Ceanothus confusus	~	Santa Rosa	Presumed Extant	19890522	None	None
	Arctostaphylos stanfordiana						
Rincon Ridge manzanita	ssp. decumbens	12	Santa Rosa	Presumed Extant	19890522	None	None
Calistoga ceanothus	Ceanothus divergens	4	Santa Rosa	Presumed Extant	19890522	None	None
showy rancheria clover	Trifolium amoenum	21	Santa Rosa	Presumed Extant	19290518	Endangered	None
	Arctostaphylos stanfordiana						
Rincon Ridge manzanita	ssp. decumbens	~	Santa Rosa	Presumed Extant	ı	None	None
	Arctostaphylos stanfordiana						
Rincon Ridge manzanita	ssp. decumbens	2	Santa Rosa	Extirpated		None	None
western pond turtle	Emys marmorata	403	Santa Rosa	Presumed Extant	19910520	None	None
	Arctostaphylos canescens ssp.						
Sonoma canescent manzanita	sonomensis	7	Santa Rosa	Presumed Extant	19890522	None	None
western pond turtle	Emys marmorata	513	Santa Rosa	Presumed Extant	19990813	None	None
	Arctostaphylos canescens ssp.						
Sonoma canescent manzanita	sonomensis	19	Santa Rosa	Presumed Extant	19650420	None	None
	Hemizonia congesta ssp.						
seaside tarplant	congesta	21	Santa Rosa	Presumed Extant	20080505	None	None
Burke's goldfields	Lasthenia burkei	37	Santa Rosa	Presumed Extant	20080505	Endangered	Endangered
Rincon Ridge ceanothus	Ceanothus confusus	2	Santa Rosa	Presumed Extant	19410427	None	None
	Arctostaphylos stanfordiana						
Rincon Ridge manzanita	ssp. decumbens	5	Santa Rosa	Possibly Extirpated	1987XXXX	None	None
western pond turtle	Emys marmorata	432	Santa Rosa	Presumed Extant	1	None	None

Attachment B:

Cultural Resources Survey, Tom Origer & Associates, December 20, 2011

A Cultural Resources Study for the Pedestrian Bridge and Path Project Chanate Road, Sonoma County, California

> Virginia Hagensieker, B.A. and Janine M. Loyd, M.A./R.P.A.

> > December 20, 2011



A Cultural Resources Study for the Pedestrian Bridge and Path Project Chanate Road, Sonoma County, California

Prepared by:

Virginia Hagensieker, B.A. and Janine M. Loyd M.A./R.P.A.

Tom Origer & Associates Post Office Box 1531 Rohnert Park, California 94927 (707) 584-8200 (707) 584-8300 (fax)

Prepared for:

Danny Chen City of Santa Rosa Department of Transportation and Public Works 69 Stony Circle Santa Rosa, CA 95401

December 20, 2011

ABSTRACT

Tom Origer & Associates conducted a cultural resources study for construction of a pedestrian bridge and path along Chanate Road, between Parker Hill Road and Fitzpatrick Court, Santa Rosa, Sonoma County, California. The study was requested by Danny Chen, City of Santa Rosa Department of Transportation and Public Works, in compliance with requirements of the California Environmental Quality Act, and authorized by Steve Dittmer under project work order no. 008723-2007-12. The study area consists of approximately 180 linear feet of land located approximately two miles north-northeast of downtown Santa Rosa. This project includes the construction of a pedestrian bridge and path.

This study included archival research at the Northwest Information Center, Sonoma State University (NWIC File No. 11-0652), examination of the library and files of Tom Origer & Associates, field inspection of the project location, and contact with the Native American community. Field survey of the study area found no cultural resources. Documentation pertaining to this study is on file at the offices of Tom Origer & Associates (File No. 11-86S).

Synopsis

Project:Chanate Pedestrian Bridge and PathLocation:Chanate Road between Park Hill Rd and Fitzpatrick Ct, Sonoma CountyQuadrangle:Santa Rosa, California 7.5' seriesStudy Type:Intensive surveyScope:180 linear ftFinds;None

i

Project Personnel

Janine M. Loyd provided project oversight. Ms. Loyd has 28 years experience working in Northern California cultural resources management. She has been with Tom Origer & Associates since 1991. She has worked on both prehistoric and historical archaeological sites, and has completed research and documentation of historical buildings. Ms. Loyd has a Bachelor of Arts in Anthropology from Sonoma State University. She holds a Master of Arts in Archaeology and Heritage from the University of Leicester. She has completed extensive continuing education in regulatory compliance, planning local surveys, and identifying historical resources. She is affiliated with the Society for California Archaeology (Secretary of the Executive Board 2004-2006), the International Association for Obsidian Studies, the Society for American Archaeology, the Society for Historical Archaeology, Society of Architectural Historians, Vernacular Architecture Forum, and the Register of Professional Archaeologists (#1066030).

Virginia Hagensieker prepared the report for this project. Ms. Hagensieker has been with Tom Origer & Associates since May 2010. She holds a Bachelor of Arts in Anthropology from Sonoma State University. She is working towards a Master of Arts in Cultural Resources Management at Sonoma State University. She is affiliated with the Society for California Archaeology.

Eileen Barrow participated in the field work. Ms. Barrow has a Bachelor of Arts in Anthropology from Sonoma State University and currently is working on her Master of Arts from the same institution. Since 2005, she was been on the staff of Tom Origer & Associates, where she regularly participates in fieldwork, laboratory analysis, and report preparation. Her professional affiliations include the Society for American Anthropology, the Society for California Archaeology, the Western Obsidian Focus Group, and the Register of Professional Archaeologists (#989269).

Abstract Synopsis Project Personnel	.i
Contentsi	ii
Introduction	1
Regulatory Context Resource Definitions Significance Criteria	2
Project Setting Study Area Location and Description Cultural Setting	3
Study Procedures and Findings Native American Contact Archival Study Procedures Archival Study Findings Field Survey Procedures Field Survey Findings	5 5 6 6
Recommendations Known Resources Accidental Discovery	7
Summary	8
Materials Consulted	9
Appendix A: Native American Contact	

CONTENTS

FIGURES

Figure 1. Project vicinity Figure 2. Study location

1 4

INTRODUCTION

This report describes an cultural resources survey for the Chanate Pedestrian Bridge and Path Project, located along Chanate Road between Park Hill Road and Fitzpatrick Court, Santa Rosa, Sonoma County, California. The study area is located north-northeast of downtown Santa Rosa, in central Sonoma County (Figure 1). Project plans include the construction of a pedestrian path and bridge. This study was requested by Danny Chen, City of Santa Rosa Department of Transportation and Public Works and authorized by Steve Dittmer under project work order no. 008723-2007-12. Documentation pertaining to this study is on file at Tom Origer & Associates (File No. 11-86S).

REGULATORY CONTEXT

The California Environmental Quality Act (CEQA) requires that cultural resources be considered during the environmental review process. This is accomplished by an inventory of resources within a study area and by assessing the potential that cultural resources could be affected by development.

This cultural resources survey was designed to satisfy environmental issues specified in the CEQA and its guidelines (Title 14 CCR §15064.5) by: (1) identifying all cultural resources within the project area; (2) offering a preliminary significance evaluation of the identified cultural resources; (3) assessing resource vulnerability to effects that could arise from project activities; and (4) offering suggestions designed to protect resource integrity, as warranted.

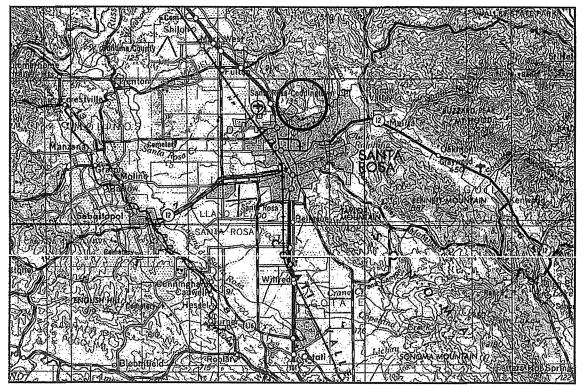


Figure 1. Project vicinity (adapted from the 1970 Santa Rosa 1:250,000-scale USGS map).

Resource Definitions

This cultural resources survey was designed to satisfy environmental issues specified in the CEQA and its guidelines (Title 14 CCR §15064.5) by: (1) identifying all cultural resources within the project area; (2) offering a preliminary significance evaluation of the identified cultural resources; (3) assessing resource vulnerability to effects that could arise from project activities; and (4) offering suggestions designed to protect resource integrity, as warranted.

Cultural resources are classified by the State Office of Historic Preservation (OHP) as sites, buildings, structures, objects and districts, and each is described by OHP (1995) as follows.

Site. A site is the location of a significant event, a prehistoric or historic occupation or activity, or a building or structure, whether standing, ruined, or vanished, where the location itself possesses historic, cultural, or archaeological value regardless of the value of any existing structure.

Building. A building, such as a house, barn, church, hotel, or similar construction, is created principally to shelter any form of human activity. "Building" may also be used to refer to a historically and functionally related unit, such as a courthouse and jail, or a house and barn.

Structure. The term "structure" is used to distinguish from buildings those functional constructions made usually for purposes other than creating human shelter.

Object. The term "object" is used to distinguish from buildings and structures those constructions that are primarily artistic in nature or are relatively small in scale and simply constructed. Although it may be, by nature or design, movable, an object is associated with a specific setting or environment.

District. A district possesses a significant concentration, linkage, or continuity of sites, buildings, structures, or objects united historically or aesthetically by plan or physical development.

Significance Criteria

When a project might affect a cultural resource, the project proponent is required to conduct an assessment to determine whether the effect may be one that is significant. Consequently, it is necessary to determine the importance of resources that could be affected. The importance of a resource is measured in terms of criteria for inclusion on the California Register of Historical Resources (Title 14 CCR, §4852[a]) as listed below. A resource may be important if it meets any one of the criteria below, or if it is already listed on the California Register of Historical Resources or a local register of historical resources. An important historical resource is one which:

- 1. Is associated with events that have made a significant contribution to the broad patterns of local or regional history, or the cultural heritage of California or the United States.
- 2. Is associated with the lives of persons important to local, California, or national history.
- 3. It embodies the distinctive characteristics of a type, period, region or method of construction, or represents the work of a master or possesses high artistic values.
- 4. It has yielded, or may be likely to yield, information important to the prehistory or history of the local area, California, or the nation.

In addition to meeting one or more of the above criteria, eligibility for the California Register requires that a resource retains sufficient integrity to convey a sense of its significance or importance. Seven elements are considered key in considering a property's integrity: location, design, setting, materials, workmanship, feeling, and association.

Additionally, the OHP advocates that all historical resources over 45 years old be recorded for inclusion in the OHP filing system (OHP 1995:2), although the use of professional judgment is urged in determining whether a resource warrants documentation.

PROJECT SETTING

Study Area Location and Description

The study area comprises approximately 180 linear feet of land along Chanate Road between Parker Hill Road and Fitzpatrick Court, approximately two miles north-northeast of downtown Santa Rosa as shown on the Santa Rosa, California 7.5' USGS topographic map (Figure 2). The project plans call for the construction of a pedestrian path and bridge over Paulin Creek.

Soils within the study area consist of the Pleasanton and Haire clay loams (Miller 1972: Sheet 74). These soils are moderate to well-draining loams found on rolling terraces. These soils typically support the growth of annual and perennial grasses, forbs, small shrubs, wild berry vines, and scattered oaks. Historically, these soils were used for vineyards and pasture (Miller 1972:42, 68).

The project area has well-draining soils that probably once supported a variety of plants that could have served as food and cover for animals. In addition, fresh water and freshwater resources were available in Paulin Creek. The presence of these attributes suggests that the

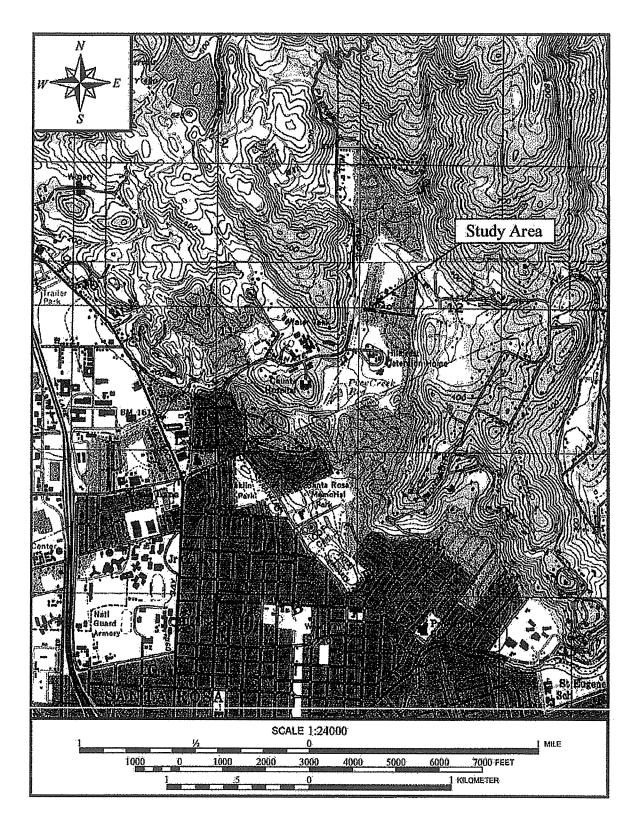


Figure 2. Study location (adapted from the 1994 Santa Rosa 7.5' USGS topographic map).

project area would have been highly suitable to prehistoric occupants as a place to gather resources and hunt.

Cultural Setting

Archaeological evidence indicates that human occupation of California began at least 10,000 years ago (Moratto 1984:71). Early occupants appear to have had an economy based largely on hunting, with limited exchange, and social structures based on the extended family unit. Later, milling technology and an inferred acorn economy were introduced. This diversification of economy appears to be coeval with the development of sedentism and population growth and expansion. Sociopolitical complexity and status distinctions based on wealth are also observable in the archaeological record, as evidenced by an increased range and distribution of trade goods (e.g., shell beads, obsidian tool stone), which are possible indicators of both status and increasingly complex exchange systems.

At the time of European settlement, the study area was situated area controlled by the Southern Pomo (Barrett 1908; McLendon and Oswalt 1978). The Southern Pomo were hunter-gatherers who lived in rich environments that allowed for dense populations with complex social structures (Barrett 1908; Kroeber 1925). They settled in large, permanent villages about which were distributed seasonal camps and task-specific sites. Primary village sites were occupied throughout the year and other sites were visited in order to procure particular resources that were especially abundant or available only during certain seasons. Sites often were situated near fresh water sources and in ecotones where plant life and animal life were diverse and abundant. For more information about the Pomo see Barrett (1908), Bean and Theodoratus (1978), Kniffen (1939), and Stewart (1943).

STUDY PROCEDURES AND FINDINGS

Native American Contact

The State of California's Native American Heritage Commission, the Federated Indians of Graton Rancheria, the Ya-Ka-Ama Indian Education Center, and the Lytton Band of Pomo Indians were contacted in writing. A log of contact efforts is provided at the end of this report (Appendix A).

Archival Study Procedures

Archival research included examination of the library and project files at Tom Origer & Associates. A review (NWIC File No. 11-0652) was completed of the archaeological site base maps and records, survey reports, and other materials on file at the Northwest Information Center (NWIC), Sonoma State University, Rohnert Park. Sources of information included but were not limited to the current listings of properties on the National Register of Historic Places (National Register), California Historical Landmarks, California Register of

Historical Resources (California Register), and California Points of Historical Interest as listed in the Office of Historic Preservation's *Historic Property Directory* (OHP 2011).

The Office of Historic Preservation has determined that structures older than 45 years should be considered potentially important historical resources, and former building and structure locations could be potentially important historic archaeological sites. Archival research included an examination of historical maps to gain insight into the nature and extent of historical development in the general vicinity, and especially within the study area. Maps ranged from hand-drawn maps of the 1800s (e.g., GLO plats) to topographic maps issued by the United States Geological Survey (USGS) and the Army Corps of Engineers (USACE) from the early to the middle 20th century.

In addition, ethnographic literature that describes appropriate Native American groups, county histories, and other primary and secondary sources were reviewed. Sources reviewed are listed in the "Materials Consulted" section of this report.

Archival Study Findings

Archival research found that study area had not been previously surveyed. Two studies have been conducted near the current study area; one adjacent and the other within a quarter mile (Fredrickson 1974; Kuhn 1980). There are five recorded sites within a half-mile radius of the study area, the nearest being adjacent to the study area, the historic Fitzpatrick Residence (Praetzellis 1990).

There are no reported ethnographic sites in the vicinity (Barrett 1908).

Historical maps show buildings near to and adjacent the study area beginning in 1916. (Bell and Heymans 1888; Bowers 1867; GLO 1865; McIntire and Lewis 1908; Reynolds and Proctor 1898; Thompson 1877; USGS 1916, 1944, 1954, 1954, 1954 [1968]).

Field Survey Procedures

A field survey was completed by Eileen Barrow on December 19, 2011. The 180 foot study area was examined intensively by walking in a linear corridor that extended from the edge of the pavement to fences or dense vegetation that appeared to be indicating private property. Visibility was good to poor, with vegetation, fill materials, and paved roads and driveways being the chief hindrances. A hoe was used as needed to clear small patches of vegetation so that the ground could be inspected.

Based on the distribution of known cultural resources and their environmental settings, it was anticipated that prehistoric archaeological sites could be found within the study area. Prehistoric archaeological site indicators expected to be found in the region include but are not limited to: obsidian and chert flakes and chipped stone tools; grinding and mashing implements such as slabs and handstones, and mortars and pestles; bedrock outcrops and boulders with mortar cups; and locally darkened midden soils containing some of the previously listed items plus fragments of bone, shellfish, and fire affected stones. Historic period site indicators generally include: fragments of glass, ceramic, and metal objects; milled and split lumber; and structure and feature remains such as building foundations and discrete trash deposits (e.g., wells, privy pits, dumps).

Field Survey Findings

No cultural resources were found within the study area.

RECOMMENDATIONS

Known Resources

No prehistoric or historic-era cultural resources were found within the study area, and no resource-specific recommendations are warranted.

Accidental Discovery

There is the possibility that buried archaeological deposits could be present, and accidental discovery could occur. In keeping with the CEQA guidelines, if archaeological remains are uncovered, work at the place of discovery should be halted immediately until a qualified archaeologist can evaluate the finds (§15064.5 [f]). Prehistoric archaeological site indicators include: obsidian and chert flakes and chipped stone tools; grinding and mashing implements (e.g., slabs and handstones, and mortars and pestles); bedrock outcrops and boulders with mortar cups; and locally darkened midden soils. Midden soils may contain a combination of any of the previously listed items with the possible addition of bone and shell remains, and fire affected stones. Historic period site indicators generally include: fragments of glass, ceramic, and metal objects; milled and split lumber; and structure and feature remains such as building foundations and discrete trash deposits (e.g., wells, privy pits, dumps).

The following actions are promulgated in Public Resources Code 5097.98 and Health and Human Safety Code 7050.5, and pertain to the discovery of human remains. If human remains are encountered, excavation or disturbance of the location must be halted in the vicinity of the find, and the county coroner contacted. If the coroner determines the remains are Native American, the coroner will contact the Native American Heritage Commission. The Native American Heritage Commission will identify the person or persons believed to be most likely descended from the deceased Native American. The most likely descendent makes recommendations regarding the treatment of the remains with appropriate dignity.

SUMMARY

Tom Origer & Associates conducted a cultural resources study for the Chanate Pedestrian Bridge and Path along Chanate Road between Parker Hill Road and Fitzpatrick Court in central Sonoma County, California. The study was requested by Danny Chen, City of Santa Rosa Department of Transportation and Public Works, in compliance with requirements of the California Environmental Quality Act. No cultural resources were found within the study area, and no resource-specific recommendations are warranted. Documentation pertaining to this study is on file at the offices of Tom Origer & Associates (File No. 11-86S).

,

MATERIALS CONSULTED

Barrett, S.

1908 The Ethno-Geography of the Pomo and Neighboring Indians. University of California Publications in American Archaeology and Ethnology Vol. 6, No. 1. University of California Press, Berkeley.

Bean, L. and D. Theodoratus

1978 Western Pomo and Northeast Pomo. In *California*, edited by R. Heizer, Handbook of North American Indians, Vol. 8, W. Sturtevant, general editor. Smithsonian Institution, Washington, D.C.

Bell and Heymans

1888 Map of Sonoma County, California. Bell and Heymans, San Francisco.

Bowers, A.

1867 Map of Sonoma County. 2nd ed. A. Bowers.

Fredrickson, D.

- 1974 An Archaeological survey of the Proposed Chanate Village Locations, Santa Rosa, California. Document S-74 on file at the Northwest Information Center, Sonoma State University, Rohnert Park.
- 1984 The North Coastal Region. In *California Archaeology*, edited by M. Moratto. Academic Press, San Francisco.

General Land Office

1865 Plat of T7N;R8W. Department of the Interior, Washington, D.C.

Hoover, M., H. Rensch, E. Rensch, W. Abeloe

1966 Historic Spots in California. 3rd edition. Stanford University Press. Stanford.

Hoover, M., H. Rensch, E. Rensch, W. Abeloe, and D. Kyle

1990 Historic Spots in California. 4th edition, Stanford University Press. Stanford.

2002 Historic Spots in California. 5th edition, Stanford University Press. Stanford.

Kniffen, F.

1939 *Pomo Geography*. University of California Publications in American Archaeology and Ethnology, Vol. 36. Berkeley.

Kroeber, A.

1925 Handbook of the Indians of California. Bureau of American Ethnology, Bulletin 78, Smithsonian Institution, Washington, D.C.

Kuhn, S.

1980 An Archaeological Reconnaissance of a Proposed Subdivision Parcel Located at Chanate and Parker Hill Roads, Santa Rosa, California. Document S-1869 on file at the Northwest Information Center, Sonoma State University, Rohnert Park.

LeBaron, G., D. Blackman, J. Mitchell, and H. Hansen

1985 Santa Rosa: A Nineteenth Century Town. Historia, LTD.

LeBaron, G. and J. Mitchell

1993 Santa Rosa: A Twentieth Century Town. Historia, LTD.

McIntire and Lewis

1908 Official Map of the County of Sonoma, California. County of Sonoma, California.

McLendon, S. and R. Oswalt

1978 Pomo. In *California*, edited by R. Heizer, pp. 274-288. Handbook of North American Indians, Vol. 8, W. Sturtevant, general editor. Smithsonian Institution, Washington, D.C.

Menefee, C.

1873 Historical and Descriptive Sketchbook of Napa, Sonoma, Lake and Mendocino. Reporter Publishing House. Napa, California.

Miller, V.

1972 Soil Survey of Sonoma County, California. U.S. Department of Agriculture in cooperation with the University of California Agricultural Experimental Station.

Moratto, M.

1984 California Archaeology. Academic Press, San Francisco.

Office of Historic Preservation (OHP)

- 1995 Instructions for Recording Historic Resources. Office of Historic Preservation, Sacramento.
- 2011 *Historic Property Directory*. Office of Historic Preservation, Sacramento.

Peugh, E.

1934 Official Map of Sonoma County, California. County of Sonoma, California.

Reynolds, W. and T. Proctor

1898 Illustrated Atlas of Sonoma County, California. Reynolds and Proctor, Santa Rosa.

State of California Department of Parks and Recreation

1976 California Inventory of Historic Resources. Department of Parks and Recreation, Sacramento. Stewart, O.

1943 *Notes on Pomo Ethnography.* University of California Publications in American Archaeology and Ethnology. Vol. 40. Berkeley.

Thompson, T.H. & Co.

1877 Historical Atlas of Sonoma County, California. T.H. Thompson & Co., Oakland, California.

United States Geological Survey

- 1916 Santa Rosa 15' quadrangle. Geological Survey, Washington, D.C.
- 1944 Santa Rosa 15' quadrangle. Geological Survey, Washington, D.C.
- 1954 Santa Rosa 15' quadrangle. Geological Survey, Washington, D.C.
- 1954 Santa Rosa 7.5' quadrangle [photorevised 1968 edition]. Geological Survey, Washington, D.C.
- 1994 Santa Rosa 7.5' quadrangle. Geological Survey, Washington, D.C.

.

APPENDIX A: Native American Contact

.

.

•

.

Native American Contact Efforts Chanate Pedestrian Path Project, Sonoma County

Organization	Contact	Letters	Results
Native American Heritage Commission	Katy Sanchez	12/8/11	No response received as of the date of this report.
Federated Indians of Graton Rancheria	Gene Buvelot Greg Sarris Frank Ross	12/8/11	A response was received by Mr. Nick Tipon on December 17th. He stated that the tribe currently has no knowledge of cultural resources within or near to the project area.
Lytton Band of Pomo Indians	Margie Mejia Lisa Miller	12/8/11	No response received as of the date of this report.
Ya-Ka-Ama		12/8/11	No response received as of the date of this report.

Katy Sanchez Native American Heritage Commission 915 Capitol Mall Sacramento, CA 95184

VIA FACSIMILE

RE: Pedestrian path along Chanate Road, Santa Rosa, Sonoma County

Dear Ms. Sanchez:

I write to notify you about a cultural resources study our firm is conducting for construction of a pedestrian path along a portion of Chanate road, Santa Rosa, Sonoma County. The project area is shown on the enclosed portion of the Santa Rosa, California 7.5' USGS quadrangle within Township 7 North, Range 8 West, within Section 12. We are seeking information from the Native American Heritage Commission regarding possible sacred lands and other cultural sites within these areas. We would also like to obtain a list of individuals whom it would be appropriate to contact regarding this project.

Below is information to aid in your search. Please contact us at (707) 584-8200 if you have any questions of need additional information. Thank you for your help

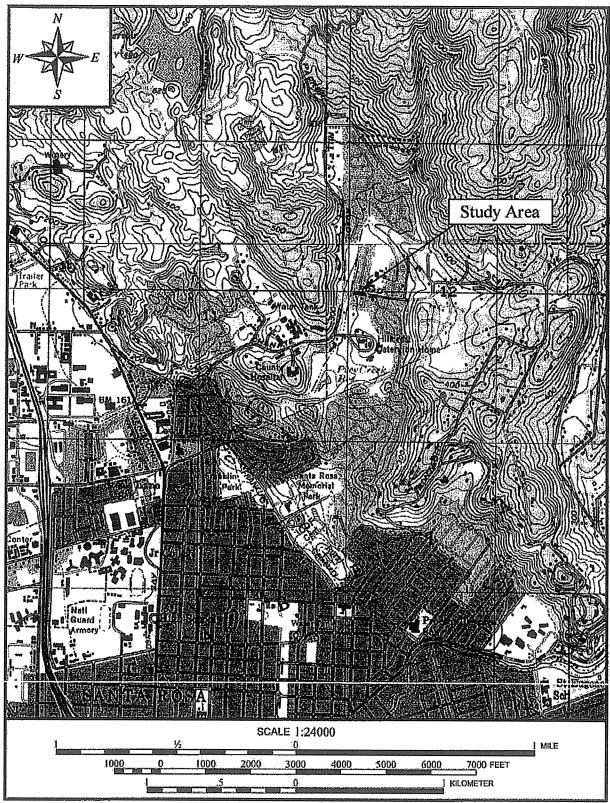
Sincerely,

Virginia Hagensieker Associate

Encl: Portion of the Santa Rosa, California 7.5' USGS map

County	USGS Map	Township	Range	Section	Comments
Sonoma	Santa Rosa 7.5'	7 North	8 West	12	

P.O. Box 1531, Rohnert Park, California 94927 🔹 Phone (707) 584-8200 Fax (707) 584-8300



Santa Rosa, Calif. USGS 7.5' quadrangle

Gene Buvelot Federated Indians of Graton Rancheria 6400 Redwood Drive, Suite 300 Rohnert Park, CA 94928

Re: Pedestrian path along Chanate Road, Santa Rosa, Sonoma County.

Dear Mr. Buvelot:

I write to notify you about a cultural resources study our firm is conducting for construction of a pedestrian bridge and path along a portion of Chanate Road, Santa Rosa, Sonoma County. The project area is shown on the enclosed portion of the Santa Rosa, California 7.5' USGS quadrangle within Township 7 North, Range 8 West, within Section 12.

While this notification does not constitute SB 18 or formal Section 106 consultation, if you have any information or concerns we would be happy to convey them to our client.

Please contact us at (707) 584-8200 if you need any additional information. Thank you for your help.

Sincerely,

Virginia Hagensieker Associate

Greg Sarris Federated Indians of Graton Rancheria 6400 Redwood Drive, Suite 300 Rohnert Park, CA 94928

Re: Pedestrian path along Chanate Road, Santa Rosa, Sonoma County.

Dear Mr. Sarris:

I write to notify you about a cultural resources study our firm is conducting for construction of a pedestrian bridge and path along a portion of Chanate Road, Santa Rosa, Sonoma County. The project area is shown on the enclosed portion of the Santa Rosa, California 7.5' USGS quadrangle within Township 7 North, Range 8 West, within Section 12.

While this notification does not constitute SB 18 or formal Section 106 consultation, if you have any information or concerns we would be happy to convey them to our client.

Please contact us at (707) 584-8200 if you need any additional information. Thank you for your help.

Sincerely,

Virginia Hagensieker Associate

Frank Ross Federated Indians of Graton Rancheria PO Box[®]854 Novato, CA 94948

Re: Pedestrian path along Chanate Road, Santa Rosa, Sonoma County.

Dear Mr. Ross:

I write to notify you about a cultural resources study our firm is conducting for construction of a pedestrian bridge and path along a portion of Chanate Road, Santa Rosa, Sonoma County. The project area is shown on the enclosed portion of the Santa Rosa, California 7.5' USGS quadrangle within Township 7 North, Range 8 West, within Section 12.

While this notification does not constitute SB 18 or formal Section 106 consultation, if you have any information or concerns we would be happy to convey them to our client.

Please contact us at (707) 584-8200 if you need any additional information. Thank you for your help.

Sincerely,

Virginia Hagensieker Associate

Lytton Band of Pomo Indians Lisa Miller 437 Aviation Blvd Santa Rosa, CA 95403

Re: Pedestrian path along Chanate Road, Santa Rosa, Sonoma County.

Dear Ms. Miller:

I write to notify you about a cultural resources study our firm is conducting for construction of a pedestrian bridge and path along a portion of Chanate Road, Santa Rosa, Sonoma County. The project area is shown on the enclosed portion of the Santa Rosa, California 7.5' USGS quadrangle within Township 7 North, Range 8 West, within Section 12.

While this notification does not constitute SB 18 or formal Section 106 consultation, if you have any information or concerns we would be happy to convey them to our client.

Please contact us at (707) 584-8200 if you need any additional information. Thank you for your help.

Sincerely,

Virginia Hagensieker Associate

Lytton Band of Pomo Indians Margie Mejia 437 Aviation Blvd Santa Rosa, CA 95403

Re: Pedestrian path along Chanate Road, Santa Rosa, Sonoma County.

Dear Ms. Mejia:

I write to notify you about a cultural resources study our firm is conducting for construction of a pedestrian bridge and path along a portion of Chanate Road, Santa Rosa, Sonoma County. The project area is shown on the enclosed portion of the Santa Rosa, California 7.5' USGS quadrangle within Township 7 North, Range 8 West, within Section 12.

While this notification does not constitute SB 18 or formal Section 106 consultation, if you have any information or concerns we would be happy to convey them to our client.

Please contact us at (707) 584-8200 if you need any additional information. Thank you for your help.

Sincerely,

Virginia Hagensieker Associate

Ya-Ka-Ama 7465 Steve Olson Lane Forestville, CA 95436

Re: Pedestrian path along Chanate Road, Santa Rosa, Sonoma County.

To Whom It May Concern:

I write to notify you about a cultural resources study our firm is conducting for construction of a pedestrian bridge and path along a portion of Chanate Road, Santa Rosa, Sonoma County. The project area is shown on the enclosed portion of the Santa Rosa, California 7.5' USGS quadrangle within Township 7 North, Range 8 West, within Section 12.

While this notification does not constitute SB 18 or formal Section 106 consultation, if you have any information or concerns we would be happy to convey them to our client.

Please contact us at (707) 584-8200 if you need any additional information. Thank you for your help.

Sincerely,

Virginia Hagensieker Associate



Federated Indians of Graton Rancheria Sacred Sites Protection Committee 6400 Redwood Drive Suite 300 Rohnert Park, CA 94928

December 16, 2011

Virginia Hagensieker Tom Origer and Associates P.O. Box 1531 Rohnert Park, CA 94927

RE: Chanate Road Pedestrian Project

Dear Ginny:

The Federated Indians of Graton Rancheria, a federally recognized Tribe and sovereign government has received your correspondence regarding the proposed Chanate Road Pedestrian Project. We appreciate the notification of this potential project.

The Tribe has no current knowledge of cultural resources at the location of this project.

Thank you for the notification.

Respectfully, Nick Tipon

Sacred Sites Protection Committee

.;



From:	Tony Alvernaz [talvernaz@comcast.net]
Sent:	Thursday, March 14, 2013 12:01 PM
To:	Housh, Noah
Subject:	Chanate Rd Pedestrian Path

Mr. Housh,

Thank you for taking the time to answer my questions regarding the much needed pedestrian pathway on Chanate Rd. My concerns are as follows.

1. The small retaining wall that will be constructed to support the pathway will render my old driveway unusable. Many people still use that driveway because it is the front of my house. I constructed a driveway and garage on Glen Echo many years ago to eliminate having to use Chanate Rd due to how difficult it was to enter and exit from. However my address is still on Chanate. I suspect someone will try to enter from Chanate and drive off the retaining wall causing damage to the retaining wall and their vehicle. Even though I specifically tell people to park on the Glen Echo driveway they still use Chanate. It's ok now but you know they will try to use it after the construction and the damage will be done.

2. The lush over grown vegetation between my old driveway and Paulin Creek create a visual and audible buffer. When portions are removed to accommodate the pedestrian pathway and bridge, my privacy will be impacted while enjoying my backyard. I can now stand on my deck and see and hear people and vehicles during the day and car headlights will shine in my yard in the evening. Without mitigation it will only get worse.

3. I'm concern about the liability should anyone using the pathway trip and fall the 2 1/2 feet off the pathway and end up in my yard.

4. Should I need Police, Fire or EMS services there is no way for them to logically enter my property because Chanate will have a small 2 1/2 foot max retaining wall in front of my house. No Steps/Stairs for logical entry/exit based on my address and the physical location of my front door.

Now that I've outlined my concerns I have some suggestions that will help mitigate the impacts.

1. Declare my current front yard as my side yard.

2. As part of this project build an 8 foot fence (6 foot fence with 2 feet of lattice) at my property line from Paulin Creek to Glen Echo Drive.

My property is below grade from Chanate road varying from 0 to approximately 4 feet at Paulin Creek. This fence will not be an eyesore.

Thank you,

Tony Alvernaz 3515 Chanate Rd Santa Rosa, Ca 95404 527-6380