County of Yolo

DEPARTMENT OF COMMUNITY SERVICES

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NOTICE OF AVAILABILITY AND NOTICE OF INTENT TO ADOPT A MITIGATED NEGATIVE DECLARATION

TO: Interested Parties

FROM: Yolo County Community Department

DATE: November 10, 2016

SUBJECT: **Circulation of Initial Study/Mitigated Negative Declaration and Notice of Intent to Adopt the Initial Study/Mitigated Negative Declaration for the County Road 29 Bridge Replacement Project Over Dry Slough**

Applicant: Yolo County, Department of Community Services
292 West Beamer St.
Woodland, CA 95695

File Name: ZF 2016-0051

Description of Project: The project consists of the replacement of the existing functionally obsolete Bridge 22C-0117 over Dry Slough, a single-span reinforced concrete T-beam structure, with a new single-span, cast-in-place post-tensioned concrete slab structure. The project area consists of the existing bridge, approximately 500 feet of CR 29 to the east of the bridge, approximately 250 feet of CR 29 to the west of the bridge, and a corridor ranging from 50 to 130 feet to the north of CR 29 and 50 to 150 feet to the south of CR 29. The proposed bridge will be approximately 60 feet long, and the bridge foundations will consist of driven Caltrans Class 140 (Alternative W) 14" diameter steel pipe piles. The bridge and roadway embankment adjacent to the Slough will be protected with rock slope protection over slope protection fabric.

The proposed bridge clear width and paved roadway section width will be 32 feet wide and will consist of two 12 foot lanes with 4 foot shoulders. Outside the edge of pavement, 4 foot graded aggregate base shoulder backing per the County Standard for Rural Streets is proposed.

The horizontal alignment was developed to reduce right of way and environmental impacts as much as possible. As a result of the new alignment it is expected that three non-native black walnut trees each with a diameter breast height (DBH) of less than 20” will be removed. Where feasible, the horizontal alignment matches the existing, however the western bridge abutment will need to be shifted to the south (relative to the existing) in order to provide a longer tangent roadway segment between the reversing horizontal curves. A longer 200 foot tangent segment between the reversing horizontal curves is necessary to meet County standards and provide adequate distance for the roadway super elevation to transition. The tangent segment between curves is also desirable because it would allow for the new bridge to be constructed on a straight

alignment which would simplify construction details and reduce costs. Lastly, the resulting straighter alignment improves sight distance relative to the existing condition.

Environmental Determination: An Initial Study was prepared to examine potential areas of impact resulting from this project. The Initial Study found that the proposed project would not have a significant effect on the environment with the implementation of proposed mitigation. As a result, an Environmental Impact Report is not required and a Mitigated Negative Declaration has been prepared.

Availability of Documents: The Initial Study/Mitigated Negative Declaration (IS/MND) is now available for public review at the following location during normal business hours: the Yolo County Community Services Department, 292 W. Beamer Street, Woodland, CA 95695. **The IS/MND has been posted to the Yolo County Web site and may be downloaded and printed at http://www.yolocounty.org/community-services/planning-public-works/planning-division/current-projects.** A PDF digital file of the IS/MND, or a hard (paper) copy of the IS/MND, is also available upon request from the Planning Division at the address or e-mail depicted below.

Comments on the Initial Study/Mitigated Negative Declaration: The County requests your comments on the Initial Study/Mitigated Negative Declaration during a **30-day review period**, which commences **November 10, 2016,** and **ends on December 12, 2016**.

The Initial Study/Mitigated Negative Declaration may be obtained from, and comments (written, e-mailed, or oral) may be directed to:

Stephanie Cormier, Senior Planner
Yolo County Community Department
292 W. Beamer Street
Woodland, CA. 95695
(530) 666-8850
stephanie.cormier@yolocounty.org

All interested parties are invited to send written communications to the Yolo County Community Services Department no later than the relevant ending date.

YOLO COUNTY
COMMUNITY SERVICES DEPARTMENT

ADMINISTRATIVE DRAFT
Initial Study/Mitigated Negative Declaration
File # ZF 2016-0051

County Road 29 at Dry Slough
Bridge Replacement Project
Yolo County, California

County Work Order 4586
Federal Project Number BRLO-5922(098)
November 2016

Initial Study/ Mitigated Negative Declaration

1. **Project Title:** County Road 29 Bridge Replacement at Dry Slough

2. **Lead Agency Name and Address:**
   Yolo County Community Services Department
   292 West Beamer Street, Woodland, CA 95695

3. **Contact Person, Phone Number, E-Mail:**
   Eric Parfrey, Principal Planner
   (530) 666-8043 or eric.parfrey@yolocounty.org

4. **Project Location:** The project is located in Yolo County on County Road (CR) 29 approximately 0.75 miles west of County Road 98 near Plainfield Station. The project area is located on the Merritt, California 7.5 minute U.S. Geological Survey (USGS) quadrangle in Township 9 North, Range 1 East, Section 25 and 36 (Figure 1 and Figure 2).

5. **Project Sponsor's Name and Address:** Same as lead agency.

6. **General Plan Designation(s):** Agriculture (AG)

7. **Zoning**: Agricultural Intensive Zone (A-N)

8. **Description of the Project:** See attached "Project Description" on the following pages.

9. **Surrounding Land Uses and Setting:** See Table 1.

Table 1. Land Use, Zoning, and General Plan Designation.

Relation to Project	*Land Use*	*Zoning*	*General Plan Designation*
Project Area	Transportation, riverine	Agricultural Intensive (A-N)	Agriculture (AG)
North	Riverine, Row Crops	Agricultural Intensive (A-N)	Agriculture (AG)
South	Riverine, Row Crops	Agricultural Intensive (A-N)	Agriculture (AG)
East	Row Crops	Agricultural Intensive (A-N)	Agriculture (AG)
West	Row Crops	Agricultural Intensive (A-N)	Agriculture (AG)

Source: Yolo County 2016

10. **Other public agencies whose approval is required:** Caltrans (District 3), U.S. Army Corps of Engineers (Corps; Sacramento District), California Regional Water Quality Control Board (Central Valley Region), and California Department of Fish and Wildlife (CDFW; North Central Region).

11. **Other Project Assumptions:** The Initial Study assumes compliance with all applicable State, Federal, and local codes and regulations including, but not limited to, County of Yolo Improvement Standards, the California Building Code, the State Health and Safety Code, and the State Public Resources Code.

PROJECT DESCRIPTION

Project Under CEQA

The lead agency is the public agency with primary responsibility over the proposed project. In accordance with the California Environmental Quality Act (CEQA) Guidelines Section 15051(b)(1), "the lead agency will normally be the agency with general governmental powers, such as a city or county, rather than an agency with a single or limited purpose...." The lead agency for the proposed project is Yolo County (County).

The term "project" is defined in CEQA as the whole of an action that has the potential, directly or ultimately, to result in a physical change to the environment (CEQA Guidelines Section 15738). This includes all phases of a project that are reasonably foreseeable, and all related projects that are directly linked to the project.

The "project," which is the subject of this Environmental Initial Study, is the replacement of the existing functionally obsolete Bridge 22C-0117 over Dry Slough, a single-span reinforced concrete T-beam structure, with a new single-span, cast-in-place post-tensioned concrete slab structure. The project is described in greater detail below.

The County has determined that a Mitigated Negative Declaration (MND) is the appropriate level of CEQA review for the proposed project. Potentially significant impacts have been identified in this MND related to biological resources, cultural resources, and hazards/hazardous materials. A lead agency prepares an MND when an initial review of the project identified potentially significant effects, but revisions in the project plans have been agreed to by the County that would avoid or mitigate those effects to a point where clearly no significant impact to the environment would occur, and there is no substantial evidence to determine that a project may have a significant effect on the environment.

Project Area

The project area consists of the existing bridge (#22C-0117) over Dry Slough, approximately 500 feet of CR 29 to the east of the bridge, approximately 250 feet of CR 29 to the west of the bridge, and a corridor ranging from 50 to 130 feet to the north of CR 29 and 50 to 150 feet to the south of CR 29. The project area is located on the *Merritt California* 7.5 minute USGS quadrangle in Township 9 North, Range 1 East, Section 25 and 26 (Figures 1 and 2). The project area has been established to encompass the maximum limits of potential ground disturbing construction activities that would reasonably be expected from the proposed project, including but not limited to, all existing and proposed new rights-of-way, temporary construction easements, utility relocations, and equipment staging areas.

Proposed Project

The proposed replacement structure will clear span the Slough with a single span in order to avoid maintenance and environmental issues associated with a center support. The proposed bridge will be approximately 60 feet long, and consist of a single span cast-in-place post tensioned concrete slab skewed approximately 33 degrees (Figure 3). The bridge foundations will consist of driven Caltrans Class 140 (Alternative W) 14" diameter steel pipe piles. The bridge and roadway embankment adjacent to the Slough will be protected with rock slope protection over slope protection fabric.

The bridge will utilize Caltrans concrete barriers and have no concrete approach slabs. To protect traffic from impacting the blunt end of the bridge concrete barriers, approach guard railing will be installed at all four bridge corners. The guard railing will consist of Caltrans Standard 25 foot long Transition Railing (WB-31) in conjunction with a 37.5 foot long Alternative Flared Terminal System.

The proposed bridge clear width and paved roadway section width will be 32 feet wide and will consist of two 12 foot lanes with 4 foot shoulders. Outside the edge of pavement, 4 foot graded aggregate base shoulder backing per the County Standard for Rural Streets is proposed.

The horizontal alignment was developed to reduce right of way and environmental impacts as much as possible. As a result of the new alignment it is expected that three non-native black walnut trees each with a diameter breast height (DBH) of less than 20" at will be removed. Where feasible, the horizontal alignment matches the existing, however the western bridge abutment needed to be shifted to the south (relative to the existing) in order to provide a longer tangent roadway segment between the reversing horizontal curves. A longer 200 foot tangent segment between the reversing horizontal curves is necessary to meet County standards and provide adequate distance for the roadway super elevation to transition. The tangent segment between curves is also desirable because it would allow for the new bridge to be constructed on a straight alignment which would simplify construction details and reduce costs. Lastly, the resulting straighter alignment improves sight distance relative to the existing condition.

The roadway profile at the bridge location is controlled by the design speed, structure depth, cross slope and creek hydraulics. The bridge will require clearance for the 50 year design storm with freeboard and the 100 year design storm without freeboard. The water surface at the bridge is controlled by the channel capacity, which overtops at a design flow less than the 50 year storm. This makes the 50 year flow and the 100 year flow almost identical. Therefore the proposed design actually provides approximately 2 feet of freeboard over the 100 year water surface elevation, which results in a profile elevation very similar to the existing condition.

The proposed roadway cross slope will provide a sufficient gradient for drainage of bridge surfaces. The proposed concrete barriers will utilize scuppers to allow water to drain off of the bridge deck directly into Dry Slough. The finished condition will match the existing drainage pattern. Roadway drainage will consist of water sheet flowing off the roadway and into unlined drainage ditches that tie into the Slough. Erosion control consisting of native grasses is proposed on new fill slopes.

Temporary Impacts

Since the road will be closed during construction much of the contractor staging could occur from the existing roadway. If additional staging is necessary, the parcel just northeast of the project site will be used as a potential staging area. This is the only adjacent parcel that is not actively being farmed. The parcel has been identified in the APE map so that it is included within the environmental study limits.

Falsework will be required in Dry Slough for the proposed cast-in-place bridge. Temporary Slough access roads and a temporary Slough crossing will be required to install rock slope protection and falsework. This temporary crossing would not be open to the public, but would be used by the contractor to transport men, equipment and materials across the Slough. The crossing would either be made when the Slough is dry or the contractor would install a diversion consisting of cofferdams upstream and downstream of the project with the water being diverted though the project site with longitudinal culverts. Cofferdams could consist of sandbags, visquene and clean crushed rock, or large plastic bladders filled with water. All diversion material would be removed after construction and any access roads necessary to access the channel would be removed and restored to the preexisting contours.

Road Closure and Detour

The County has indicated that a road closure during construction is feasible at this location. The most viable east/west detours appear to be CR 27 to the north or CR 31/Covell Blvd. to the south. These detours are both approximately 10 miles to get from one side of the bridge to the other. Most east/west traffic will not need to backtrack towards the bridge along CR 29 so the actual detour for most traffic will be seven miles for either detour. This detour length is acceptable for most vehicles and the County has confirmed that this closure is acceptable for emergency vehicles and large farm equipment.

Right of Way
CR 29 bisects two large 160 acre parcels. The northern parcel APN 040-170-009 is owned by THORBURN 1993 TRUST and the southern parcel 040-200-029 is owned by EOFF BARBARA J TRUST ETAL. The southern parcel is also subject to a conservation easement near the Slough which is owned by the Yolo Land Trust and City of Davis.

It appears that the roadway is located within a 60 foot wide County easement. At this time temporary construction easements for both parcels are anticipated to be required. A new permanent right of way easement may also be required for both parcels.

Utilities
Utility relocation will be required at this site. There is an underground AT&T utility that is attached to the northern side of the existing bridge. This utility will need to be relocated prior to construction. AT&T may elect to bore under the Slough in order to relocate to a new out of conflict location or utilize a two stage relocation where they temporarily relocate off the existing bridge and then relocate back on the new bridge once the new bridge is complete.

Overhead PG&E electric relocations will also be required at this site. Currently there is a utility pole just southeast of the exiting bridge. New bridge foundations will consist of deep pile foundations that require a high vertical clearance. A temporary Shoofly or permanent relocation will be required in order to move electric lines further away from the new foundations. PG&E also has a gas line located in the project vicinity, however it does not appear in conflict with the project at this time.

Excavators, bulldozers, cranes, dump trucks, concrete trucks, concrete pumps, pile driving hammers, and pile drilling equipment may be required to construct the new bridge. Construction of the new bridge is anticipated to be completed within one construction season (Estimated to be 100 working day during the months of April – December).

Conservation Measures

Conservation measures will be incorporated into the proposed project to minimize the potential for adverse effects on the environment. These conservation measures are identified below.

Conservation Measure #1 - Erosion and Sedimentation Control

Erosion control measures shall be implemented during construction of the proposed project. These measures shall conform to the appropriate erosion/sedimentation control provisions contained in the Caltrans Standard Specifications (that are in force at the time the construction contract is awarded) and the special provisions included in the contract for the project. Such provisions shall include the preparation of a Storm Water Pollution Prevention Plan (SWPPP), which will describe and illustrate best management practices (BMPs).

Erosion control measures to be included in the Storm Water Pollution Prevention Plan or otherwise implemented by the County include the following:

- To the extent practicable, activities that increase the erosion potential will be restricted to the relatively dry late spring through early fall period to minimize the potential for rainfall to transport sediment to surface water features. If these activities must take place during the late fall, winter, or early spring, temporary erosion and sediment control structures will be in place and operational at the end of each construction day and will be maintained until permanent erosion control structures are in place.

- Vegetation clearing and ground-disturbing activities will be limited to the minimum area necessary for project implementation.

- Areas where woody vegetation needs to be removed will be identified in advance of ground disturbance and will be limited to only those areas that have been approved by the County. Within 10 days of completion of construction in those areas, hydro seed will be applied to disturbed areas to reduce the potential for short-term erosion. Prior to a rain event or when there is a greater than 50 percent probability of rain within the next 24 hours as forecasted by the National Weather Service, weed-free mulch will be applied to all exposed areas at the completion of the day's activities. Soils will not be left exposed during the rainy season.

- Suitable BMPs will be implemented, such as placing silt fences, straw wattles, or catch basins below all construction activities at the edge of surface water features to intercept sediment before it reaches the waterway. These structures will be installed prior to any clearing or grading activities.

- If spoil sites are used, they will be placed where they do not drain directly into a surface water feature, if possible. If a spoil site would drain into a surface water feature, catch basins will be constructed to intercept sediment before it reaches the feature. Spoil sites will be graded and vegetated to reduce the potential for erosion.

- Sediment control measures will be in place prior to the onset of the rainy season and will be monitored and maintained in good working condition until disturbed areas have been revegetated.

Conservation Measure #2 – Prevention of Accidental Spills

Construction specifications will include the following measures to minimize the potential for adverse effects resulting from accidental spills of pollutants (e.g., fuel, oil, grease):

- A site-specific spill prevention plan will be implemented for potentially hazardous materials. The plan will include the proper handling and storage of all potentially hazardous materials, as well as the proper procedures for cleaning up and reporting any spills. If necessary, containment berms will be constructed to prevent spilled materials from reaching surface water features.

- Equipment and hazardous materials will be stored a minimum of 50 feet away from surface water features.

- Vehicles and equipment used during construction will receive proper and timely maintenance to reduce the potential for mechanical breakdowns leading to a spill of potentially hazardous materials. Maintenance and fueling will be conducted in an area at least 50 feet away from surface water features or within an adequate fueling containment area.

Conservation Measure #3 - Air Quality/Dust Control

In the construction bid documents, the County will include provisions that the contractor will implement a dust control program to limit fugitive dust emissions. The dust control program will include, but not be limited to, the following elements, as appropriate:

- Inactive construction sites (i.e., previously graded areas inactive for ten days or more) and uncovered stockpiles shall be watered at least twice daily or until soils are stable. If soil stabilizers other than water are used, they must be nontoxic and shall be used according to manufacturer's specifications.

- Water or other nontoxic soil stabilizers shall be applied to all unpaved access roads, parking areas and staging areas at construction sites three times daily during days when construction is occurring.

- All vehicles hauling dirt, sand, soil, or other loose materials shall be covered or at least two feet of freeboard (i.e., minimum vertical distance between the top of the load and the trailer) shall be maintained.

- Any topsoil removed during construction shall be stored on-site in piles no higher than 4 feet to allow development of microorganisms prior to replacing the soil in the construction area. The topsoil piles shall be clearly marked and flagged. Topsoil piles that are not immediately used in the construction area shall be revegetated with a non-persistent erosion control mixture.

- Soil piles for backfill shall be marked and flagged separately from native topsoil stockpiles.

- Ground cover shall be reestablished in disturbed areas quickly.

- A speed limit of 15 MPH for equipment and vehicles operated on unpaved areas shall be enforced.

- If visible soil material is carried onto adjacent public paved roads, such materials shall be swept or otherwise removed from the public paved roads at the end of the day.

In the construction bid documents, the County will include provisions that the contractor will implement the standard NOx reduction requirements recommended by the Yolo-Solano Air Quality Management District (YSAQMD), including:

- To the extent that equipment and technology is available and cost effective, the contractors shall use catalyst and filtration technologies.

- Idling time shall be limited to 5 minutes when construction equipment is not in use, unless engine manufacturer's specifications or safety considerations require more time.

- The contractor shall comply with YSAQMD Rule 2.3, which states that visible emissions shall not exceed 40% opacity for more than three minutes in any one-hour.

Conservation Measure #4 - Prevention of Spread of Invasive Species

The following measures will be implemented to prevent the spread of invasive species as a result of the project:

- All equipment used for off-road construction activities will be weed-free prior to entering the project area.

- Any mulches or fill used will be weed free.

- Any seed mixes or other vegetative material used for revegetation of disturbed sites will consist of locally adapted native plant materials to the extent practicable.

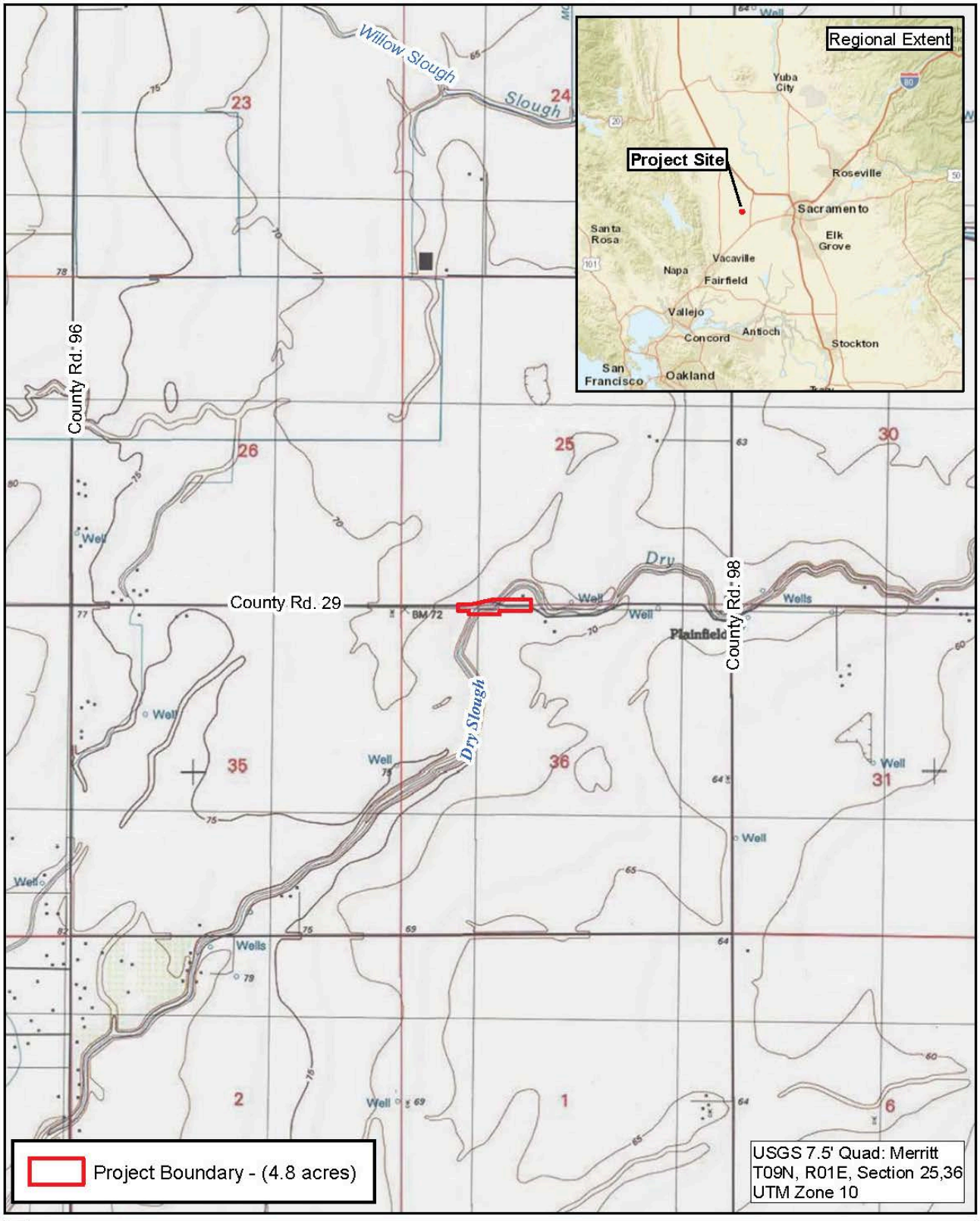
Conservation Measure #5 – General Measures for Protection of Special-Status Wildlife Species

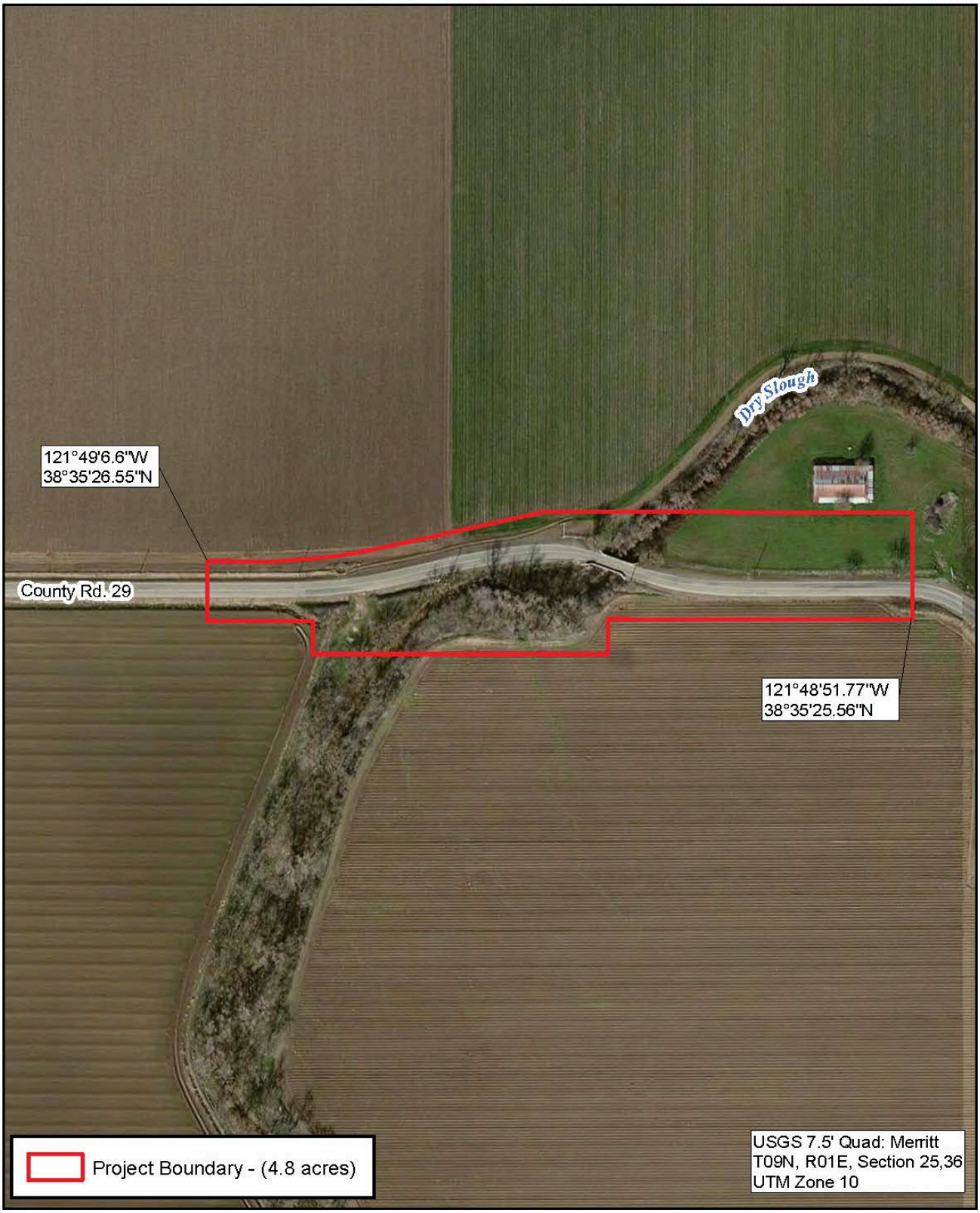
The County will implement the following general conservation measures to avoid or minimize the potential for adverse effects on special-status wildlife species:

- Disturbance of soil, vegetation, naturally occurring debris piles (including fallen trees, woodrat nests, or dead tree snags), and wildlife burrows will be avoided or minimized to the extent possible.

- To the extent practicable, all holes or trenches will be covered at the end of each workday to prevent wildlife from becoming trapped. All holes and trenches will be inspected before each work day to facilitate the release of any trapped wildlife. A qualified biologist will be consulted if work crews are unable to safely assist in the release of trapped wildlife.

- To minimize attractants to wildlife, trash will be stored in containers that can be closed and latched or locked to prevent access by wildlife. All loose trash will be cleaned up daily.


Regional Extent
Project Site
Yuba City
Roseville
Sacramento
Santa Rosa
Elk Grove
Napa
Vacaville
Fairfield
Vallejo
Concord
Antioch
Stockton
San Francisco
Oakland
Willow Slough
Slough
County Rd. 96
County Rd. 29
County Rd. 98
Dry
Dry Slough
Plainfield
BM 72
Well
Wells
23
24
25
26
30
31
35
36
2
1
6
Project Boundary - (4.8 acres)
USGS 7.5' Quad: Merritt
T09N, R01E, Section 25,36
UTM Zone 10
NORTH
1:24,000
0 1,000 2,000 Feet
Data Sources: ESRI, USGS, Quincy Engineering
County Road 29 Bridge Replacement Project
Regional Location
Figure 1
Map Date: 05/16/16


Dry Slough
121°49'6.6"W
38°35'26.55"N
County Rd. 29
121°48'51.77"W
38°35'25.56"N
Project Boundary - (4.8 acres)
USGS 7.5' Quad: Merritt
T09N, R01E, Section 25,36
UTM Zone 10
NORTH
1:2,500
0 100 200 Feet
Data Sources: ESRI (Base Map Sourced: 05/16/16), Quincy Engineering
County Road 29 Bridge Replacement Project
Project Location
Figure 2
Map Date: 05/16/16

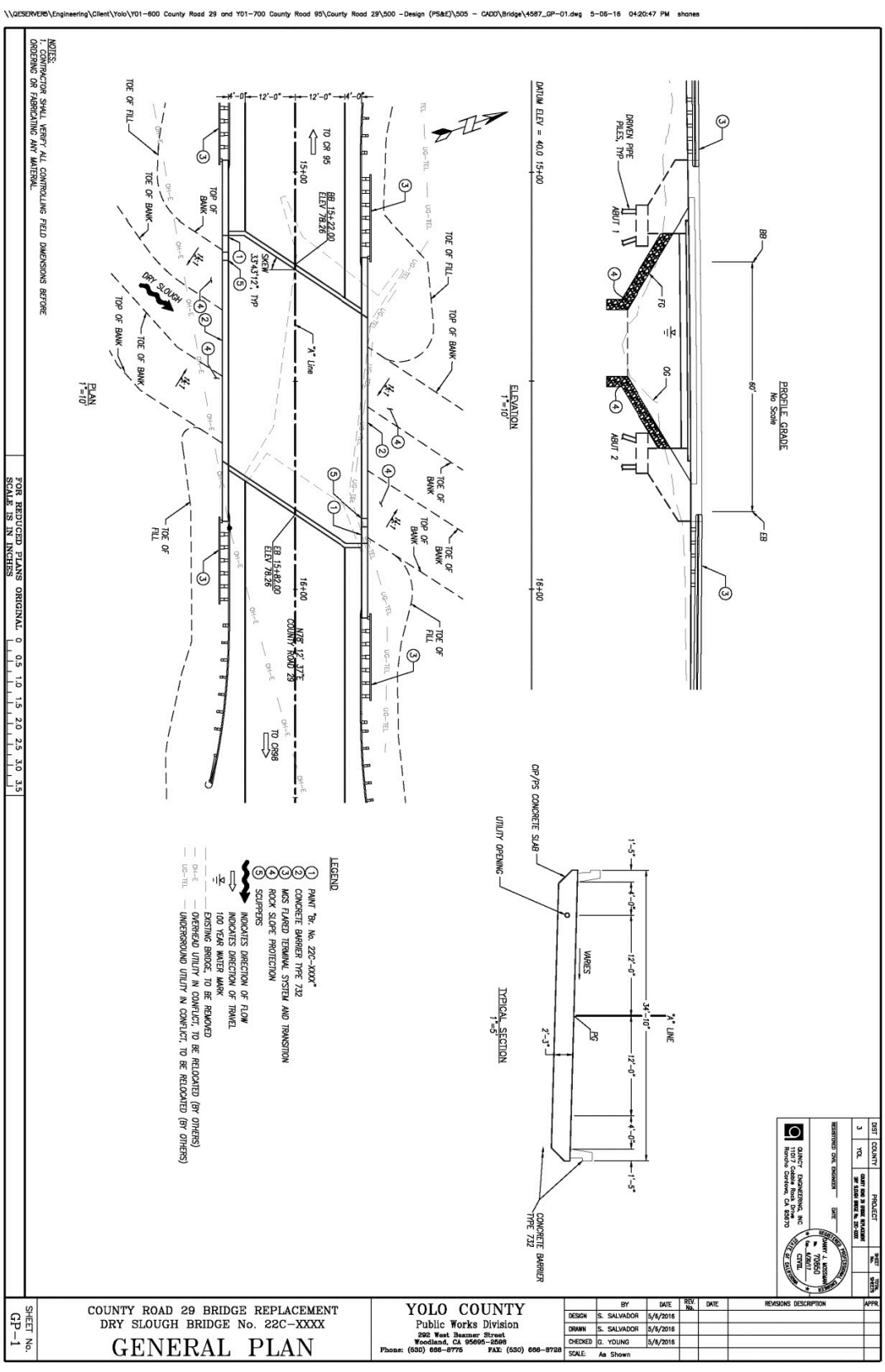

\\GESERVER6\Engineering\Client\Yolo\Y01-600 County Road 29 and Y01-700 County Road 95\County Road 29\500 - Design (PS&E)\505 - CADD\Bridge\4567_GP-01.dwg 5-05-16 04:20:47 PM shanes
NOTES:
1. CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL.
PLAN
1"=10'
ELEVATION
1"=10'
PROFILE GRADE
No Scale
TYPICAL SECTION
1"=5'
LEGEND
PAINT "Dr. No. 22C-XXXX"
CONCRETE BARRIER TYPE 732
MGS FLARED TERMINAL SYSTEM AND TRANSITION
ROCK SLOPE PROTECTION
SCUPPERS
INDICATES DIRECTION OF FLOW
INDICATES DIRECTION OF TRAVEL
100 YEAR WATER MARK
EXISTING BRIDGE, TO BE REMOVED
OVERHEAD UTILITY IN CONFLICT, TO BE RELOCATED (BY OTHERS)
UNDERGROUND UTILITY IN CONFLICT, TO BE RELOCATED (BY OTHERS)
DRY SLOUGH
TOP OF BANK
TOE OF BANK
TOE OF FILL
SKEW 33°43'12" TYP
TO CR 95
TO CR98
BB 15+22.00 ELEV 78.26
EB 15+82.00 ELEV 78.26
DATUM ELEV = 40.0
DRIVEN PIPE PILES, TYP
ABUT 1
ABUT 2
60'
CIP/PS CONCRETE SLAB
UTILITY OPENING
VARIES
CONCRETE BARRIER TYPE 732
FOR REDUCED PLANS ORIGINAL SCALE IS IN INCHES
COUNTY ROAD 29 BRIDGE REPLACEMENT
DRY SLOUGH BRIDGE No. 22C-XXXX
GENERAL PLAN
SHEET No. GP-1
YOLO COUNTY
Public Works Division
292 West Beamer Street
Woodland, CA 95695-2598
Phone: (530) 666-8775 FAX: (530) 666-8728
DESIGN S. SALVADOR 5/5/2016
DRAWN S. SALVADOR 5/5/2016
CHECKED G. YOUNG 5/5/2016
SCALE: As Shown
REVISIONS DESCRIPTION
QUINCY ENGINEERING, INC
Rancho Cordova, CA 95670
REGISTERED CIVIL ENGINEER
DATE
DIST 3
COUNTY YOL
PROJECT
SHEET No.
TOTAL SHEETS

Figure 3

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is "Potentially Significant Impact" (before any proposed mitigation measures have been adopted) as indicated by the checklist on the following pages.

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

DETERMINATION: (To be completed by the Lead Agency)

On the basis of this initial evaluation:

☐ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

☒ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.

☐ I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

☐ I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

☐ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to the earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Planner's Signature	Date	Eric Parfrey Planner's Printed name

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PURPOSE OF THIS INITIAL STUDY

This Initial Study has been prepared consistent with CEQA Guidelines Section 15063, to determine if the project as described herein may have a significant effect upon the environment.

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 is significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.

4. "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 XVIII, "Earlier Analyses," may be cross-referenced).

5. A determination that a "Less Than Significant Impact" would occur is appropriate when the project could create some identifiable impact, but the impact would be less than the threshold set by a performance standard or adopted policy. The initial study should describe the impact and state why it is found to be "less than significant."

6. 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, pursuant to Section 15063 (c)(3)(D) of the California Government Code. Earlier analyses are discussed in Section XVIII at the end of the checklist.

7. 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.

8. Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.

ENVIRONMENTAL SETTING

The project area is largely bounded by agricultural lands, with some rural residential and industrial uses nearby. The land immediately north of the project area houses a large agricultural-use warehouse. The majority of the surroundings are almond orchards. A large field used for grazing is located at the southwest corner of the project area. Dry Slough, an intermittent stream, bisects the project area from the northwest to the east.

Climate

Climate within the project area is as described below based on historical data collected at Davis, California approximately five miles southeast of the project area (Western Regional Climate Center 2016). The project area is characterized by a Mediterranean climate with moderate winters and hot, dry summers. Precipitation in the project area primarily falls as rain. The average annual rainfall is approximately 18.50 inches. Air temperatures in the project area range between an average January high of 54 degrees Fahrenheit (ºF), and an average July high of 96 ºF. The annual average high is approximately 75.7 ºF. The growing season (i.e., 50% probability of air temperature 28 ºF or higher) in the project area is approximately 355 days.

Existing Land Uses

Land uses within the project area include the alignment of CR 29 including Bridge 22C-0117 over Dry Slough. Land uses in the vicinity of the project area include agricultural land typically used for row crops.

Topography

The topography throughout the project area is generally level, except for Dry Slough's incised channel. The project area in elevation from 70 to 75 feet above mean sea level.

Hydrological Setting

The primary hydrologic feature within the project area is Dry Slough, an intermittent creek. Riparian wetlands are also located within the project area. Dry Slough flows into the Willow Slough approximately 3 river miles east of the project area. The Willow Slough flows to a series of agricultural canals and eventually into the Sacramento River Bypass, approximately 12 miles to the east.

Geology and Soils

The majority of the soil in the project area is alluvial and is common to landforms located in the Central Valley. Although the geology and soils indicate that flood episodes only occur periodically in the project area, over time such events have deposited deep soils in the project vicinity.

Three soil map units occur in the project area. They are described in the Soil Survey of Yolo County, California (Natural Resource Conservation Service 2013). Soil map units occurring within the project area are described in Table 2.

Table 2. Soil Map Units

Map Unit Name	*Map Unit Code*	*Drainage Class*	*Depth to Restrictive Layer*	*Hydric Soil*
Rincon silty clay loam	Rg	Well drained	n/a	No
Yolo silty clay loam, 0 to 2 percent slopes MLRA 17	Yb	Well drained	n/a	No

Vegetation Community Types

Vegetation communities in the project area were classified in the Natural Environment Study – minimal impacts prepared for this project and based on descriptions provided in *A Guide to Wildlife Habitats of California* (Mayer and Laudenslayer 1988). Five vegetation communities occur in the project area: dryland grain crops, deciduous orchard, riverine, valley foothill riparian.

Deciduous Orchards

Deciduous orchards occur along the south western portion of the project area. The orchards contain young plantings that are either almond or walnut almond trees grown in a row pattern with an understory devoid of vegetation.

Riverine

Riverine occurs within the channel of Dry Slough. It is mostly devoid of vegetation. The substrate is composed of gravels, sand, and silt, with a few cobbles. Water is present in the irrigation ditch during the spring and summer months. During the winter, Dry Slough is intermittent, only flowing during precipitation events.

Pasture

Pasture occurs in the north east section of the project site. Pasture vegetation is a mix of perennial grasses and legumes that varies according to management practices, fertilization, soil type, irrigation and weed control. This area of the project site appears to be heavily manipulated by agriculture and land management practices.

Dryland Grain Crops

Dryland grain crops within the project site occur on the south side of the road. Recently the dryland gain crop consisted of wheat within the project site. Vegetation in the dryland (non-irrigated) grain and seed crops habitat includes seed producing grasses, primarily barley, cereal rye, oats, and wheat

Valley Foothill Riparian

A thin corridor of marginal valley foothill riparian habitat occurs along Dry Slough. Black walnut (Juglans nigra), willows (Salix spp.) and blackberry are the dominate species. Giant reed (Arundo donax), an invasive botanical species, also occurs along the banks.

I. AESTHETICS

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

Discussion of Impacts

(a) ***No Impact.*** The project is located in a rural agricultural area and is not within view of any designated scenic vistas. The project consists of replacing the existing CR 29 Bridge over Dry Slough and roadway approaches with similar structures and will be designed in a manner consistent with the existing aesthetic. The project will have no impact on a scenic vista.

(b) ***No Impact.*** CR 29 is not designated as a state scenic highway. Furthermore, none of the nearby roadways or highways (including I-5) are listed or designated as state scenic highways (Caltrans 2016). Therefore, the project will have no impact on scenic resources within a state scenic highway.

(c) ***No Impact.*** The project consists of replacing the existing CR 29 Bridge over Dry Slough and roadway approaches with similar structures. The project will be designed in a manner consistent with the existing aesthetic and therefore would have no impact on the existing visual character or quality of the site or surrounding area.

(d) ***No Impact.*** Construction and operation of the project are not expected to result in increased glare in the project area. No lighting is proposed as part of the project and none will be needed during construction. Therefore, there are no impacts related to the creation of new sources of substantial light or glare that would affect day or nighttime views of the area.

II. AGRICULTURAL AND FOREST RESOURCES:

In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site assessment Model (1997) prepared by the California 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:

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
(a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance, as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☒	☐
(b) Conflict with existing zoning for agricultural use or a Williamson Act contract?	☐	☐	☐	☒
(c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)) or timberland (as defined in Public Resources Code section 4526)?	☐	☐	☐	☒
(d) Result in the loss of forest land or conversion of forest land to non-forest use?				
(e) Involve other changes in the existing environment which due to their location or nature, could result in conversion of farmland, to non-agricultural use or conversion of forest land to nonforest use?	☐	☐	☐	☒

Discussion of Impacts

(a) ***Less-Than-Significant Impact.*** The soils within the project area are designated as Prime Farmland (Natural Resources Conservation Service 2014). The project will slightly expand the County's easement due to the placement of fill and installation of rock slope protection (RSP). While the placement of fill will not convert any farmland, the installation of RSP will convert less than 0.01 acre of farmland to non-agricultural use; however, the land to be converted is currently only within the Dry Slough drainage is not used for crops. The placement of RSP in this area would not affect the existing farming in the area. Therefore, the project will have a less-than-significant impact on the conversion of any farmland to non-agricultural use.

(b) ***No Impact.*** The project area and the surrounding lands are zoned as Agricultural Intensive (A-N) and are under a Williamson Act Contract (Yolo County 2016). The project will not conflict with the current agricultural practices, agricultural zoning or Williamson Act contracts and therefore, will have no impact.

(c)(d) ***No Impact.*** The project area is not within an area that is zoned for timber production (Yolo County 2016). The project will have no impact on forest land uses.

(e) ***No Impact.*** The project will not involve other changes in the existing environment that could result in the conversion of farmland to non-agricultural use. The project is also not located in any forest land. Therefore, the project will have no impact with respect to this issue.

III. AIR QUALITY:

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

Thresholds of Significance:

The project site is within the Yolo-Solano Air Quality Management District (YSAQMD), and the Sacramento Valley Air Basin regulates air quality conditions within Yolo County. Yolo County is classified as a non-attainment area for several air pollutants, including ozone (O_3) for state and federal standards and particulate matter 10 microns or less in diameter (PM_{10}) for state standards, the partial non-attainment of the federal particulate matter 2.5 ($PM_{2.5}$),

Development projects are most likely to violate an air quality plan or standard, or contribute substantially to an existing or project air quality violation, through generation of vehicle trips.

For the evaluation of project-related air quality impacts, the YSAQMD recommends the use of the following thresholds of significance:

- Long-term Emissions of Criteria Air Pollutants (ROG, NO_X, and PM_{10})—The criteria air pollutants of primary concern include ozone-precursor pollutants (ROG and NO_X) and PM_{10}. Significance thresholds have been developed for project-generated emissions of reactive organic gases (ROG), nitrogen oxides (NO_X), and particulate matter of 10 microns or less (PM_{10}). Because $PM_{2.5}$ is a subset of $PM_{10,}$ a separate significance threshold has not be established for $PM_{2.5}$. Operational impacts associated with the proposed project would be considered significant if project-generated emissions would exceed YSAQMD-recommended significance thresholds, as identified below:

Table AQ-1
YSAQMD-Recommended Quantitative Thresholds of Significance for Criteria Air Pollutants

Pollutant	Threshold
Reactive Organic Gases (ROG)	10 tons/year (approx. 55 lbs/day)
Oxides of Nitrogen (NO_X)	10 tons/year (approx. 55 lbs/day)
Particulate Matter (PM_{10})	80 lbs/day
Carbon Monoxide (CO)	Violation of State ambient air quality standard

Source: Handbook for Assessing and Mitigating Air Quality impacts (YSAQMD, 2007)

- Emissions of Criteria Air Pollutants (ROG, NO_X, and PM_{10})—Construction impacts associated with the proposed project would be considered significant if project-generated emissions would exceed YSAQMD-recommended significance thresholds, as identified in Table AQ-1, and recommended control measures are not incorporated.

- Conflict with or Obstruct Implementation of Applicable Air Quality Plan— Projects resulting in the development of a new land use or a change in planned land use designation may result in a significant increase in vehicle miles traveled (VMT). Substantial increases in VMT, as well as, the installation of new area sources of emissions, may result in significant increases of criteria air pollutants that may conflict with the emissions inventories contained in regional air quality control plans. For this reason and given the region's non-attainment status for ozone and PM_{10}, project-generated emissions of ozone precursor pollutants (i.e., ROG and NO_x) or PM_{10} that would exceed the YSAQMD's recommended project-level significance thresholds, would also be considered to potentially conflict with or obstruct implementation of regional air quality attainment plans.

- Local Mobile-Source CO Concentrations—Local mobile source impacts associated with the proposed project would be considered significant if the project contributes to CO concentrations at receptor locations in excess of the CAAQS (i.e., 9.0 ppm for 8 hours or 20 ppm for 1 hour).

- Toxic Air Contaminants. Exposure to toxic air contaminants (TAC) would be considered significant if the probability of contracting cancer for the Maximally Exposed Individual (i.e., maximum individual risk) would exceed 10 in 1 million or would result in a Hazard Index greater than 1.

- Odors. Odor impacts associated with the proposed project would be considered significant if the project has the potential to frequently expose members of the public to objectionable odors.

Discussion of Impacts

(a)(b) ***Less-Than-Significant Impact.*** Yolo County is within the Yolo Solano Air Quality Management District (YSAQMD). The district is currently a non-attainment area for ozone (State and Federal ambient standards) and Particulate Matter PM-10 (State ambient standards), PM-2.5 (State ambient standards), and in partial non-attainment for PM-2.5 (Federal ambient standards)

(California Air Resources Board, 2016). Though air quality plans exist for ozone, none exists for PM-2.5 or PM-10.

The project will contribute incrementally to the non-attainment of these air quality standards on a short-term basis during construction; however, there will be no long-term impacts because the project is not expected to increase the number of vehicle trips along the route. Project construction will create short-term increases in Reactive Organic Gases (ROG), Oxides of Nitrogen (NOx), and PM-10 emissions from vehicle emissions and construction activities. These emissions were estimated using the Roadway Construction Emissions Model (Version 7.1.5.1) which is distributed by the Sacramento Metropolitan Air Quality Management District (Table 3).

The YSAQMD sets threshold levels for use in evaluating the significance of criteria air pollutant emissions from project-related mobile and area sources in the Handbook for Assessing and Mitigating Air Quality Impacts (Yolo-Solano Air Quality Management District 2007). The handbook identifies quantitative and qualitative long-term significance thresholds for use in evaluating the significance of criteria air pollutant emissions from project-related mobile and area sources.

Table 3. Emissions Generated by Project Construction Compared with YSAQMD Thresholds

Project Phase	*ROG (lb/day)*	*NOx (lb/day)*	*PM-10 (lb/day)*
Grubbing/Land Clearing	1.51	17.75	0.89
Grading/Excavation	13.9	160.90	7.51
Drainage/Utilities/ Sub-grade	9.83	106.36	5.36
Paving	1.74	17.02	1.09
Maximum Daily Emissions	13.9 lbs	160.90 lbs	**7.51 lbs**
Maximum Annual Emissions	**0.62 tons**	**6.99 tons**	0.34 tons
YSAQMD Significance Threshold	10 tons/year	10 tons/year	80 lb/day
Significant Impact?	**No**	**No**	**No**

Notes: Total PM-10 emissions are the sum of exhaust and fugitive dust emissions. Modeling assumptions include a 2017 construction start year, 6 months of construction, a total road length of 0.22 miles, a total project area of 4.6 acres, a maximum area disturbed per day of 0.2 acres, a maximum of 700 cubic yards of exported/imported soil per day, and use of water trucks.

Because the emissions generated by the project would be below the thresholds set by YSAQMD the impact to air quality would be considered less than significant. In addition, Conservation Measure #3 (Air Quality/Dust Control) would further reduce project emissions and ensure the project would not conflict with any applicable air quality plan or violate any air quality standards.

(c) ***Less-Than-Significant Impact.*** Yolo County is in non-attainment for ozone (State and Federal ambient standards) and PM-10 (State ambient standards), and in partial non-attainment for PM-2.5 (Federal ambient standards) (California Air Resources Board, 2016). However, project-generated emissions would be short-term (i.e., a few months during construction) and would be below the thresholds set by YSAQMD for these pollutants. Therefore, the project would have a less-than-significant impact with respect to this issue.

(d) ***No Impact***. The project is located in a rural area. No sensitive receptors such as schools, hospitals, or daycare centers occur in the vicinity of the project area. The nearest homes are located approximately 600 feet to the north of the project area. The project will not expose sensitive receptors to any substantial pollutant concentrations from construction equipment. Therefore, the project will have no impact on sensitive receptors.

(e) ***Less-Than-Significant Impact.*** The project's construction activities will involve the use of petroleum-powered construction equipment and asphalt, which can generate distinctive odors. However, the impacts from these odors are considered to be less-than-significant due to the limited number of nearby sensitive receptors and the temporary nature of their generation.

IV. BIOLOGICAL RESOURCES

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	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 in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☒	☐	☐
b) Have a substantial adverse effect on any riparian habitat or sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☐	☐	☒
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☐	☒	☐
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native residents or migratory wildlife corridors or impede the use of native wildlife nursery sites?	☐	☐	☒	☐
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☐	☒
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	☒

Discussion of Impacts

(a) ***Less-than-Significant with Mitigation Incorporated***. A Natural Environment Study – Minimal Impacts (NES-MI) (Gallaway Enterprises, 2016), which analyzes the project effects on biological resources, has been prepared for the project. Based on a review of habitat requirements and the results of the field assessment of the project area conducted on March 28, 2016, the project area provides habitat for three special-status animal species (Table 4).

Migratory birds and raptor species, in addition to those listed as special-status species, could also nest in the vicinity of the project area. Migratory birds and their nests are protected under the Migratory Bird Treaty Act (MBTA), and raptor species and their nests are protected from take according to California Department of Fish and Game Code. Cliff swallows (*Petrochelidon pyrrhonota*), barn swallows (*Hirundo rustica*), black phoebes (*Sayornis nigricans*), and other migratory birds are known to build nests under artificial structures, such as bridges and culverts.

The NES-MI included a survey for potential migratory bird habitat as well as evidence of previous migratory bird nesting activity (e.g., remnant mud nests) during the field assessment. Inactive Cliff swallow nests were located on the existing bridge. Certain migratory birds will nest in orchards, such as: mourning dove (*Zenaida macroura*), western king bird (*Tyrannus verticalis*), and mockingbird (*Mimus polyglottos*). Almond orchards located within and adjacent to the project area may provide nesting habitat for these species.

No special-status plant species have the potential to occur within the project area due to lack of suitable habitat. Implementation of the proposed project is not expected to adversely affect any special-status plant species.

Table 4. Special-Status Animals Potentially Occurring in the Project Area

Common Name *(Scientific Name)*	*Status*[1] *(Federal/State)*
Federal or State Listed Species	
Swainson's hawk (*Buteo swainsoni)*	—/T
Giant garter snake (Thamnophis gigas)	T/T
Other Special-Status Species	
Tri-colored blackbird (*Agelaius tricolor)*	—/SC

[1] Status Codes: Threatened (T); Species of Special Concern (SC); Fully Protected Species (FP).

Swainson's Hawk Swainson's hawk is a state-listed threatened species. Large trees that provide nesting habitat for Swainson's hawk are within the Biological Survey Area (BSA). Foraging habitat is present in the dryland grain crops and pasture habitat areas adjacent to the project area. Multiple California Natural Diversity Database (CNDDB) records for Swainson's hawk occur within 5 miles of the project area, with three occurrences documented within and directly adjacent to the BSA. CNDDB records (Occurrence No. 1296) documents a nest with young in 2004, located in a willow tree south of the existing bridge in Dry Slough. No stick nests indicative of Swainson's hawk were identified within the project area during the field reconnaissance visit; however, several trees located within and adjacent to the project area could support nests.

If Swainson's hawk nests occur within 0.25 miles of the project area, construction disturbance during the breeding season could result in the loss of fertile eggs or nestlings, or otherwise lead to nest abandonment. No foraging habitat would be converted to other uses; therefore, the project is not anticipated to result in significant impacts on Swainson's hawk foraging habitat. In addition to the conservation measures provided in Section 1, Mitigation Measures #1 and #4 would be implemented to ensure that impacts to these species are less than significant.

Giant Garter Snake Giant garter snakes are listed as threatened under the Federal Endangered Species Act (ESA) and the California Endangered Species Act (CESA). They are the largest species of garter snake. Dull yellow striping, wide head and commonly distinguishes GGS from other common species of garter snake. GGSs are found in the wetlands of the Sacramento and San Joaquin Valleys from Chico, Butte County to Mendota Wildlife Area, Fresno County. Suitable habitat includes marshes, sloughs, back waters of rivers, irrigation canals, drainage canals, agricultural wetlands, flooded rice fields and occasionally streams with low gradient and slow to stagnant waters. GGSs breed from March to April and females give birth to live young from July to early September. Current threats facing the GGS is urbanization, flood control and canal maintenance, grazing and agricultural practices, wetland management for water fowl, invasive species and natural gas exploration (USFWS 2012).

Dry Slough and its banks provides suitable aquatic habitat for GGS within the BSA. The surrounding area consists of dryland grain crops and orchards, which does not provide suitable upland or wintering habitat due to farming practices that eliminate burrows and reduce places for escapement. Fields used for winter crops are typically worked during the snake's winter hibernation period thus do not provide suitable upland habitat during winter or during the active season. Although there is suitable aquatic habitat within the BSA for GGS it is unlikely for GGS

to occur in the BSA as the project area is outside of the species historic range. The historic range of the snake coincides with the nearest occurrence records (Giant Garter Snake Recovery Plan, USFWS 2015). Although GGS may use the Slough for dispersement there is marginal aquatic habitat and they are not expected to occupy the site. In addition, the project is outside of the historic and known range of GGS; therefore no direct impacts to GGS or permanent loss of GGS habitat is expected and no avoidance and minimization measures recommended.

Tri-Colored Blackbird Tri-colored blackbirds are a state candidate species for listing under the CESA. There are blackberry brambles that line the banks of Dry Slough which provide suitable nesting habitat. In 1991, tri-colored blackbirds were recorded nesting in the blackberry brambles within the BSA (Occurrence No. 404). Dryland grain crops (i.e. wheat) within the BSA also provide nesting habitat. Dryland grain crops have become an alternative nesting location for large colonies of tri-colored blackbirds since most of the species natural nesting habitat has been converted into other land uses. During the biological evaluation, red-winged blackbirds (Agelaius phoeniceus) were observed nesting in the wheat fields adjacent to the BSA. There were no tri-colored blackbirds observed during the biological evaluation yet the presence of suitable nesting habitat lends potential for the species to nest in the area in the future.

If tri-colored blackbirds are nesting within or adjacent to the project area, construction disturbance during the breeding season could result in the loss of fertile eggs, or nestlings, or otherwise leaf to nest abandonment. In addition to the conservation measures provided in Section 1 and Mitigation Measure #2 and #4 would be implemented to ensure that the project would have a less-than-significant impact on nesting migratory birds and raptors.

Special Status Species Bats There has been an increase in awareness regarding declining bat populations across the United States. Some species of bats are now recognized as SSC in California. Bats have little to no regulatory protection and are largely protected under the CEQA process. The CEQA states that “No projects which would cause significant environmental effects should be approved as proposed if there are feasible alternatives or mitigation measures that would lessen those effects.” An impact to a colony of roosting bats is considered a significant environmental effect.

There is suitable day roosting habitat for bats within the County Road 29 Bridge over Dry Slough. The bridge contains small weep holes which provide suitable bachelor roosting habitat. Bachelor roosts typically are small and cannot support a maternity roost. Only male bats roost in these locations during the spring and summer months when females are forming large maternity roosts and having young. During the biological evaluation several bats were observed roosting in the weep holes. A dead bat was also observed under the bridge and was later identified as a male yuma myotis (Myotis yumanensis). This species of bat is known for roosting in bridge structures and forming small bachelor roosts during the bat maternity season. It is assumed that the species of bat roosting in the bridge is yuma myotis. In addition to the conservation measures provided in Section 1, Mitigation Measure #3 would be implemented to ensure that the project would have a less-than-significant impact on roosting bats.

Migratory Birds and Raptors. All migratory birds and their nests are protected from take under the federal MBTA. All raptor species, including relatively common species and their nests, are protected from take according to California Fish and Game Code. Inactive cliff swallow nests were observed on the bridge over Dry Slough during the March 2016 field reconnaissance visit. Raptor nests were not observed in the project area; however, given that large trees near the project area provide suitable nesting habitat for raptors, there is a potential for active nests to be present during project construction.

If migratory bird or raptor species are nesting within or adjacent to the project area, construction disturbance during the breeding season could result in the loss of fertile eggs or nestlings, or otherwise lead to nest abandonment. In addition to the conservation measures provided in Section 1, Mitigation Measures #1, #2, #4, and #5 would be implemented to ensure that the

project would have a less-than-significant impact on bats and nesting migratory birds and raptors.

In conclusion, with implementation of the conservation measures in Section 1 and Mitigation Measures #1 through #5, adverse effects, either directly or through habitat modification, on any species identified as a candidate, sensitive, or special-status species, would be less than significant.

Mitigation Measures

In addition to the conservation measures provided in Section 1, the County would implement the following measures to ensure that the project would have a less-than-significant impact on biological resources.

Mitigation Measure #1: Project activities, including the removal of three non-native black walnut trees, shall be initiated outside of the Swainson's hawk nesting season (March 1 – September 15). If project activities cannot be initiated outside of the Swainson's hawk nesting season than the following will occur: A qualified biologist will conduct a Swainson's hawk pre-construction survey within 7 days of starting vegetation removal or initial ground disturbing activities, which ever activity occurs first. If an active Swainson's hawk nest (i.e. with egg(s) or young) is observed within ¼ mile from scheduled project activities during the pre-construction survey, then a species protection buffer will be established. The species protection buffer will be a 1/4 mile or otherwise defined by the qualified biologist in consultation with CDFW. Construction activity shall be prohibited within the buffer zones until the young have fledged or the nest fails. Construction will be permitted if a qualified biologist or CDFW determine that Project activities are not disturbing the nest. Nests shall be monitored once per week and a report submitted to the County weekly. Monitoring would only be required if the Swainson's hawk nest is within the buffer and continued until the young have fledged.

Mitigation Measure #2: Project activities, related to site grubbing and vegetation removal within the BSA shall be initiated outside of the tri-colored blackbird nesting season (February 1 – August 31). Vegetation is defined as trees, blackberry bushes/brambles, grass, forbs, shrubs, and emergent vegetation. If project activities that involve removing vegetation (e.g. trees, blackberry bushes/brambles, grass, forbs, shrubs, and emergent vegetation) cannot be initiated outside of the bird nesting season, the following measures will be implemented. A qualified biologist will conduct a pre-construction survey for tri-colored blackbirds within 7 days of starting vegetation removal. If an active tri-colored blackbird nest (i.e. with egg(s) or young) is observed within 250 feet of the BSA during the pre-construction survey, then a species protection buffer will be established. The minimum buffer distance will be determined by the monitoring biologist. Construction activity shall be prohibited within the buffer zones until the young have fledged or the nest fails. Nests shall be monitored once per week and a report submitted to the County weekly.

Mitigation Measure #3: Prior to bridge demolition, bat exclusion material or one-way devices shall be installed by the contractor under the guidance and supervision of a qualified biologist with bat exclusion experience or by a qualified biologist with bat exclusion experience. A survey shall be conducted by a qualified biologist prior to the installation of exclusion to determine if bats are present. If bats are present, then one-way exclusion devices shall be installed. If bats are not present then the roosting area can be sealed. Since the bat roost has been identified as a bachelor roost, exclusion material or devices can be installed during the bat maternity season (generally April 1 – August 31) without impacts to reproductive females and young. Exclusion shall not occur during the time when bats are in torpor (generally October 15 – February 15) unless a survey has been conducted by a qualified biologist and results from the survey determine that there are no bats present. Netting shall not be used as a type of exclusion material. Exclusion devices/materials shall be monitored by a qualified biologist at least once per week until the bridge is demolished. All exclusion devices/materials shall be maintained to ensure they are properly functioning.

Mitigation Measure #4: Project activities, related to site grubbing and vegetation removal within the BSA shall be initiated outside of the bird nesting season (February 1 – August 31). Vegetation is defined as

trees, blackberry bushes/brambles, grass, forbs, shrubs, and emergent vegetation. If project activities that involve removing trees, blackberry bushes/brambles, grass, forbs, shrubs, and emergent vegetation cannot be initiated outside of the bird nesting season than the following will occur: A qualified biologist will conduct a pre-construction survey for nesting and migratory birds within 7 days of starting vegetation removal. If an active (i.e. with egg(s) or young) nest is observed within 250 feet of the BSA during the pre-construction survey, then a species protection buffer will be established. The minimum species protection buffer of 50 feet or more will be defined by the qualified biologist based on the species, nest type and tolerance to disturbance. The minimum 50 foot buffer would apply to bird nests of non-raptor species. Construction activity shall be prohibited within the buffer zones until the young have fledged or the nest fails. Nests shall be monitored once per week and a report submitted to the County weekly. The species protection buffer may be reduced if the biologist monitoring construction activities determines that construction activities are not causing an impact or behavioral modification to the nesting birds. Birds that build nests within the active construction site are presumably accustomed to high levels of disturbance therefore buffer distances would be reduced.

Mitigation Measure #5: Avian exclusion on the County Road 29 Bridge shall occur through one of the following techniques or a combination of both in order to avoid impacts to nesting birds:

Exclusion through Installation of Exclusion Devices: Avian exclusion materials shall be established on the County Road 29 Bridge prior to the bird nesting season. Exclusion materials can be installed by the contractor under the supervision of a qualified biologist with exclusion experience or a qualified biologist with exclusion installation experience can install materials. Exclusion materials may be established prior to construction and before the nesting season the bird nesting season if a pre-construction survey by a qualified biologist is conducted prior to installation and confirms that there are no active nests on the bridge. Bird netting shall not be used as a form of exclusion material since bats roost within the bridge. Exclusion shall be monitored by the contractor or qualified biologist at least once per week until the bridge is demolished or it is the end of the bird nesting season. Exclusion materials shall be maintained to ensure they are properly functioning. If birds are observed initiating nests on the bridge then the inactive nests shall be removed and the exclusion material adjusted to prevent nesting in that area.

And/or

Exclusion through Monitoring: Exclusion of nesting birds on the County Road 29 Bridge can be achieved by regularly removing partially constructed nests prior to nests becoming active. Nests can become active within one day of nest completion and swallows can complete building a nest in one day, therefore nest exclusion during the nesting season via nest removal must be conducted daily or every other day to prevent nests from becoming active. Nests can be removed by using a pole. Other methods of removal shall be approved by the County. Old remnant nests shall be removed from the bridge structure prior to the nesting season to deter nesting birds. All nesting material removed shall be left onsite. Monitoring shall continue until the bridge is demolished or it is the end of the bird nesting season.

(b) ***No Impact.*** The list of sensitive natural communities includes riparian habitats. The riparian habitat is the project area is fragmented, consisting of a narrow band of valley oak and associated understory vegetation. Due to the high level of actively managed agricultural fields surrounding the project site, the riparian habitat in this location is not considered a sensitive natural community per CEQA guidelines. The project footprint will largely occur in the County easement which is highly maintained. There would be no impact to riparian habitat or other designated sensitive natural communities as a result of the project.

(c) ***Less-than-Significant with Mitigation Incorporated.*** A wetland delineation performed for the project area on March 28, 2016, mapped a total of 0.782 acre of waters of the United States (Gallaway Enterprises 2016b). Six other waters of the United States totaling 0.556 acres and one riparian wetland totaling 0.226 acres were identified as potentially jurisdictional. The other waters of the United States, specifically Dry Slough, would be impacted by the proposed project.

The project would result in permanent impacts to Dry Slough, an other water of the United States. Other waters of the United States are seasonal or perennial water bodies, including lakes, stream channels, ephemeral and intermittent drainages, ponds, and other surface water features, that exhibit an ordinary high-water mark but lack positive indicators for one or more of the three wetland parameters (hydrophytic vegetation, hydric soil, and wetland hydrology) (33 CFR 328.4).The permanent impacts would result from the placement of fill at the edges of the Slough for the bridge abutments. The project will also result in temporary impacts to Dry Slough from construction of the temporary access road within the creek bed. Adherence to the standard requirements of the Corps, RWQCB and CDFW as stated on Page 1 of this Initial study, would be implemented to ensure the project would have a less-than-significant impact on waters and other waters of the United States.

(d) ***Less-than-Significant Impact.*** No migratory fish are present in Dry Slough. Construction activities and post-construction use of the proposed bridge replacement would not inhibit wildlife movement. The CR 29 Bridge has been present in the environment for an extended period of time, allowing wildlife species to become accustomed to its presence. Project construction activities would be temporary and with implementation of the conservation measures would have a less-than-significant impact on wildlife movement or nursery sites.

(e) ***No Impact.*** No local policies or ordinances regulate or protect biological resources in the project area; therefore, the project would not conflict with any local policies or ordinances protecting biological resources and there would be no impact.

(f) ***No Impact.*** The Yolo Habitat Conservancy is a county-wide Natural Communities Conservation Plan/Habitat Conservation Plan (NCCP/HCP). The Yolo Habitat Conservancy released the first administrative draft of the Yolo Natural Heritage Program on July 1, 2013. The NCCP/HCP is currently under review and has not been approved by the Yolo Habitat Conservancy; therefore, it has not taken effect. The replacement of the CR 29 Bridge is not included as a covered activity in the draft NCCP/HCP and therefore would not conflict with NCCP/HCP plan implementation or conservation goals. The project would have no impact with respect to this issue.

V. CULTURAL RESOURCES

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

Discussion of Impacts

(a)(b) ***Less-Than-Significant with Mitigation Incorporated***. Conservation policies in the Countywide General Plan require that projects avoid or mitigate to the maximum extent feasible the impacts of development on Native American archaeological and cultural resources. The project site is within the aboriginal territories of the Yocha Dehe Wintun Nation who has a cultural interest and authority in the project area. An Archeological Survey Report (ASR; Genesis Society 2016 and a Historical Property Survey Report (HPSR; Genesis Society 2016) have been prepared for the

project. No cultural resources were identified within the project area. No historic-era or prehistoric sites, features, or artifacts, or potentially sensitive landforms or soil deposits were identified during preparation of the ASR or HPSR. Caltrans lists Bridge 22C-0117 as a Category 5 bridge, which identifies the bridge as not eligible for listing on the National Register of Historic Places (NRHP). No cultural resources within the project area have been recommended for listing on the NRHP and none are eligible to be considered historical resources or archeological resources as defined in Section 15064.5 of the State CEQA Guidelines. Therefore, the project will have no impact with respect to causing a substantial adverse change in the significance of historical resources or archeological resources as defined in Section 15064.5 of the State CEQA Guidelines.

Soils in the project area appear to be the result of alluvial deposition from the adjacent waterway, which is exposed on the surface within and near the project area. Based on the characteristics of this soil deposition process, it is presumed that any cultural resources would be visible on or near the surface within the project area or located at a depth greater than is proposed for ground disturbing activities in the project area, due to periodic flooding events that have occurred in the Sacramento Valley over the last 5,000 years. Additionally, ground-disturbing activities associated with the construction and maintenance of CR 29, Bridge 22C-0117, would have destroyed or at least severely disturbed any prehistoric or historic-era cultural remains situated within the narrow project area. However, if previously unidentified cultural materials are unearthed during construction activities those resources could be damaged, which would result in significant impact. Implementation of Mitigation Measure #8 would address potential direct or indirect impacts to previously undiscovered cultural and/or historical resources and reduce any such impact to a less-than-significant level.

(c) ***Less-Than-Significant with Mitigation Incorporated***. A paleontologically important rock unit is one that is known to produce unique, scientifically-important fossils specimens in relative abundance. Geologic maps (Helley and Harwood 1985) indicate that a majority of the project vicinity is underlain Holocene-aged (10,000 years before present and younger) alluvium and small areas of Pleistocene-aged (10,000 years to 1.8 million years before present) Modesto Formation (lower member). An object must be older than 10,000 years old to be considered a fossil, so activities in this unit would not have an impact on paleontological resources. The lower member of the Modesto Formation is composed of alluvial deposits containing slightly-weathered gravel, sand, silt, and clay that form the lowest deposits lying above the Holocene-aged alluvium. Remains of land mammals have been found in California at a number of sites containing the Modesto Formation (Jefferson 1991).

A records search of the UCMP collections database indicated that there are at least eight sites in California where significant fossil remains were recovered from the Modesto Formation, six of which contained fossil remains of vertebrate mammals (UCMP 2013).There are no UCMP sites located in the project area. The closest recorded UCMP locality is located 8 miles to the west of the project area.

While no known paleontological resources occur within the project area, the regional occurrence of Pleistocene fossils within the Modesto Formation suggests that there is potential for uncovering fossil remains during project-related earth-moving activities. Substantial damage to, or degradation of unique paleontological resources would represent a significant impact. Implementation of Mitigation Measure #9 would address potential direct or indirect impacts to unique paleontological resources and reduce any such impact to a less-than-significant level.

Mitigation Measures

The County would implement the following measures to ensure that impacts to paleontological resources would be less than significant.

Mitigation Measure #6:

If an inadvertent discovery of cultural materials (e.g. unusual amounts of shell, animal bone, glass, ceramics, structure/building remains, etc.) is made during project-related construction activities, ground disturbances in the area of the find shall be halted until a professional archaeologist can be consulted. The archaeologist shall determine whether the resource is potentially significant per the CRHR and develop appropriate mitigation to protect the integrity of the resource and ensure that no additional resources are impacted. If the professional archaeologist's evaluation concludes that the resource(s) are associated with Native American artifacts or culturally sensitive resources the County shall contact the Yocha Dehe Wintun Nation and in consultation with their designated monitors, the site shall be evaluated for cultural significance and to determine proper disposition of any artifacts or culturally sensitive resources. Mitigation could include, but not necessarily be limited to preservation in-place, archival research, subsurface testing, or contiguous block unit excavation and data recovery.

Mitigation Measure #7: If paleontological resources (i.e., fossils) are discovered during project construction, all work within 100 feet of the discovery site will stop until a qualified paleontologist can assess the importance of the find and recommend appropriate treatment. Yolo County will be responsible for ensuring that recommendations regarding treatment are implemented.

(d) ***Less-Than-Significant with Mitigation Incorporated.*** No human remains are known or predicted to exist in the project area. The only new construction or earthmoving activities proposed involve replacing an existing bridge structure with a new bridge in the same location. Nevertheless, construction activities could result in the discovery of human remains not previously identified. The implementation of Mitigation Measure #8 will reduce the project impact to a less-than-significant level.

Mitigation Measure

Mitigation Measure #8:

In the event that any human remains or any associated funerary objects are encountered during construction, all work will cease within the vicinity of the discovery. In accordance with CEQA (Section 1064.5) and the California Health and Safety Code (Section 7050.5), the county coroner should be contacted immediately. If the human remains are determined to be Native American, the coroner will notify the Native American Heritage Commission and the Yocha Dehe Wintun Nation, who will notify and appoint a Most Likely Descendent (MLD). The MLD would have the responsibility to work with a qualified archaeologist to decide the proper treatment of the human remains and any associated funerary objects.

VI. GEOLOGY AND SOILS

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

GEOLOGICAL SETTING

According to the 2030 Countywide General Plan, the only fault in Yolo County that has been identified by the California Division of Mines and Geology (1997) to be subject to surface rupture (within an Alquist-Priolo Earthquake Fault Zone) is the Hunting Creek Fault, which is partly located in a sparsely inhabited area of the extreme northwest corner of the County. Most of the fault extends through Lake and Napa Counties. The other potentially active faults in the County are the Dunnigan Hills Fault, which extends west of I-5 between Dunnigan and northwest of Yolo, and the newly identified West Valley and East Valley Faults (Fault Activity Map of California, California Geological Survey, 2010), which are also not in the vicinity of the proposed project. These faults are not within an Alquist-Priolo Earthquake Fault Zone, and are therefore not subject to surface rupture.

Discussion of Impacts

(a) ***Less-Than-Significant Impact:***

(i)(ii) The project area is not located in an Alquist-Priolo Earthquake Fault Zone and does not contain any known earthquake faults (California Geological Survey 2012). Even though the project area is distant from known, active faults, very infrequent earthquakes could still cause strong ground shaking (California Geological Survey 2006). To ensure that potential seismically induced hazards do not affect the replacement bridge, the project will be engineered to account

for the seismic activity known to occur in the area. The project will have a less-than-significant impact with respect to exposing people or structures to potential substantial adverse effects from seismic ground shaking.

The project area is located in a relatively level area. The subsurface soils in the project area consist of Rincon silty clay loam, and Yolo silty clay loam, (Natural Resources Conservation Service 2016). While the soils located in the project area do possess the basic physical properties for liquefaction to occur (loose granular soils and low plasticity); it is unlikely that these soils will in fact become liquefied during a seismic event. Liquefaction would require intense ground shaking and water saturation in soils. Soils are not likely to be saturated due to the extremely low water tables in the area and infrequency of flooding events (Natural Resources Conservation Service 2016). The project will also be engineered to account for the possibility of liquefaction occurring. Therefore, the project will have no impact with respect to seismic-related ground failure.

(iv) The topography of the project area is relatively flat, with the exception of the banks of Dry Slough. Therefore, the project area has low susceptibility to landslides. Installation of the RSP at the bridge would improve the stability of the banks in those locations. The project will have a less-than-significant impact with respect to exposing people or structures to potential substantial adverse effects from landslides.

(b) ***Less-Than-Significant Impact.*** Project construction will be necessary within Dry Slough. Vegetation clearing, construction equipment access, and re-contouring of the creek bed and banks will expose and loosen soils. Erosion and sedimentation into downstream waters could result if runoff were to occur during construction. Also, grading activities could increase the potential for erosion during rain or wind events, which would be a significant impact. Pursuant to the Clean Water Act, the County is required to obtain a National Pollution Discharge Elimination System (NPDES) Phase II permit from the California Regional Water Quality Control Board (Central Valley Region). To obtain a NPDES Phase II permit, the County will prepare a Stormwater Pollution Prevention Plan (SWPPP). The SWPPP will include BMPs to reduce erosion during project construction and minimizes sedimentation down gradient from the project. The BMPs are specified in the California Stormwater Quality Association specifications (California Stormwater Quality Association 2015). Implementation of these BMPs and Conservation Measure #1 – Erosion and Sediment Control will ensure that soil erosion impacts during project construction will be less than significant.

(c) ***No Impact.*** The project is not located on unstable geologic materials and will not have any effect on the stability of the underlying materials or potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse. For the reasons discussed previously, the potential for landslides or liquefaction during seismic events is unlikely. Furthermore, the project will be engineered to account for the possibility of these events occurring. The project will have no impact with respect to this issue.

(d) ***Less-Than-Significant Impact.*** Geologic hazard impacts that are associated with expansive soils include long-term-differential settlement and cracking of foundations, disruption and cracking of paved surfaces, underground utilities, canals, and pipelines. Mapped soil units in the project area include Rincon silty clay loam, and Yolo silty clay loam, both of which have moderate/normal shrink/swell potential (Yolo County GIS Public Viewer 2016). Because the project follows generally accepted geotechnical procedures minimizing consequences of expansive soil, the project will have a less-than-significant impact.

(e) ***No Impact.*** The project does not include the construction of septic tanks or wastewater systems and therefore, will have no impact.

VII. GREENHOUSE GAS EMISSIONS

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	☒	☐
b) Conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☐	☒
c) Be affected by climate change impacts, e.g., sea level rise, increased wildfire dangers, diminishing snow pack and water supplies, etc.?	☐	☐	☐	☒

Environmental Setting

The issue of combating climate change and reducing greenhouse gas (GHG) emissions has been the subject of recent state legislation (AB 32 and SB 375). The Governor's Office of Planning and Research has recommended changes to CEQA Guidelines, and the environmental checklist which is used for Initial Studies such as this one. The changes to the checklist, which were approved in 2010, are incorporated above in the two questions related to a project's GHG impacts. A third question has been added by the County to consider potential impacts related to climate change's effect on individual projects, such as sea level rise and increased wildfire dangers.

The County has adopted General Plan policies and a Climate Action Plan (CAP) which address these issues. In order to demonstrate project-level compliance with CEQA relevant to GHG emissions and climate change impacts, applications for discretionary projects must demonstrate consistency with the General Plan and CAP. The adopted 2030 Yolo Countywide General Plan contains the following relevant policies and actions:

Policy CO-8.2: Use the development review process to achieve measurable reductions in GHG emissions.

Action CO-A117: Pursuant to the adopted CAP, the County shall take all feasible measures to reduce its total carbon dioxide equivalent (CO2e) emissions within the unincorporated area (excluding those of other jurisdictions, such as UC-Davis, Yocha Dehe Wintun Nation, DQ University, school districts, special districts, reclamation districts, etc.) from 648,252 metric tons (MT) of CO2e in 2008 to 613,651 MT of CO2e by 2020. In addition, the County shall strive to further reduce total CO2e emissions within the unincorporated area to 447,965 MT by 2030. These reductions shall be achieved through the measures and actions provided for in the adopted CAP, including those measures that address the need to adapt to climate change.

Action CO-A118: Pursuant to and based on the CAP, the following thresholds shall be used for determining the significance of GHG emissions and climate change impacts associated with future projects:

1. Impacts associated with GHG emissions from projects that are consistent with the General Plan and otherwise exempt from CEQA are determined to be less than significant and further CEQA analysis for this area of impact is not required.

2. Impacts associated with GHG emissions from projects that are consistent with the General Plan, fall within the assumptions of the General Plan EIR, consistent with the CAP, and not exempt from CEQA are determined to be less than significant or mitigated to a less-than-significant level, and further CEQA analysis for this area of impact is generally not required.

To be determined consistent with the CAP, a project must demonstrate that it is included in the growth projections upon which the CAP modeling is based, and that it incorporates applicable strategies and measures from the CAP as binding and enforceable components of the project.

3. Impacts associated with GHG emissions from projects that are not consistent with the General Plan, do not fall within the assumptions of the General Plan EIR, and/or are not consistent with the CAP, and are subject to CEQA review are rebuttably presumed to be significant and further CEQA analysis is required. The applicant must demonstrate to the County's satisfaction how the project would achieve its fair share of the established targets including:

    - Use of alternative design components and/or operational protocols to achieve the required GHG reductions;

    - Use of real, additional, permanent, verifiable and enforceable offsets to achieve required GHG reductions. To the greatest feasible extent, offsets shall be: locally based, project relevant, and consistent with other long term goals of the County;

    The project must also be able to demonstrate that it would not substantially interfere with implementation of CAP strategies, measures, or actions.

Discussion of Impacts

(a) ***Less-Than-Significant Impact.*** Use of diesel and gasoline powered vehicles and equipment during project construction will generate GHG emissions. However, based on the small scale and duration of the project's construction activities, the project will not generate significant increases in GHGs or an ongoing increase in the demand for off-site energy production. The project does not include any new facilities or land uses that will permanently increase GHG generation over existing conditions once construction ceases. While the project's GHG emissions associated with the use of heavy equipment would be measurable over the course of the project construction, GHG emissions and any effects on global climate change will not be cumulatively significant considering the amount of GHG emissions generated by the project and the current local and regional air quality conditions. The project will have a less-than-significant impact regarding the generation of GHGs.

(b) ***No Impact.*** The proposed project will not conflict with any applicable plan, policy, or regulation adopted to reduce GHG emissions, including the Yolo County CAP or the relevant climate change policies of the Yolo County 2030 General Plan (Yolo County 2009, Yolo County 2011). The project will have no impact with respect to this issue.

(c) ***No Impact.*** The project is not at significant risk to the effects of climate change-related impacts such as wildfire dangers or diminishing snow pack or water supplies; therefore, the project will have no impact with respect to this issue.

VIII. HAZARDS AND HAZARDOUS MATERIALS

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

Discussion of Impacts

(a) ***Less-Than-Significant Impact.*** Project construction and operation would not routinely generate any hazardous materials. Although construction would not generate any hazardous materials, a potential hazard to the public and the environment would be posed by the use of diesel or gasoline powered construction equipment (trucks, excavators, etc.) and lubricants such as oil and hydraulic fluids. The potential for such a hazard would be temporary and manageable because equipment would be routinely maintained and inspected to avoid leaks. The Best Management Practices (BMPs) described in Conservation Measure #2 – Prevention of Accidental Spills would be included in the project to reduce potential impacts associated with accidental spills of pollutants (i.e., fuel, oil, grease, etc.) on vegetation and aquatic habitat resources within the project area. In the event of an accidental spill, the spill prevention plan to be prepared in accordance with Conservation Measure #2 - Prevention of Accidental Spills would reduce the potential hazard to the public and the environment to a less-than-significant level.

(b) ***Less-Than-Significant Impact.*** An Initial Site Assessment has been prepared for the project (Crawford & Associates 2016). There was no direct or indirect evidence of a hazardous spill or

release of petroleum products in the project area. No underground storage tanks were identified during the records search. Reviews of geologic maps and a site visit were conducted to assess the likelihood of naturally occurring asbestos (NOA) in the project area. No ultramafic rock units were identified and no rock outcrops or rock fragments likely to contain NOA were observed in the project area.

Paint used on the bridge was tested for lead. The paint contained on the painted surfaces of the bridge was above the regulatory threshold and is classified as hazardous. Lead was also reported in the soil samples below the bridge, however based on reported concentrations, the soils do not need to handled as hazardous waste. The yellow traffic striping within the project area was not tested to determine whether hazardous materials are present. The yellow traffic striping may be tested or, because the volume of striping is so low, it could be treated as hazardous waste and disposed of accordingly, at a Class 1 Disposal facility in accordance with Title 8 and the Caltrans Standard Special Provisions for removal of lead paint. The Special Provisions should be included in the Contract to provide a Health and Safety Plan for workers and a "Lead Compliance Program" for the project. The Special Provisions should address worker protections with respect to handling of lead-based paint, temporary storage, testing, and transportation to an appropriate disposal or recycling facility. Because removal and disposal of paint containing lead would be conducted in accordance with California State regulations and Caltrans Standard Special Provisions impacts would be less than significant.

Treated timber does not appear to be a material used in the construction of the existing bridge. Chemically treated wood must be handled as treated wood waste (TWW) and disposed of as hazardous waste. Should additional timber be uncovered during bridge demolition and replacement, e.g., buried creosote timber piles, this timber would be treated as TWW. Caltrans Special Standard Provision (SPP 14-11.09) for treated wood waste (TWW) provides alternative management standards (AMS) for TWW. The contractor will be required to follow the AMS including providing training to all personnel that may come in contact with TWW. This training must include, at a minimum, safe handling, sorting and segregating, storage, labeling (including date), and proper disposal methods. Because the contractor will follow Caltrans Special Standard Provision for TWW disposal impacts would be less than significant.

Samples of soil from the project area were analyzed for lead. Although lead was present in most of the soil samples, concentrations were below threshold values, and no special handling is anticipated for soil within the project limits. The Department of Toxic Substances Control (DTSC) has granted a variance to Caltrans regarding soils that may be contaminated with lead (Caltrans 2009). The variance allows stockpiling, transporting, and reuse of soils with hazardous waste concentrations of lead below maximum allowable levels on Caltrans right of way when specific conditions are met, which are contained in the variance. If the terms and conditions of the variance are not meet, then the hazardous waste management requirements of Health and Safety Code, Chapter 6.5 and California Code of Regulations, title 22 would apply. Because the handling, use, removal and disposal of soils will be conducted in accordance with California State Regulations impacts would be less than significant.

(c) ***No Impact.*** The project is not located within one-quarter mile of an existing or proposed school. Therefore, the project will have no impact with respect to this issue.

(d) ***No Impact.*** The provisions in Government Code Section 65962.5 are commonly referred to as the "Cortese List". The list is maintained by numerous public agencies, and the California Environmental Protection Agency maintains an online register of the data resources that provide information on the Cortese List sites throughout the state (California Environmental Protection Agency 2012). There are no Cortese List sites within the project area and therefore, the project will have no impact with respect to this issue.

(e)(f) ***No Impact.*** The project is located approximately 2 miles east of the Yolo County Airport; however it is outside of the overflight zone (Airport Land Use Commission for Sacramento,

Sutter, Yolo and Yuba Counties, 1999). . There will be no increased safety hazard for people residing or working in the project area as a result of the proposed project. No impact related to proximity to an airport or airstrip will occur.

(g) ***Less-Than-Significant Impact.*** During project construction, traffic will be temporarily detoured around the bridge site using existing roads, potentially either east/west via CR 27 to the north or CR 31/Covell Blvd. to the south. Before CR 29 is closed for construction, the County will inform emergency response agencies and the local community about the temporary road closure and available detours. The detour will be maintained per the standards contained within the California Manual on Uniform Traffic Control Devices and the County will provide notification within the month prior to construction commencement by a press release with an attached detour route map. The project is not anticipated to impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan because vehicular access will be maintained through detours during construction. The project will have a less-than-significant impact with respect to this issue.

(h) ***No Impact.*** The project area is not located in a wildland area and, therefore, will not be at risk from wildland fires. No impact related to wildland fires is anticipated.

IX. HYDROLOGY AND WATER QUALITY

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

Discussion of Impacts

(a)(f) ***Less-Than-Significant Impact.*** The project falls under the several laws and regulations that relate to water quality and discharge requirements. These include the Clean Water Act (CWA), the Porter-Cologne Water Quality Control Act, and regulations under the State Water Resources Control Board and the Regional Water Quality Control Board. Project construction associated with the new bridge, road improvements, and the demolition of the old bridge will require ground-disturbing activities in and adjacent to Dry Slough. Construction and staging areas will be disturbed by vehicles and various construction related activities that will make these areas susceptible to erosion by stormwater runoff. Additionally, the project will include the use of fuels and lubricants to operate construction equipment, and other machinery, as well as solvents, paints, or other hazardous materials. Accidental spills or leaks of construction related hazardous materials could discharge into the creek, resulting in adverse water quality impacts. However,

adverse effects from stormwater runoff or hazardous material spills are not expected to occur. Water quality objectives will be met through adherence to construction provisions, precautions, and stipulations as described in the National Pollutant Discharge Elimination System permit, §404 CWA Nationwide Permit #14, §401 CWA Water Quality Certification, and §1602 Streambed Alteration Agreement. The County will require the contractor to prepare and implement a SWPPP to reduce or minimize discharge of pollutants from construction activities. These measures, along with the implementation of Conservation Measure #1 – Erosions and Sedimentation Control and Conservation Measure #2 – Prevention of Accidental Spills, would reduce potential impacts relating to quality standards or waste discharge requirements to a level considered less than significant.

(b) ***Less-Than-Significant Impact.*** The project will slightly increase the amount of impervious surfaces in the project area through the addition of RSP and the slight widening of the road surface. These additional barriers will not significantly contribute to creating an impermeable barrier as rainfall will be routed to nearby permeable surfaces or to Dry Slough, allowing for groundwater recharge. The effect on aquifer recharge and groundwater will be minor; therefore, the project will have a less-than-significant impact on groundwater recharge or the local aquifer.

(c)(d)(e) ***Less-Than-Significant Impact.*** The course of Dry Slough will not be substantially altered by the project. The minor increase of impervious surface area resulting from the wider bridge and road approaches is not expected to contribute to a substantial increase in water runoff from the site. These minor changes in runoff patterns on the site will not cause flooding on- or off-site. Water quality during project construction will be protected by adherence to construction provisions, precautions, and stipulations as described in the NPDES, Section 404, Section 401, and 1602 Streambed Alteration Agreement permits, as well as the SWPPP. Project impacts will be considered less than significant.

(g) ***No Impact.*** The project does not involve the construction of housing. The project will have no impact with respect to this issue.

(h) ***Less-Than-Significant Impact.*** A Floodplain Evaluation Report which assessed the existing floodplains within the project limits and document any potential impacts or encroachments upon the floodplains, from the proposed project has been prepared (Wreco 2016). The project area is located within a Special Flood Hazard Area AE zone subject to flooding by the 100-year flood event determined by detailed methods where Base Flood Elevations (BFE) are shown. The new bridge will be constructed such that the structure depth will be reduced to convey the 100-year flood with 2 feet of freeboard. Additionally the proposed bridge would be longer and wider than the existing bridge resulting in improved hydraulics and a lowering of the water surface elevation. Due to the design and construction methods of the proposed bridge, the project will have a less than significant impact on flood flows.

(i) ***No Impact.*** The project will not expose people or structures to a significant risk of loss due to flooding. The project area is not located immediately downstream of a dam or adjacent to a levee that would expose individuals to risk from flooding. The project will have no impact with respect to this issue.

(j) ***No Impact.*** The project area is not located near any large bodies of water that would pose a seiche or tsunami hazard. In addition, the project area is relatively flat and is not located near any physical or geologic features that would produce a mudflow hazard. Therefore, the project will have no impact with respect to this issue.

X. LAND USE AND PLANNING

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

Discussion of Impacts

(a) ***No Impact.*** Although the section of CR 29 near the project area would be temporarily closed for a few months during construction, the bridge replacement project would not include any permanent features that would physically divide an established community. For this reason the project will have no impact with respect to this issue.

(b) ***No Impact.*** Construction of the project is consistent with the Yolo County General Plan, (Yolo County 2009). The General Plan designates the project area as Agriculture. The General Plan includes several goals and policies with which the project will be directly compatible. These include:

- GOAL LU-2: Agricultural Preservation. Preserve farm land and expand opportunities for related business and infrastructure to ensure a strong local agricultural economy.
- GOAL CC-1: Preservation of Rural Character. Ensure that the rural character of the County is protected and enhanced, including the unique and distinct character of the unincorporated communities.
- GOAL CI2: Mode and User Equity. Design and implement a circulation and transportation system that reflects the needs of all transportation types and users.
- GOAL CI-4: Environmental Impacts. Minimize environmental impacts caused by transportation.
    - Policy CI-4.1: Avoid or mitigate environmental impacts from the construction and/or operation of the transportation system, to the greatest feasible extent.
    - Policy CI-4.5: Roads and road-related structures (bridges, culverts, retaining walls, abutments, etc.) located in or near watercourses shall be placed, designed, built, and landscaped so as to minimize the impact to riparian corridors. Structures shall reduce erosion during and after construction, accommodate flood flows, and minimize grading on slopes greater than 20 percent.
- GOAL CO-2: Biological Resources. Protect and enhance biological resources through the conservation, maintenance, and restoration of key habitat areas and corresponding connections that represent the diverse geography, topography, biological communities, and ecological integrity of the landscape.
- GOAL CO-4: Cultural Resources. Preserve and protect cultural resources within the County.

The project will not conflict with any General Plan policies or other County regulations, and will have no impact with respect to this issue.

(c) ***No Impact.*** The Yolo Habitat Conservancy (YHC) is in the process of preparing a county-wide NCCP/HCP (Yolo Natural Heritage Program 2013). The first administrative draft of the plan was released on July 1, 2013. The project will not conflict with any of the policies or mitigation requirements of the draft NCCP/HCP. Therefore, the project will have no impact with respect to this issue.

XI. MINERAL RESOURCES

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

Discussion of Impacts

(a)(b) ***No Impact.*** The project will not change the existing availability of minerals in the region because none are known to occur in the area (California Department of Conservation 2016). The project will have no impact with respect to these issues.

XII. NOISE

Would the project result in:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	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?	☐	☐	☒	☐
b) Exposure of persons to or generation of excessive groundborne vibration noise levels?	☐	☐	☒	☐
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☐	☒
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☒	☐
e) For a project located within an airport land use plan or, where such a plan has not been adopted within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒

ENVIRONMENTAL SETTING

Yolo County has not adopted a noise ordinance which sets specific noise levels for different zoning districts or for different land uses in the unincorporated area. Instead, the County relies on the State of California Department of Health Services' recommended Community Noise Exposure standards, which are set forth in the State's General Plan Guidelines (2003). These standards are included in the Yolo County 2030 Countywide General Plan and used to provide guidance for new development projects. The recommended standards provide acceptable ranges of decibel (dB) levels. The noise levels are in the context of Community Noise Equivalent Level (CNEL) measurements, which reflect an averaged noise level over a 24-hour or annual period. The Countywide General Plan identifies up to 75 dB CNEL as an acceptable exterior noise environment for agricultural land uses and up to 60 dB CNEL for residential land uses.

Discussion of Impacts

(a)(b) ***Less-Than-Significant Impact.*** Because the project will not increase roadway capacity, it will not permanently increase traffic noise or introduce new permanent noise sources. Construction noise associated with the project will be intermittent and will vary in intensity, depending on the construction activity. The project area is located in an agricultural region with dispersed rural residential development. The closest structure is a farm dwelling located approximately 600 feet to the north of the project. The distance between the nearest homes and project construction activities will buffer the intensity of project-related construction noise and vibration experienced at these sensitive locations. In addition, noise generated by the operation of construction equipment will be similar to noise associated with the operation of agricultural equipment on surrounding lands, which is constantly moving in patterns that influence noise exposure levels. Because the project is not located adjacent to a noise-sensitive land use, potential impacts from exposure of persons to construction noise levels or groundborne vibration will be less than significant.

(c) ***No Impact.*** The project will not increase traffic in the area or create any other new permanent noise source. There will be no permanent increase in ambient noise levels in the project vicinity above levels existing without the project. The project will have no impact with respect to this issue.

(d) ***Less-Than-Significant Impact.*** Construction activities will increase noise levels temporarily in the vicinity of the project. Actual noise levels will depend on the type of construction equipment involved, distance to the source of the noise, weather, time of day, and other factors. However, these increases will be temporary and will not be located adjacent to a noise-sensitive land use. Potential impacts are less than significant.

(e)(f) ***No Impact.*** The project area is not located in an airport land use plan. The closest airport to the project site is the Yolo County Airport which is two miles to the west. The project will have no impact with respect exposing people residing or working in the project area to excessive noise levels.

XIII. POPULATION

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

Discussion of Impacts

(a) ***No Impact.*** Replacement of the existing bridge will not increase the traffic capacity of CR 29 or extend roads to new locations. The project will not induce substantial population growth. Therefore, the project will have no impact with respect to this issue.

(b)(c) ***No Impact.*** The project will not remove any housing or displace any people, necessitating the construction of replacement housing elsewhere. The project will have no impact with respect to these issues.

XIV. PUBLIC SERVICES

Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service rations, response time or other performance objectives for any of the public services:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Fire protection?	☐	☐	☐	☒
b) Police Protection?	☐	☐	☐	☒
c) Schools?	☐	☐	☐	☒
d) Parks?	☐	☐	☐	☒
e) Other public facilities?	☐	☐	☐	☒

Discussion of Impacts

(a)(b)(c)(d)(e ***No Impact.*** The project will not result in an increase in population served by government facilities. The project will not substantially increase the demand for fire protection or police protection during project construction or operation. Therefore, the project will not generate the need for new or physically altered police or fire protection facilities. Schools, parks, or other public facilities will not be affected by the construction or operation of the project. Therefore the project will not generate the need for new or altered facilities relating to schools, parks, or other public facilities. The project will have no impact with respect to these issues.

XV. RECREATION

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

Discussion of Impacts

(a)(b) ***No Impact.*** There are no recreational facilities in the vicinity of the project. The project will not require the construction or expansion of recreational facilities. The project will have no impact with respect to these issues.

XVI. TRANSPORTATION/TRAFFIC

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

ENVIRONMENTAL SETTING

The roadway network within unincorporated Yolo County consists primarily of two lane roads that are designed to serve small farming communities and agricultural uses. Thus, policies in the 2030 Countywide General Plan encourage inter-and intra-regional traffic to use State and federal interstates and highways, since the primary role of county roads is to serve local and agricultural traffic.

General Plan roadways are defined as: Minor Two-Lane County Roads, which primarily function as collector roads providing access to adjacent land carrying local traffic; Major Two-Lane County Roads, which function as collector roads that serve travel that is intra-county, carrying traffic between communities and/or other areas of the County; Conventional Two-Lane Highways, which are identified for State-maintained highways used as connectors between major traffic generators or links in State and national highway networks; Arterials, which are fed by local and collector roads to provide intra-community circulation and connection to regional roadways; and Freeways, which are intended to serve both intra-regional and inter-regional travel (Yolo County, 2009).

Level of Service (LOS) is a quantitative measure of traffic operating conditions whereby a letter grade A through F is assigned to an intersection or roadway segment, representing progressively worsening traffic conditions. LOS A, B, and C are considered satisfactory to most motorists, and allow for the relatively free movement of traffic. LOS D is marginally acceptable, with noticeable delays and unstable traffic speeds. LOS E and F are associated with increased congestion and delay.

Discussion of Impacts

(a)(b) ***No Impact.*** The project consists of replacing the existing substandard bridge with a new bridge. CR 29 is designated as a Minor Two-Lane County Road in the General Plan. . The project will not result in an increase in traffic in the area and will not conflict with the Yolo County General Plan, or any ordinance, policy, or congestion management program related to CR 29. Therefore, the project will have no impact with respect to these issues.

(c) ***No Impact.*** The project will not result in a change in air traffic patterns. The project will have no impact with respect to this issue.

(d) ***No Impact.*** The project does not incorporate design features that will substantially increase hazards or introduce incompatible uses. The project will have no impact with respect to this issue.

(e) ***Less-Than-Significant Impact***. Emergency access to residences, farms, and businesses along CR 29 in the vicinity of the project area may be affected during construction. Emergency vehicles and local traffic would be allowed to access these land uses; however, traffic would not be allowed to cross Dry Slough while the bridge is being replaced. A detour will be established to route traffic and emergency vehicles around the project area during construction, and the County would inform emergency service providers of the closure and the detour before the road is closed. Because of the temporary nature of this disruption, the presence of an established detour, and advanced communication with emergency service providers, this is a less than significant impact.

(f) ***No Impact.*** The project will not conflict with the Yolo County General Plan Update (Yolo County 2009) or the County of Yolo Bicycle Transportation Plan (Yolo County Transportation Advisory Committee 2013). The Bicycle Transportation Plan states “new bridge construction in the County shall accommodate the needs of bicyclists where there is a demand potential.” The project is located in a rural farming area, and it is unlikely that a high demand potential for bicycle lanes exists. Furthermore, the replacement of the existing substandard bridge with a new, wider bridge will improve bicyclist safety. The project will have no impact with respect to this issue.

XVII. UTILITIES AND SERVICE SYSTEMS

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

Discussion of Impacts

(a)(b) ***No Impact.*** The proposed project does not involve any actions that would generate wastewater. The project will have no impact regarding exceedance of wastewater treatment requirements. Furthermore, the project would not require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities. Therefore, the project would have no impact with respect to these issues.

(c) ***No Impact.*** Construction and operation of the project will not require new storm water facilities or alterations to existing storm water facilities. The project will be designed to provide sufficient drainage of roadway and bridge surfaces. The project will have no impact relating to the expansion or construction of storm water facilities.

(d) ***No Impact.*** Because the project will replace an existing functionally obsolete bridge and will not create the need for new water entitlements, the project will have no impact with respect to this issue.

(e) ***No Impact.*** The project will be limited to improvements to the existing bridge and approaches, and will not result in a change in the current demand for wastewater treatment. The project will have no impact with respect to this issue.

(f) ***Less-than-Significant Impact.*** Construction activities associated with the project will temporarily generate solid waste in the form of construction materials and demolished bridge components. Some of the demolished bridge components may be recycled as scrap material. Waste generated at the project site will be disposed of at a suitable facility as described in Section VIII. HAZARDS AND HAZARDOUS MATERIALS of this document. The project is not

likely to generate solid waste in amounts that would adversely affect the existing capacity of the Yolo County Central Landfill. This impact is expected to be less than significant.

(g) ***No Impact.*** Any solid waste generated by the project will be disposed of at an approved landfill, in compliance with local, state, and federal regulations pertaining to solid waste disposal. The project will have no impact with respect to this issue.

XVIII. MANDATORY FINDINGS OF SIGNIFICANCE

		Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a)	Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plan 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 probably future projects)?	☐	☐	☒	☐
c)	Does the project have environment effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☐	☒	☐

Discussion of Impacts

a) ***Less-Than-Significant Impact.*** Based on the analysis provided in this Initial Study and the Conditions of Approval required for project implementation, including mitigation measures addressed in Section IV, the project would not degrade the quality of the environment. As discussed in Section IV (Biological Resources) of this Initial study the proposed project could potentially impact habitat for the tri-colored blackbird, nesting habitat for the Swainson's hawk, special status bat species and birds protected under the MBTA. Mitigation Measures #1, #2, #3, #4, and #5 included in the project's Conditions of Approval will require surveys prior to construction activity and the implementation of exclusion devices to ensure that impacts to biological resources remain less than significant so that the habitat and/or range of any special status species are not endangered. Impacts to biological resources will be less than significant.

Based on the analysis provided in this Initial Study including mitigation measures addressed in Section V, the project would eliminate important examples of the major periods of California history or prehistory. Mitigation Measures #6, #7, and #8 will require temporary cessation of project activities and evaluation of resources In the event that cultural, paleontological or human remains are inadvertently discovered. Impacts to examples of major periods of California history or prehistory will be less than significant.

b) ***Less-Than-Significant Impact.*** The project will include improvements to an existing transportation system by replacing an existing bridge structure with a new bridge. The project will not introduce new development into a previously undeveloped area. Impacts associated with the project will be limited to the construction phase of the project, and will be fully mitigated at the project level. As a result, the project's contribution to any cumulative impacts will be less than considerable. Therefore, this impact will be less than significant.

c) ***Less-Than-Significant Impact.*** The project could result in a variety of impacts on human beings, however, only during the construction phase. Potential adverse effects on nearby residential areas along CR 29 are related to minor temporary decreases in air quality, hazards and hazardous materials, and temporary increases in noise levels during construction. Standard Conditions of Approval, Conservation and Minimization Measures, as described in the Initial Study, will be implemented to avoid or minimize potentially adverse effects to humans resulting from the construction of the project. The project will not involve any actions that will have a

substantial direct or indirect impact on the human environment that cannot be mitigated to a less-than-significant level.

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