

**STAFF REPORT  
C30**

A 21  
S 8, 12

04/05/19  
W 26932  
PRC 7183.9  
M. Schroeder

**ACCEPTANCE OF A LEASE QUITCLAIM DEED,  
AMENDMENT OF A MASTER GENERAL LEASE – PUBLIC AGENCY USE  
AND ISSUANCE OF GENERAL LEASE – PUBLIC AGENCY USE**

**LESSEE/APPLICANT:**

County of Stanislaus

**PROPOSED LEASE:**

*AREA, LAND TYPE, AND LOCATION:*

Sovereign land in the San Joaquin River, adjacent to Crows Landing Road, near Patterson, Stanislaus County.

*AUTHORIZED USE:*

Construction, use, and maintenance of a new bridge, known as the Crow's Landing Bridge, with utility conduits, storm drain lines, and bank scour protection at Crows Landing Road on the San Joaquin River; use of a temporary construction easement; temporary use and maintenance of the existing Crows Landing Bridge; and the demolition and removal of the existing bridge, including bents and piers in the river.

*LEASE TERM:*

Master Lease (Lease No. PRC 7183.9): 49 years, beginning October 18, 1985.

New Bridge Lease (W 26932): 25 years, beginning April 5, 2019.

*CONSIDERATION:*

The public use and benefit, with the State reserving the right at any time to set a monetary rent if the Commission finds such action to be in the State's best interests.

*SPECIFIC LEASE PROVISIONS:*

- Lessee shall not place, attach, or authorize the placement of any utilities or other improvements on the Bridge or within the Lease Premises without the Lessor's prior review and approval. Separate leases or subleases are required and shall be obtained for all utilities not operated by Lessee.

## STAFF REPORT NO. C30 (CONT'D)

- Lessee shall place warning signage or buoys, clearly visible from the shore and in the water, both upstream and downstream of the construction site, to provide notice of the bridge replacement project and to advise the public to exercise caution. Lessee shall place and maintain such signage at all times during bridge removal and construction activities and shall notify the California Department of Parks and Recreation's Division of Boating and Waterways of the location, description, and purposes of such signage upon its installation and removal.
- Lessee shall install signs directing the public to the nearby river access sites: Las Palmas River and Fishing Access, which is approximately 9 miles north of the project, and George J. Hatfield State Recreation Area, which is 8 miles south of the project.

### **STAFF ANALYSIS AND RECOMMENDATION:**

#### **Authority:**

Public Resources Code sections 6005, 6216, 6301, 6501.1, and 6503; California Code of Regulations, title 2, sections 2000 and 2003.

#### **Public Trust and State's Best Interests Analysis:**

On April 12, 1988, the Commission authorized a Public Agency Master Lease to the County of Stanislaus for the maintenance of five vehicular bridges, including the existing Crows Landing Bridge, crossing the San Joaquin, Stanislaus, and Tuolumne Rivers ([Item C04, April 12, 1988](#)). On December 16, 1998, the Commission authorized an amendment of the lease for reconstruction of the Roberts Ferry Bridge ([Item C56, December 16, 1998](#)). On December 18, 2015, the Commission authorized acceptance of a quitclaim deed releasing the Lessee's interest in the lease parcel for the Santa Fe Avenue Bridge, amendment of the lease to remove the Santa Fe Avenue Bridge from the Master Lease, and issuance of a separate lease to the lessee for the Santa Fe Avenue Bridge ([Item C81, December 18, 2015](#)). The Master Lease expires October 17, 2034. The Santa Fe Avenue Bridge is authorized under Lease No. PRC 9301.9 and expires on December 17, 2040.

The Lessee has submitted a lease quitclaim deed for the existing Crows Landing Bridge and requests its acceptance. In addition, the Applicant has submitted an application for a General Lease – Public Agency Use for the construction, use, and maintenance of a new bridge, known as the Crows Landing Bridge, with utility conduits, storm drain lines, and bank scour protection, use of a temporary construction easement, temporary use and maintenance of the existing Crows Landing Bridge, and the demolition and

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removal of the existing bridge, including bents and piers. The Applicant has the right to use the uplands adjoining the existing and proposed lease premises.

In 2009, the California Department of Transportation determined the existing bridge to be functionally obsolete and seismically deficient. As a result, the bridge will be replaced. The proposed bridge replacement over the San Joaquin River will provide an improved transportation network for statewide transportation needs. The new bridge will provide increased mobility along Crows Landing Road as an alternative to Interstate 5. Removal of the seismically and structurally deficient two-lane concrete bridge constructed in 1949 and replacement with a new three-lane (two through lanes and a center turn lane with shoulders) concrete bridge that meets current seismic and structural design standards will provide increased public safety. The proposed bridge will be approximately 723 feet long and 47.5 feet wide, with five spans. The proposed spans will be constructed of a cast-in-place concrete post-tensioned box girder supported on four bents composed of three cast in steel-shell columns.

The design of the proposed bridge includes openings for future accommodation of utility conduits. Installation of utility conduits is not part of the project and each utility company is responsible for installation of its utility conduits. The existing utilities at the site are owned by AT&T and cross the river adjacent to the existing bridge. The utilities are authorized by the Commission under separate leases, Lease No. PRC 779.9, 2674.9 and 5135.9. AT&T understands that it must maintain a separate lease for the utilities.

The new bridge will be constructed in two stages. It will be placed approximately 4 feet north of the existing bridge. Traffic movement will be maintained through the project site during the first stage of construction. The southern portion of the new bridge will be completed in the first stage. Traffic will then be moved to the completed section of the new bridge. The second stage of construction will include moving traffic to the new bridge, demolishing and removing the existing bridge, and completing construction of the north half of the new bridge.

Removal of the bents, which are composed of concrete piles located in the river, will require use of temporary cofferdams for dewatering the area around each bent for removal, with the exception that the existing bents may be cut off 5 feet below the mudline and left in place if the Applicant is unsuccessful in its attempts to remove the bents completely. In the event the Applicant is unable to completely remove the bents, the Applicant will

STAFF REPORT NO. **C30** (CONT'D)

remain responsible for any abandoned structures. Should the Commission determine that any abandoned structures have become a hazard to the public, the Applicant will be required to remedy the hazard. The riverbed and banks will be returned to their original condition upon completion of construction activities.

Temporary work trestles will be utilized during construction of the new bridge and removal of the existing bridge. The trestles will be removed once construction is complete. The temporary trestles will be utilized in two stages, concurrent with the staging of construction.

Promotion of public access to and use of California's navigable waters is a mandate of the California Constitution (article X, § 4), a condition of statehood in the Act of Admission (9 Stat. 452, Sept. 9, 1850), and a responsibility of all involved public agencies pursuant to the common law Public Trust Doctrine. Frequently, the most logical location for access to a waterway is at a bridge crossing. Kayakers, rafters, and others may legally utilize the public access easements around bridges to enter and exit navigable waterways. With those factors in mind, the legislature adopted three code sections in 1974 to facilitate increased public access around bridges (Sts. & Hy. Code, §§ 84.5, 991, 1809). All state or county highway projects and all city street projects that propose construction of a new bridge over a navigable waterway must consider, and report on, the feasibility of providing public access for recreational purposes to the waterway before the bridge is constructed. These code provisions apply to state agencies and city and county governments that approve bridge construction projects.

As part of the project action, the Department of Public Works of the County of Stanislaus conducted a Feasibility Study, pursuant to California Streets and Highways Code section 991, on the feasibility of providing public access to the waterway for recreational purposes as part of the Crows Landing Bridge Replacement project. Two existing public access facilities, Las Palmas River and Fishing Access, located about 9 miles north of the project, and George J. Hatfield State Recreation Area, located about 8 miles south of the project, were identified. On May 14, 2019, the Stanislaus County Board of Supervisors will consider whether to: 1) accept the Feasibility Study prepared by Dokken Engineering pursuant to California Streets and Highways Code section 991; 2) and find that construction of a public access facility is not feasible due to a combination of land acquisition requirements, environmental impacts and funding constraints; and, 3) determine whether public access will be provided at the project location.

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The Feasibility Report considered several options of providing public access at the project site. Four locations immediately adjacent to the site, and at the two closest established public access sites. All options analyzed to provide public access were determined to be not feasible due to environmental impacts to sensitive habitat, the need to acquire property or an easement, or funding constraints. Any revisions to the existing environmental document would delay the proposed Project by two years. Funding for the project is through the Local Bridge Seismic Retrofit Program and Highway Bridge Program and this funding source would not be available to offset the costs of providing public access.

The Report concludes that public access to the San Joaquin River, including the George J. Hatfield State Recreation Area and Las Palmas River & Fishing Access, are considered sufficient to serve the recreational needs for the local community, given their modest current usage. The project will incorporate additional signage to direct the public to the alternative recreational facilities at the George J. Hatfield State Recreation Area and Las Palmas River & Fishing Access area.

Lease terms will require the Lessee to post signs directing the public to nearby public access points. Brief restrictions on access to and under portions of the river are expected during construction and demolition for purposes of public safety; however, it is expected that navigation on the river will not be impeded.

The current bridge has existed for many years at this location. The proposed lease includes provisions protecting the public use of the proposed lease area and requires the County to obtain necessary permits for the project. Furthermore, the existing and proposed bridges do not significantly alter the land, the lease does not alienate the State's fee simple interest, and neither permanently impairs public rights. The lease requires the County to conduct all repair and maintenance work safely and indemnify the Commission in the event of any liability resulting from the proposed action. The lease is limited to a 25-year term and does not grant the lessee exclusive rights to the lease premises, which allows the Commission flexibility to determine if the Public Trust needs of the area have changed over time.

**Climate Change:**

The project includes removal and replacement of the Crows Landing Road Bridge over the San Joaquin River near Crows Landing in Stanislaus County. This section of the river is not tidally influenced and would not be subject to sea-level rise. As stated in *Safeguarding California Plan: 2018*

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*Update* (California Natural Resources Agency 2018), climate change is projected to increase the frequency and severity of natural disasters related to flooding, drought, and storms. In rivers, more frequent and powerful storms can result in increased flooding conditions and damage from storm-created debris. Conversely, prolonged droughts could dramatically reduce river flow and water levels, leading to loss of public access and navigability. Climate change will further influence riverine areas by changing erosion and sedimentation rates, and flooding and storm flow. Runoff will likely increase scour, decreasing bank stability at a faster rate.

The newly constructed bridge would be leased for 25 years. It would be built to withstand scour pressures, liquefaction, and seismic events. Additionally, the bridge structures in the water and the riverbanks would be protected by bank scour protection. The old bridge would be removed, and the old pilings would be cut off approximately 5 feet below the existing mudline in the river. Regular maintenance of the new bridge, as required by the terms of the lease, will reduce the likelihood of severe structural degradation.

**Conclusion:**

For the reasons stated above, staff believes the acceptance of the quitclaim deed, proposed lease amendment, and issuance of the proposed lease will not substantially impair the public rights to navigation, fishing, or other Public Trust needs and values at this location, at this time, and for the foreseeable term of the proposed lease; and is in the best interests of the State.

**OTHER PERTINENT INFORMATION:**

1. This action is consistent with Strategy 1.1 of the Commission's Strategic Plan to deliver the highest levels of public health and safety in the protection, preservation and responsible economic use of the lands and resources under the Commission's jurisdiction.
2. Acceptance of the quitclaim deed and authorization to amend Master Lease No. PRC 7183.9 are not projects as defined by the California Environmental Quality Act (CEQA) because they are administrative actions that will not result in direct or indirect physical changes in the environment.

Authority: Public Resources Code section 21065 and California Code of Regulations, title 14, section 15378, subdivision (b)(5).

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3. A Mitigated Negative Declaration, State Clearinghouse No. 2013052050, was prepared by Stanislaus County and adopted on August 13, 2013, for this project. Staff has reviewed this document.

A Mitigation Monitoring Program was adopted by Stanislaus County.

4. This activity involves lands identified as possessing significant environmental values pursuant to Public Resources Code section 6370 et seq., but such activity will not affect those significant lands. Based upon staff's consultation with the persons nominating such lands and through the CEQA review process, it is staff's opinion that the project, as proposed, is consistent with its use classification.

**APPROVALS REQUIRED:**

U.S. Army Corps of Engineers  
California Department of Fish and Wildlife  
Central Valley Flood Protection Board  
Central Valley Regional Water Quality Control Board

**EXHIBITS:**

- A. Land Description
- A-1. Land Description
- A-2. Land Description
- A-3. Land Description
- A-4. Land Description
- B. Site and Location Map
- C. Mitigation Monitoring Program

**RECOMMENDED ACTION:**

It is recommended that the Commission:

**CEQA FINDING:**

Find that a Mitigated Negative Declaration, State Clearinghouse No. 2013052050, and a Mitigation Monitoring Program were prepared by Stanislaus County and adopted on August 13, 2013, for this Project and that the Commission has reviewed and considered the information contained therein; that in the Commission's independent judgment, the scope of activities to be carried out under the lease to be issued by this authorization have been adequately analyzed; that none of the events specified in Public Resources Code section 21166 or the State CEQA Guidelines section 15162 resulting in any new or substantially more severe significant impact has occurred; and, therefore, no additional CEQA analysis is required.

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Adopt the Mitigation Monitoring Program, as contained in the attached Exhibit C.

**PUBLIC TRUST AND STATE'S BEST INTERESTS:**

Find that the proposed lease for the construction, use, and maintenance of a new bridge, known as Crows Landing Bridge, with utility conduits, storm drain lines, and bank scour protection at Crows Landing Road on the San Joaquin River; use of a temporary construction easement; temporary use and maintenance of the existing Crows Landing Bridge; and the demolition and removal of the existing bridge, including bents and piers in the river, will not substantially impair the public rights to navigation or fishing or substantially interfere with Public Trust needs and values at this location, at this time, and for the foreseeable term of the lease; and is in the best interests of the State.

**SIGNIFICANT LANDS INVENTORY FINDING:**

Find that this activity is consistent with the use classification designated by the Commission for the land pursuant to Public Resources Code section 6370 et seq.

**AUTHORIZATION:**

1. Authorize acceptance of a lease quitclaim deed, effective April 5, 2019, for Lease No. PRC 7183.9, a General Lease – Public Agency Use, issued to the County of Stanislaus.
2. Authorize amendment of Master Lease No. PRC 7183.9 to remove that parcel of sovereign land in the San Joaquin River to be used for the planned Crows Landing Bridge, as described in Exhibit A. All other terms and conditions of the Master Lease shall remain in effect without amendment.
3. Authorize issuance of a new, separate General Lease – Public Agency Use to the County of Stanislaus, beginning April 05, 2019, for a term of 25 years, for construction, use, and maintenance of a new bridge, known as the Crows Landing Bridge, with utility conduits, storm drain lines, and bank scour protection at Crows Landing Road on the San Joaquin River; use of a temporary construction easement; temporary use and maintenance of the existing Crows Landing Bridge; and the demolition and removal of the existing bridge, including bents and piers as described on Exhibits A-1 through A-4 and shown on Exhibit B (for reference purposes only), attached and by this reference made a part hereof; consideration is the public use and benefit, with the State reserving



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the right at any time to set a monetary rent if the Commission finds such action to be in the State's best interests.

## EXHIBIT A

PRC 7183.9

### LAND DESCRIPTION

#### Parcel 1 (Crows Landing Bridge)

A strip of submerged land 100 feet wide in the bed of the San Joaquin River, Sections 7 and 8, T6S, R9E, MDM, the centerline of said strip described as follows:

COMMENCING at the Section Corner common to Sections 5, 6, 7, and 8 of said Township and Range; thence S 59°32'50" E, 647.10 feet to a point on the original centerline of the Crows Landing Road at Engineers Station 707 plus 67.85 (equal to Engineer Station "L" 711 plus 45.77); thence S 39°50'42" W, a distance of 868.65 feet to the POINT OF BEGINNING of this description and Engineer Station 720 plus 14.42, and the northerly end of the bridge; thence continue S 39°50'42" W along said original centerline 653.92 feet to Engineer Station "L" 726 plus 68.34 and the beginning of a curve concave to the east of which the central angle is 0°47'57" and the radius is 1,200 feet; thence southwesterly along the arc of said curve 16.74 feet to Engineer Station 726 plus 85.08 and the south end of the bridge.

EXCEPTING FROM any portion thereof lying landward of the ordinary low water marks of said river.

The above description is based on that original description prepared by California State Lands Commission Boundary Unit November 20, 1987 and found in PRC 7183.9 file, Calendar Item C04 at Page 22.

**EXHIBIT A-1**

**W26932**

**LAND DESCRIPTION**

A strip of submerged land, 205 feet in width, lying in the bed of the San Joaquin River, adjacent to Swamp and Overflowed Survey 165, patented November 9, 1870 in Swamp and Overflowed Book 4 at Page 475, County of Stanislaus, State of California, said strip lying 130 feet northwesterly and 75 southeasterly, measured at right angles, of the following described centerline:

COMMENCING at the intersection of the centerlines of Crows Landing Road and Carpenter Road, thence southwesterly along the centerline of said Crows Landing Road along a curve to the left having a radius of 13000 feet a distance of 372.91 feet through a delta angle of  $1^{\circ}38'37''$ , the center of said curve bears  $S48^{\circ}07'15''E$ , to the POINT OF BEGINNING, thence continuing along said centerline  $S40^{\circ}14'08''W$  450.00 feet to the TERMINOUS of said strip.

The sidelines of said strip are to be lengthened or shortened to begin and terminate at perpendicular lines to said centerline.

EXCEPTING THEREFROM any portion lying landward of the ordinary low water marks of the right and left banks of the San Joaquin River.

**END OF DESCRIPTION**

Prepared March 5, 2019, by the California State Lands Commission Boundary Unit.



**Exhibit A-2**  
**Legal Description**  
**Temporary Construction**  
**APN 049-003-010**

Being a portion of Parcel 2 of the Grant Deed recorded as document number 2014-0078962 official records of Stanislaus County, being more particularly described as follows:

**Commencing** at a found monument in the centerline of Crows Landing Road as said centerline is shown on Stanislaus County Map #1657, said monument being located at the southerly terminus of the centerline course bearing North 11°07'21" East and having a grid distance of 598.46 feet;

Thence along said centerline North 11°07'21" East, 167.95 feet;

Thence leaving said centerline, North 78°52'39" West 98.41 feet to the **Point of Beginning**;

Thence from said **Point of Beginning**, North 37°50'46" West, 373.23 feet;

Thence North 52°24'49" East, 252.54 feet;

Thence North 45°28'00" West, 31.60 feet;

Thence along the arc of a non-tangent curve concave southeasterly having a radius of 1491.00 feet from a radial that bears North 79°05'47" West, through a central angle of 29°14'28", for a distance of 760.93 feet;

Thence North 40°08'34" East, 262.33 feet to a point on the northerly line of said Grant Deed;

Thence along said northerly line, South 54°02'49" East, 86.48 feet to a most northeasterly corner of said Grant Deed;

Thence along the easterly line of said Grant Deed, South 37°22'53" West, 167.84 feet;

Thence South 34°26'23" West, 57.00 feet;

Thence leaving said easterly line, South 40°08'34" West 44.28 feet;

Thence along the arc of a non-tangent curve concave southeasterly having a radius of 1391.00 feet from a radial that bears North 49°51'20" West, through a central angle of 35°14'51", for a distance of 855.72 feet;

Thence South 04°53'50" West, 269.54 feet;

Thence along the arc of a curve concave westerly having a radius of 1908.96 feet, through a central angle of 01°10'42", for a distance of 39.26 feet to the **Point of Beginning**.

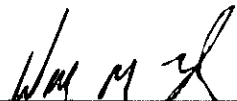
Said parcel contains ±3.721 acres more or less.

*Plat to accompany description, attached hereto and made a part hereof.*

EXCEPTING THEREFROM any portion lying landward of the ordinary low water marks of the right and left banks of the San Joaquin River.

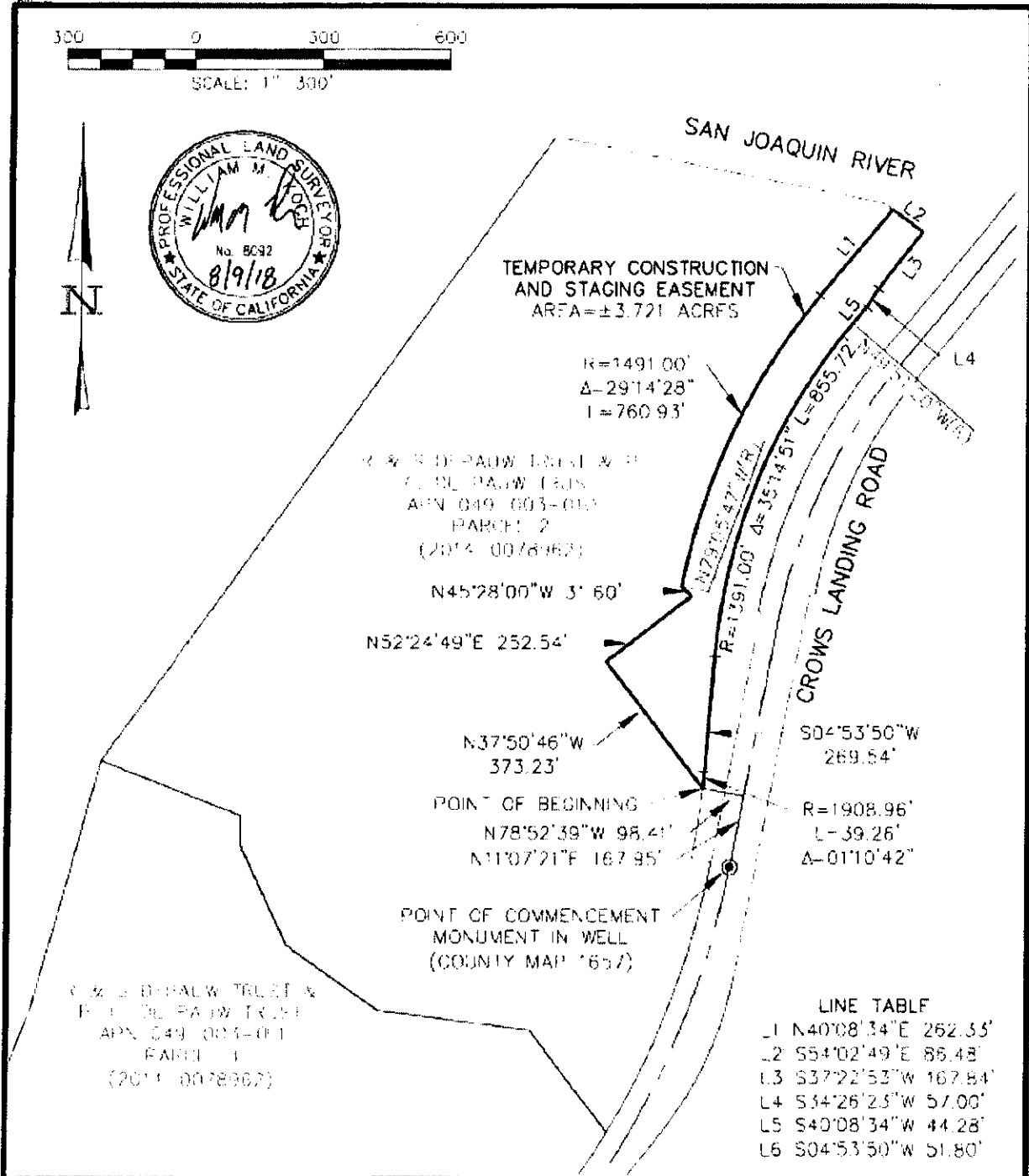
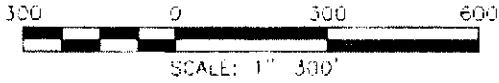
END DESCRIPTION

This legal description has been prepared by me, or under my direction, in conformance with the requirements of the Professional Land Surveyor's Act.

  
\_\_\_\_\_  
William M. Koch  
Professional Land Surveyor  
California No. 8092



01/14/10  
Date



**LINE TABLE**

L1	N40°08'34\"E	262.33'
L2	S54°02'49\"E	86.48'
L3	S37°22'53\"W	167.84'
L4	S34°26'23\"W	57.00'
L5	S40°08'34\"W	44.28'
L6	S04°53'50\"W	51.80'

**N|V 5**  
**NOLTE VERTICAL FIVE**  
 NOLTE ASSOCIATES, INC.  
 2225 NATEVALE PARK DRIVE, STE. 300  
 FOLSOM, CA 95630  
 (916) 992-8100 FAX (916) 992-7443

**TEMPORARY CONSTRUCTION EASEMENT**  
**CROWS LANDING ROAD**

PREPARED FOR: COUNTY OF STANISLAUS      DATE: AUGUST 2018

SHEET NUMBER  
**1**

OF 1 SHEETS

JOB NUMBER  
**SAB044100**

**Exhibit A-3**  
**Legal Description**  
**Temporary Construction Easement**

Being a portion of the land of the State of California lying along the northerly side of Crows Landing Road and between the banks of the San Joaquin River and being more particularly described as follows:

**Commencing** at a found monument in the centerline of Crows Landing Road as said centerline is shown on Stanislaus County Map #1657, said monument being located at the southeasterly terminus of the centerline course bearing North 40°08'34" East and having a grid distance of 686.22 feet;

Thence along said centerline North 11°07'21" East, 44.32 feet;

Thence leaving said centerline, North 49°51'26" West 146.86 feet to a point on the easterly line of Parcel 1 of the Grant Deed recorded as document number 1999-0048857 official records of Stanislaus County and the **Point of Beginning**;

Thence from said **Point of Beginning**, along said easterly line North 34°26'23" East, 57.00 feet;

Thence North 37°22'53" East, 167.84 feet to the most northeasterly corner of said Parcel 1;

Thence along the northerly line of said Parcel 1, North 54°02'49" West, 86.48 feet;

Thence leaving said northerly line North 40°08'34" East, 338.28 feet to point on the northeasterly bank of said San Joaquin River;

Thence along said northeasterly bank South 37°27'24" East, 69.27 feet;

Thence North 86°16'14" East, 17.67 feet;

Thence South 83°49'24" East, 18.75 feet;

Thence South 54°33'34" West, 4.07 feet;

Thence leaving said northeasterly bank South 40°08'34" West, 564.50 feet to the **Point of Beginning**.

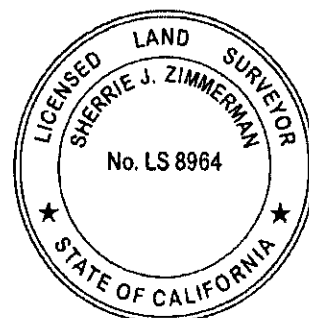
EXCEPTING THEREFROM any portion lying landward of the ordinary low water marks of the right and left banks of the San Joaquin River.

Said parcel contains ±0.797 acres more or less.

*Plat to accompany description, attached hereto and made a part hereof.*

  
 \_\_\_\_\_  
 Sherrie J. Zimmerman PLS 8964

12/19/2014  
 \_\_\_\_\_  
 Date

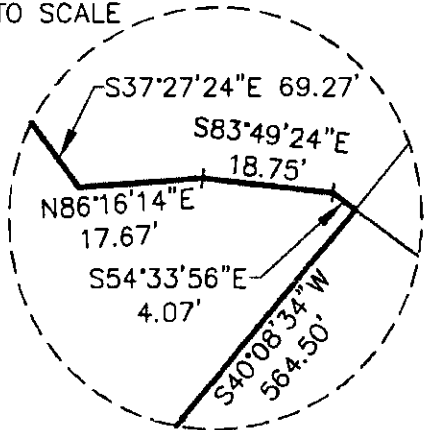


TIME:  
SERVER:  
XREFS:

DATE:  
SERVICE:

PATH:  
DRAWING NAME:

DETAIL A  
NOT TO SCALE



LANDS OF TURLOCK  
SPORTSMAN'S CLUB  
APN 057-001-005 & 006  
(DOC#1995-50-0063416)

MEANDER LINE

SEE  
DETAIL A

SAN JOAQUIN  
RIVER

TOP BANK  
OF RIVER

TEMPORARY CONSTRUCTION EASEMENT  
AREA = ±0.797 ACRES

CROWS LANDING ROAD

CLAUDETTE K. CORREIA  
APN 049-003-010  
PARCEL 1  
(1999-0048587)

N34°26'23"E  
57.00'

POINT OF  
BEGINNING

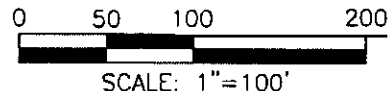
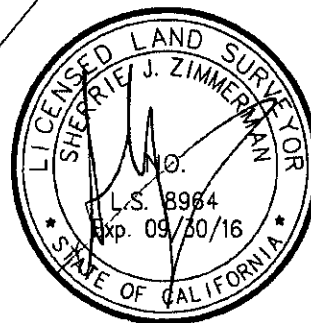
167.84'  
N37°22'53"E

N54°02'49"W  
86.48'

N49°51'26"W  
146.86'

N40°08'34"E  
44.32'

POINT OF  
COMMENCEMENT  
MONUMENT IN WELL  
(COUNTY SURVEY 1657)



**N|V|5**

NOLTE VERTICALFIVE  
NOLTE ASSOCIATES, INC

2526 HATOMAS PARK DRIVE, STE. 300, SACRAMENTO, CA 95833  
916.641.9100 TEL. 916.641.9222 FAX WWW.NV5.COM

# TEMPORARY CONSTRUCTION EASEMENT CROWS LANDING ROAD

PREPARED FOR: COUNTY OF STANISLAUS

DATE SUBMITTED: DEC. 2014

SHEET NUMBER

**1**

OF 1 SHEETS

JOB NUMBER  
**SAB044100**



**Exhibit A-4**  
**Legal Description**  
**Temporary Construction Easement**  
**APN 057-001-005 & 057-001-006**

Being a portion of the land described in the Trust Deed recorded as Document 1995-50-0083416 Stanislaus County Official Records more particularly described as follows:

**Commencing** at a found monument in the centerline of Crows Landing Road as said centerline is shown on Stanislaus County Map #1657, said monument being located at the southeasterly terminus of the centerline course bearing North 40°08'34" East and having a grid distance of 686.22 feet;

Thence along said centerline, North 40°08'34" East, 686.19 feet;

Thence North 40°08'42" East, 424.19 feet to the centerline of said Carpenter Road;

Thence along said centerline line, North 59°52'05" West, 129.95 feet;

Thence leaving said centerline of Carpenter Road, South 43°02'58" West 33.86 feet to a point on the westerly line of said Carpenter road and the **Point of Beginning**;

Thence leaving said westerly line, from said **Point of Beginning**, South 43°02'58" East, 302.63 feet;

Thence along the arc of a tangent curve, concave southeasterly, having a radius of 1300.52 feet, through a central angle of 2°53'05", for a distance of 65.47 feet;

Thence South 40°08'34" West, 77.47 feet to a point on the top bank of the San Joaquin River;

Thence along said top bank North 54°33'56" West, 4.07 feet;

Thence North 83°49'24" West, 18.75 feet;

Thence South 86°16'14" West, 17.67 feet;

Thence North 37°27'24" West, 69.27 feet;

Thence leaving said top bank North 50°07'53" West, 100.00 feet;

Thence North 40°08'34" East, 86.17 feet;

Thence along the arc of a tangent curve concave southeasterly having a radius of 1600.52 feet, through a central angle of 02°53'10", for a distance of 75.58 feet;

Thence North 43°02'58" East 273.78 feet to a point on said westerly line of said Carpenter Road;

Thence along said westerly line along the arc of a non-tangent curve, concave northeasterly, from a radial which bears South 42°20'39" West, having a radius of 733.00 feet, through a central angle of 12°12'44", for a distance of 156.24 feet;

Thence South 59°52'05" East, 46.33 feet to the **Point of Beginning**.

EXCEPTING THEREFROM any portion lying landward of the ordinary low water marks of the right and left banks of the San Joaquin River.

Said parcel contains ±2.035 acres more or less.

*Plat to accompany description, attached hereto and made a part hereof.*



Tracy W. Park, PLS 8176

10/29/15

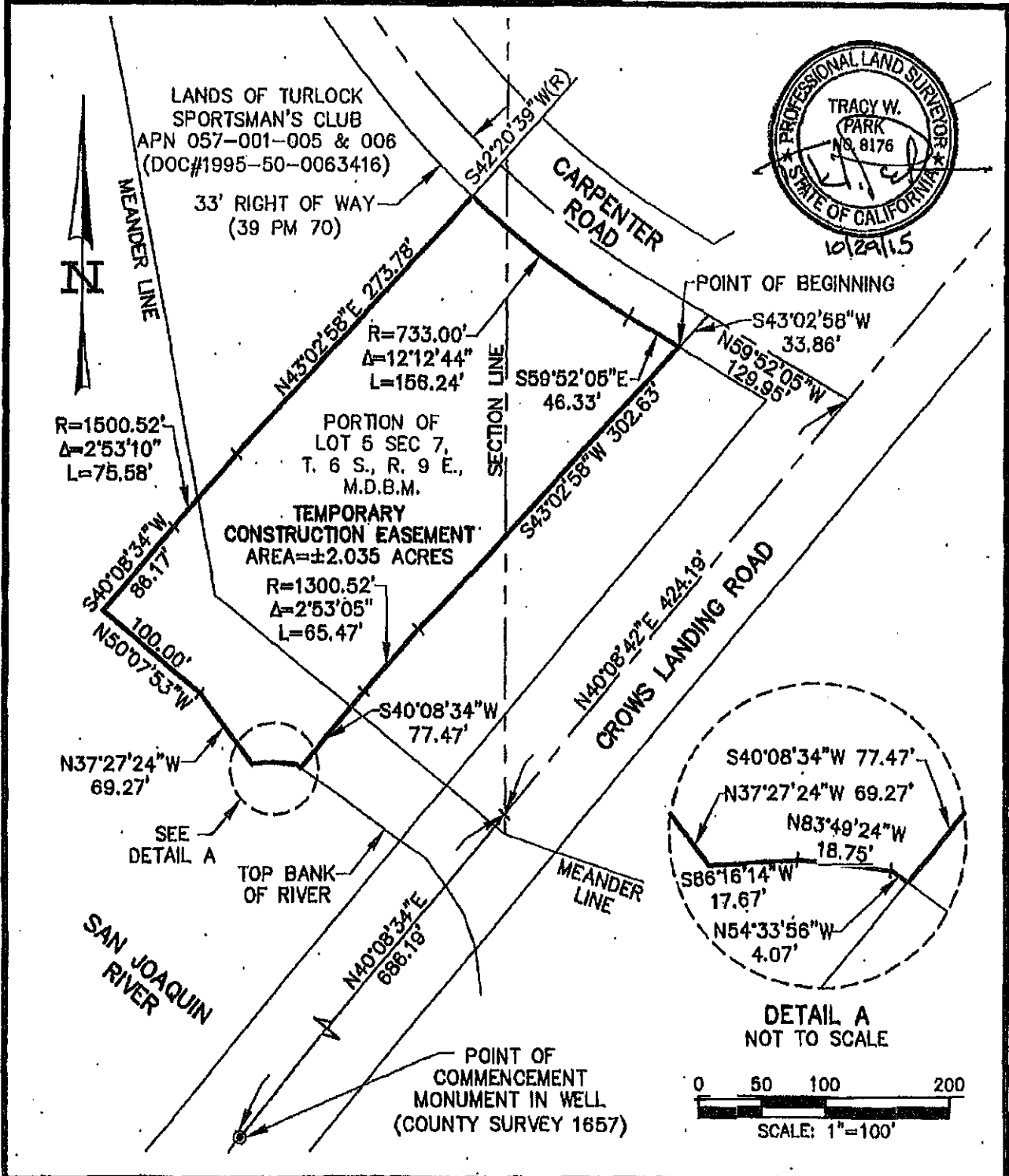
Date



JUNE  
SERVER  
DREES

DATE  
SERVICE

PATH  
DRAWING NAME



**N|V|5**

NOLTE VERTICAL FIVE  
NOLTE ASSOCIATES, INC.

2000 RAYMOND PARK DRIVE, SUITE 200A  
FALGOUTH, CALIFORNIA 95632  
TEL: 916/486-1100 FAX: 916/486-1100

**TEMPORARY CONSTRUCTION EASEMENT  
CROWS LANDING ROAD**

PREPARED FOR COUNTY OF STANISLAUS

DATE SUBMITTED: 10/29/15

SHEET NUMBER

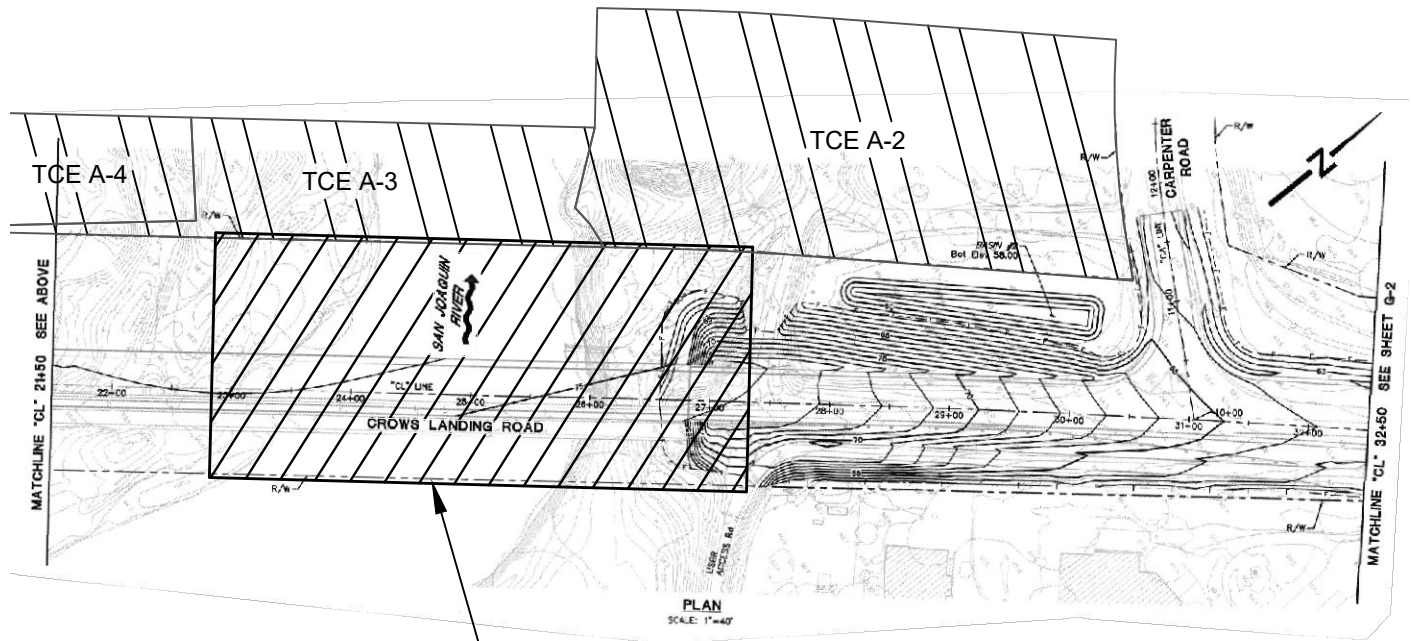
1

OF 1 SHEETS

JOB NUMBER  
8AB044100

NO SCALE

# SITE



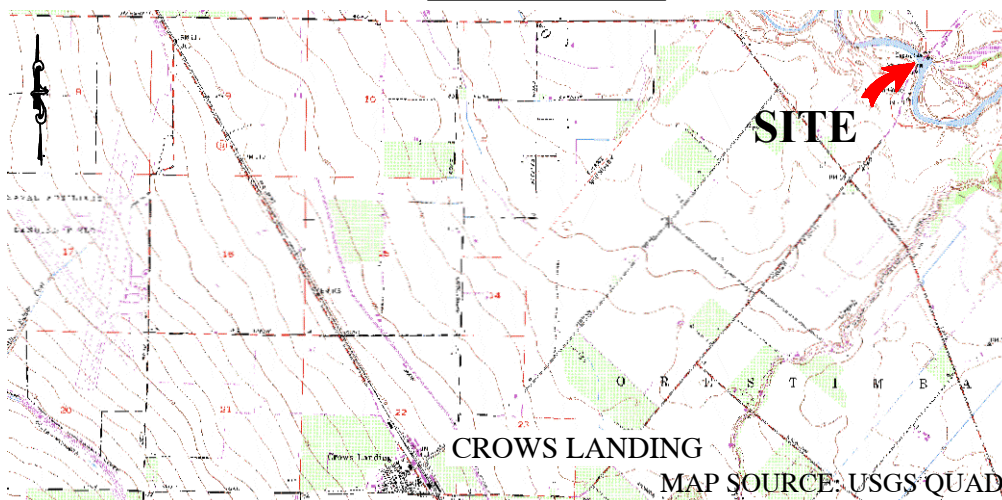
LEASE AREA (A-1)

\*ONLY PORTIONS OF THE LEASE AREA AND TEMPORARY CONSTRUCTION EASEMENTS (TCE) WITHIN THE SAN JOAQUIN RIVER ARE UNDER LEASE.

## CROWS LANDING ROAD BRIDGE

NO SCALE

# LOCATION



**SITE**

CROWS LANDING

MAP SOURCE: USGS QUAD

THIS EXHIBIT IS SOLELY FOR PURPOSES OF GENERALLY DEFINING THE LEASE PREMISES, IS BASED ON UNVERIFIED INFORMATION PROVIDED BY THE LESSEE OR OTHER PARTIES AND IS NOT INTENDED TO BE, NOR SHALL IT BE CONSTRUED AS, A WAIVER OR LIMITATION OF ANY STATE INTEREST IN THE SUBJECT OR ANY OTHER PROPERTY.

# EXHIBIT B

W26932  
 COUNTY OF STANISLAUS  
 APN 049-003-005, 010,  
 057-001-005, 008, & 057-026-001  
 GENERAL LEASE -  
 PUBLIC AGENCY USE  
 STANISLAUS COUNTY



**SITE**

JAK 03/19

**EXHIBIT C**  
**CALIFORNIA STATE LANDS COMMISSION**  
**MITIGATION MONITORING PROGRAM**  
**CROWS LANDING ROAD BRIDGE REPLACEMENT PROJECT**  
(W26932, State Clearinghouse No. 2013052050)

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The California State Lands Commission (Commission) is a responsible agency under the California Environmental Quality Act (CEQA) for the Crows Landing Road Bridge Replacement Project (Project). The CEQA lead agency for the Project is Stanislaus County (County).

In conjunction with approval of this Project, the Commission adopts this Mitigation Monitoring Program (MMP) for the implementation of mitigation measures (MMs) for the portion(s) of the Project located on Commission lands. The purpose of a MMP is to impose feasible measures to avoid or substantially reduce the significant environmental impacts from a project identified in an Environmental Impact Report (EIR) or a Mitigated Negative Declaration (MND). State CEQA Guidelines section 15097, subdivision (a), states in part:<sup>1</sup>

*In order to ensure that the mitigation measures and project revisions identified in the EIR or negative declaration are implemented, the public agency shall adopt a program for monitoring or reporting on the revisions which it has required in the project and the measures it has imposed to mitigate or avoid significant environmental effects. A public agency may delegate reporting or monitoring responsibilities to another public agency or to a private entity which accepts the delegation; however, until mitigation measures have been completed the lead agency remains responsible for ensuring that implementation of the mitigation measures occurs in accordance with the program.*

The County, as lead agency, has adopted an MND, State Clearinghouse No. 2013052050, adopted an MMP for the whole of the Project (see Exhibit C, Attachment C-1), and remains responsible for ensuring that implementation of the MMs occurs in accordance with its program. The Commission's action and authority as a responsible agency apply only to the MMs listed in Table C-1 below. The full text of each MM, as set forth in the MMP prepared by the CEQA lead agency and listed in Table C-1, is incorporated by reference in this Exhibit C. In addition to the MMs in Table C-1, an applicant proposed measure (APM) regarding Cultural Resources is added at the end of the table.

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<sup>1</sup> The State CEQA Guidelines are found at California Code of Regulations, title 14, section 15000 et seq.

**Table C-1. Project Impacts and Applicable Mitigation Measures**

Potential Impact	Mitigation Measure (MM) <sup>2</sup>
<b>Air Quality</b>	<b>MM AQ-1:</b> Prepare and Implement a Dust Control Plan to Comply with SJVAPCD Regulation VIII Requirements to Control Construction Emissions of PM10.
	<b>MM AQ-2:</b> Implement Measures to Reduce Exhaust Emissions from Off-Road Diesel Powered Equipment.
	<b>MM AQ-3:</b> Implement Measures to Comply with SJVAPCD Rule 9510, Indirect Source Review.
	<b>MM AQ-4:</b> Implement Construction Mitigation Measures to Control Construction-Related Diesel Particulate Matter Exhaust Emissions.
<b>Biological Resources</b>	<b>MM BIO-1:</b> Install Construction Barrier Fencing around the Construction Area to Protect Sensitive Biological Resources to Be Avoided.
	<b>MM BIO-2:</b> Conduct Environmental Awareness Training for Construction Employees.
	<b>MM BIO-3:</b> Retain a Biological Monitor to Conduct Weekly Visits during Construction.
	<b>MM BIO-4:</b> Avoid and Minimize Potential Disturbance of Riparian Communities.
	<b>MM BIO-5:</b> Protect Water Quality and Prevent Erosion and Sedimentation in Drainages and Wetlands.
	<b>MM BIO-6:</b> Compensate for Temporary and Permanent Loss of Riparian Vegetation.
	<b>MM BIO-7:</b> Conduct Preconstruction Presence/Absence Surveys for Western Pond Turtle and Construct Exclusion Fencing, If Needed.
	<b>MM BIO-8:</b> Remove Vegetation during the Nonbreeding Season and Conduct Preconstruction Surveys for Swainson’s Hawk.
	<b>MM BIO-9:</b> Remove Vegetation during the Nonbreeding Season and Conduct Preconstruction Surveys for Other Special-Status and Non-Special-Status Migratory Birds.
	<b>MM BIO-12:</b> Implement Protective Measures for Cliff Swallows to Avoid Disturbance to Active Nests.
	<b>MM BIO-13:</b> Conduct Nighttime Emergence Surveys for Bats and Examine Suitable Roost Trees Prior to Trimming or Removal.
	<b>MM BIO-14:</b> Install Bat Exclusion Devices in Late August.
	<b>MM BIO-15:</b> Include Bat-Friendly Designs in the Final Bridge Design.
	<b>MM BIO-18:</b> Compensate for Temporary Loss and Permanent Fill of In-Channel Habitat for Special-Status Fish Species.

<sup>2</sup> See Attachment C-1 for the full text of each MM taken from the MMP prepared by the CEQA lead agency.

Potential Impact	Mitigation Measure (MM) <sup>2</sup>
	<b>MM BIO-19:</b> Prevent Contaminants and Hazardous Materials from Entering the Stream Channel.
	<b>MM BIO-20:</b> Restrict In-Water Work to Avoid Special-Status Fish Spawning Seasons.
	<b>MM BIO-21:</b> Provide Alternate Migration Corridor through San Joaquin River Channel.
	<b>MM BIO-22:</b> Retain Fish Biologist to Perform Fish Rescue Activities as Needed.
	<b>MM BIO-23:</b> Minimize Impacts on River Channel.
	<b>MM BIO-24:</b> Minimize Noise Impacts on Special-Status Fish Species.
	<b>MM BIO-25:</b> Compensate for Permanent Loss of Seasonal Wetland.
	<b>MM BIO-26:</b> Restore Temporarily Disturbed Drainage Habitat and Compensate for Permanent Loss of Drainage Habitat.
<b>Geology and Soils</b>	<b>MM GEO-1:</b> Stockpile Topsoil and Reuse Onsite.
	<b>MM GEO-2:</b> Stop Work if Substantial Fossil Remains are Encountered during Covered Activities.
<b>Hazards and Hazardous Materials</b>	<b>MM HAZ-1:</b> Implement Asbestos and Lead-Based Paint Abatement and Subsurface Soil Investigation.
	<b>MM HAZ-2:</b> Stop Work and Implement Hazardous Materials Investigations and Remediation in the Event Hazardous Materials are Encountered during Construction.
<b>Noise</b>	<b>MM NOI-1:</b> Limit Construction Hours.
	<b>MM NOI-2:</b> Employ Noise-Reducing Construction Practices.

**APM-CUL 1: Unanticipated Discovery.** If unanticipated cultural resources are encountered during construction, all ground-disturbing activities shall stop in accordance to Caltrans’ policy until a qualified archaeologist can evaluate the nature and significance of the find. Please note that any submerged historic resources that have been in the State waters for more than 50 years are presumed to be significant.

Commission staff shall be notified of any significant cultural resources or paleontological specimens if they are discovered on lands under the Commission’s jurisdiction. The final disposition of archaeological and historical resources and paleontological specimens from lands under the Commission’s jurisdiction must be approved by the Commission.

If any human remains are found on lands under the Commission’s jurisdiction, Commission staff shall be notified to address any landowner responsibilities. If the County Corner determines the remains are Native American, then the most likely descendent identified by the Native American Heritage Commission will make a recommendation for the appropriate treatment of the remains, in accordance with state and federal law.

# **ATTACHMENT C-1**

**Mitigation Monitoring Program Adopted by the  
Stanislaus County**



# Attachment C-1

## Draft Mitigation Monitoring Reporting Plan, Stanislaus County, Crows Landing Road Bridge Replacement Project

Mitigation Measure	Timing	Implementation Responsibility	Monitoring/Reporting Responsibility	Notes
<b>Air Quality</b>				
<p><b>Mitigation Measure AQ-1: Prepare and Implement a Dust Control Plan to Comply with SJVAPCD Regulation VIII Requirements to Control Construction Emissions of PM10.</b></p> <p>To control the generation of construction-related PM10 emissions, construction contractors will prepare and submit for approval a dust control plan to the SJVAPCD at least 30 days prior to any earthmoving or construction activities. Potential measures that might be included in the dust control plan could include, but are not limited to:</p> <ul style="list-style-type: none"> <li>• Pre-activity. <ul style="list-style-type: none"> <li>○ Pre-water the work site and phase work to reduce the amount of disturbed surface area at any one time.</li> </ul> </li> <li>• Active operations. <ul style="list-style-type: none"> <li>○ Apply water to dry areas during leveling, grading, trenching, and earthmoving activities.</li> <li>○ Construct and maintain wind barriers and apply water or dust suppressants to the disturbed surface areas.</li> </ul> </li> <li>• Inactive operations, including after work hours, weekends, and holidays. <ul style="list-style-type: none"> <li>○ Apply water or dust suppressants on disturbed surface areas to form a visible crust, and vehicle access will be restricted to maintain the visible crust.</li> </ul> </li> <li>• Temporary stabilization of areas that remain unused for 7 or more days. <ul style="list-style-type: none"> <li>○ Restrict vehicular access and apply and maintain water or dust suppressants on all un-vegetated areas.</li> <li>○ Establish vegetation on all previously disturbed areas.</li> <li>○ Pave previously disturbed areas.</li> </ul> </li> <li>• Unpaved Access and haul roads, traffic and equipment storage areas. <ul style="list-style-type: none"> <li>○ Apply water or dust suppressants to unpaved haul and access roads.</li> <li>○ Post a speed limit of not more than 15 miles per hour, using signs at each entrance and again every 500 feet.</li> <li>○ Water or dust suppressants will be applied to vehicle traffic and equipment storage areas.</li> </ul> </li> <li>• Wind events. <ul style="list-style-type: none"> <li>○ Water application equipment will apply water to control fugitive dust during wind events, unless unsafe to do so.</li> <li>○ Outdoor construction activities that disturb the soil will cease whenever visible dust emissions cannot be effectively controlled.</li> </ul> </li> <li>• Outdoor handling of bulk materials. <ul style="list-style-type: none"> <li>○ Water or dust suppressants will be applied when handling bulk materials.</li> <li>○ Wind barriers with less than 50% porosity will be installed and maintained, and water or dust suppressants will be applied.</li> </ul> </li> <li>• Outdoor storage of bulk materials. <ul style="list-style-type: none"> <li>○ Water or dust suppressants will be applied to storage piles.</li> <li>○ Storage piles will be covered with tarps, plastic, or other suitable material and anchored in such a manner that prevents the cover from being removed by wind action.</li> <li>○ Wind barriers with less than 50% porosity will be installed and maintained around the storage piles, and water or dust suppressants will be applied.</li> <li>○ A three-sided structure with less than 50% porosity that is at least as high as the storage piles will be used.</li> </ul> </li> <li>• On-site transporting of bulk materials. <ul style="list-style-type: none"> <li>○ Vehicle speed will be limited on the work site.</li> <li>○ All haul trucks will be loaded such that the freeboard is not less than six inches when transported across any paved public access road.</li> <li>○ A sufficient amount of water will be applied to the top of the load to limit visible dust emissions.</li> <li>○ Haul trucks will be covered with a tarp or other suitable cover.</li> </ul> </li> </ul>	Prior to and during construction	County	SJVAPCD	Plans to be submitted to SJVAPCD prior to construction. Stanislaus County will ensure compliance during construction.

Mitigation Measure	Timing	Implementation Responsibility	Monitoring/Reporting Responsibility	Notes
<ul style="list-style-type: none"> <li>• Off-site transporting of bulk materials. <ul style="list-style-type: none"> <li>○ The following practices will be performed:</li> <li>○ The interior of emptied truck cargo compartments will be cleaned or covered before leaving the site.</li> <li>○ Spillage or loss of bulk materials from holes or other openings in the cargo compartment's floor, sides, and tailgates will be prevented.</li> </ul> </li> <li>• Outdoor transport using a chute or conveyor: <ul style="list-style-type: none"> <li>○ No open chutes or conveyors will be used.</li> <li>○ Chutes or conveyors will be fully enclosed.</li> <li>○ Water spray equipment will be used to sufficiently wet the materials.</li> <li>○ Transported materials will be washed or screened to remove fines (PM10 or smaller).</li> </ul> </li> </ul>				
<p><b>Mitigation Measure AQ-2: Implement Measures to Reduce Exhaust Emissions from Off-Road Diesel Powered Equipment.</b>  The construction contractor will be required to implement measures to reduce construction-related exhaust emissions. Such measures could include, but are not limited to: maintaining properly tuned engines; minimizing the idling time of diesel powered construction equipment to two minutes; using alternative-fuel-powered construction equipment (i.e., compressed natural gas, biodiesel, electric); using add-on mitigation devices such as diesel oxidation catalysts or particulate filters; using equipment that meets ARB's most recent certification standard for off-road heavy-duty diesel engines; phasing project construction; and limiting heavy-duty equipment operating hours.</p>	During construction	County	County	Plans to be submitted to SJVAPCD prior to construction. Stanislaus County will ensure compliance during construction.
<p><b>Mitigation Measure AQ-3: Implement Measures to Comply with SJVAPCD Rule 9510, Indirect Source Review.</b>  The County will enter into an agreement with the SJVAPCD and conduct an air impact assessment as required by SJVAPCD Rule 9510. Off-site emission reduction fees sufficient to comply with Rule 9510 and reduce construction-related NOX emissions by 20%, compared to the statewide fleet average will be calculated. Based on the emissions presented in Table F, it is anticipated that emissions reductions of 1.8 tons NOX and 0.5 tons PM10 are required to comply with Rule 9510.</p>	Prior to and during construction	County	County	Plans to be submitted to SJVAPCD prior to construction. Stanislaus County will ensure compliance during construction.
<p><b>Mitigation Measure AQ-4: Implement Construction Mitigation Measures to Control Construction-Related Diesel Particulate Matter Exhaust Emissions.</b>  The construction contractor will be responsible for implementing the following measures:</p> <ul style="list-style-type: none"> <li>• Minimize the idling time of diesel powered construction equipment to two minutes.</li> <li>• Develop a plan demonstrating that the off-road equipment (more than 50 horsepower) to be used in the construction project (i.e., owned, leased, and subcontractor vehicles) would achieve a project wide fleet-average 20 percent NOX reduction and 45 percent PM reduction compared to the most recent ARB fleet average. Acceptable options for reducing emissions include the use of late model engines, low-emission diesel products, alternative fuels, engine retrofit technology, after-treatment products, add-on devices such as particulate filters, and/or other options as such become available.</li> <li>• Require that all construction equipment, diesel trucks, and generators be equipped with Best Available Control Technology for emission reductions of NOX and PM.</li> <li>• Require all contractors use equipment that meets CARB's most recent certification standard for off-road heavy duty diesel engines.</li> </ul>	Prior to and during construction	County	County	Plans to be submitted to SJVAPCD prior to construction. Stanislaus County will ensure compliance during construction.
<b>Biological Resources</b>				
<p><b>Mitigation Measure BIO-1. Install Construction Barrier Fencing around the Construction Area to Protect Sensitive Biological Resources to Be Avoided.</b>  The County or its contractor will install orange construction barrier fencing to identify environmentally sensitive areas. A qualified biologist will identify sensitive biological resources adjacent to the construction area before the final design plans are prepared so the areas to be fenced can be included in the plans. The area that would generally be required for construction, including staging and access, is shown in Figure 6. Portions of this area that are to be avoided during construction will be fenced off to avoid disturbance. Sensitive biological resources that occur adjacent to the construction area include sensitive natural communities; riparian trees to be retained; potential sensitive wildlife habitats for western pond turtle and American badger; and trees with nesting birds or roosting bats.</p>	Prior to and during construction	County/Contractor	County	

Mitigation Measure	Timing	Implementation Responsibility	Monitoring/Reporting Responsibility	Notes
<p>Temporary fences around the environmentally sensitive areas will be installed as one of the first orders of work following County specifications. Before construction, the construction contractor will work with the project engineer and a resource specialist to identify the locations for the barrier fencing and will place stakes around the sensitive resource sites to indicate these locations. The protected areas will be designated as environmentally sensitive areas and clearly identified on the construction plans. The fencing will be installed before construction activities are initiated, maintained throughout the construction period, and removed after completion of construction.</p>				
<p><b>Mitigation Measure BIO-2. Conduct Environmental Awareness Training for Construction Employees.</b>  The County will retain a qualified biologist to develop and conduct environmental awareness training for construction employees on the importance of onsite biological resources, including sensitive natural communities; riparian trees to be retained; potential special-status wildlife including western pond turtle, American badger, nesting birds, and roosting bats. In addition, construction employees will be educated about invasive plants and the importance of controlling and preventing the spread of invasive plant infestations.</p> <p>The environmental awareness program will be provided to all construction personnel to brief them on the life history of all sensitive species in or adjacent to the project area, the need to avoid impacts on sensitive biological resources, any terms and conditions required by state and federal agencies, and the penalties for not complying with biological mitigation requirements. If new construction personnel are added to the project, the contractor's superintendent will ensure that the personnel receive the mandatory training before starting work. An environmental awareness handout that describes and illustrates sensitive resources to be avoided during project construction and identifies all relevant permit conditions will be provided to each person.</p>	Prior to and during construction	County	County	Training would occur prior to construction and monitoring would occur during construction.
<p><b>Mitigation Measure BIO-3. Retain a Biological Monitor to Conduct Weekly Visits during Construction.</b>  The County will retain a qualified biologist to conduct construction monitoring in and adjacent to all sensitive habitats in the construction area. The frequency of monitoring will range from daily to weekly depending on the biological resource. The monitor, as part of the overall monitoring duties, will inspect the fencing once a week along the river in the construction area that support riparian vegetation, surrounding native trees and woodlands, special-status plants, and special-status wildlife habitats. The biological monitor will assist the construction crew as needed to comply with all project implementation restrictions and guidelines. The biological monitor also will be responsible for ensuring that the contractor maintains the staked and flagged perimeters of the construction area and staging areas adjacent to sensitive biological resources.</p>	Prior to construction	County	County	
<p><b>Mitigation Measure BIO-4. Avoid and Minimize Potential Disturbance of Riparian Communities.</b>  The County will avoid and minimize potential disturbance of riparian communities by implementing the following measures.</p> <ul style="list-style-type: none"> <li>• The potential for long-term loss of riparian vegetation will be minimized by trimming vegetation rather than removing entire shrubs. Shrubs that need to be trimmed will be cut at least 1 foot above ground level to leave the root systems intact and allow for more rapid regeneration. Cutting will be limited to the minimum area necessary within the construction zone. To protect nesting birds and western pond turtles, the County will not allow pruning or removal of woody riparian vegetation between February 1 and August 31 without preconstruction surveys.</li> <li>• A certified arborist will be retained to perform any necessary pruning or root cutting of retained riparian trees.</li> <li>• The areas that undergo vegetative pruning and tree removal will be inspected immediately before construction, immediately after construction, and one year after construction to determine the amount of existing vegetative cover, cover that has been removed, and cover that resprouts. If, after one year, these areas have not resprouted sufficiently to return the cover to the pre-project level, the County will replant the areas with the same species to reestablish the cover to the pre-project condition.</li> </ul>	During construction		County	Streambed Alteration Agreement determination would occur prior to construction.
<p><b>Mitigation Measure BIO-5. Protect Water Quality and Prevent Erosion and Sedimentation in Drainages and Wetlands.</b>  Features to be protected include the San Joaquin River, the unnamed seasonal drainage, riparian forest and scrub wetlands, and the seasonal wetland in and adjacent to the project area. The County will implement the following BMPs before and during construction.</p> <ul style="list-style-type: none"> <li>• All earthwork or foundation activities within the river, its floodplain, or the seasonal drainage will occur in the dry season (generally between June 1 and October 15).</li> <li>• Equipment used in and around drainages and wetlands will be in good working order and free of dripping or leaking engine fluids.</li> </ul>	Prior to and during construction		County	NPDES permit would be obtained prior to construction. Section 404 permit, if needed to occur prior to construction.

Mitigation Measure	Timing	Implementation Responsibility	Monitoring/Reporting Responsibility	Notes
<p>All vehicle maintenance, staging, and materials storage will be performed at least 300 feet from all drainages and wetlands. Any necessary equipment washing will be carried out where the water cannot flow into drainages or wetlands.</p> <ul style="list-style-type: none"> <li>Any surplus concrete rubble, asphalt, or other rubble from construction will be taken to the Stanislaus County landfill or a recycling facility.</li> </ul> <p>An erosion control plan will be prepared and implemented for the proposed project. It will include the following provisions and protocols:</p> <ul style="list-style-type: none"> <li>Discharge from dewatering operations, if needed, and runoff from disturbed areas will be made to conform to the water quality requirements of the waste discharge permit issued by the RWQCB.</li> <li>Material stockpiles will be located in non-traffic areas only. Side slopes will not be steeper than 2:1. All stockpile areas will be surrounded by a filter fabric fence and interceptor dike.</li> <li>Temporary erosion control measures, such as sandbagged silt fences, will be applied throughout construction of the proposed project and will be removed after the working area is stabilized or as directed by the engineer. The Storm Water Pollution Prevention Plan (SWPPP) for the project will detail the applications and type of measures and the allowable exposure of unprotected soils.</li> <li>Soil exposure will be minimized through use of temporary BMPs, groundcover, and stabilization measures. Exposed dust-producing surfaces will be sprinkled daily, if necessary, until wet; this measure will be controlled to avoid producing runoff. Paved streets will be swept daily following construction activities.</li> <li>The contractor will conduct periodic maintenance of erosion and sediment control measures.</li> </ul> <p>An appropriate seed mix of native species will be planted on disturbed areas upon completion of construction.</p>				
<p><b>Mitigation Measure BIO-6. Compensate for Temporary and Permanent Loss of Riparian Vegetation.</b></p> <p>The County will compensate for temporary construction-related loss of riparian vegetation by replanting the temporarily disturbed area with the native species removed, including Fremont’s cottonwood, Goodding’s willow, narrow-leaf willow, and valley oak. Replanting will occur after completion of the construction activities and before October 15 to minimize erosion and creek sedimentation, and to avoid impacts on fish.</p> <p>The County will compensate for the permanent loss of riparian vegetation at a minimum ratio of 1:1 (1 acre restored or created for every 1 acre permanently affected). The actual compensation ratios will be determined through coordination with the RWQCB and USACE as part of the permitting process for the wetland impacts and through coordination with the CDFW for the upland riparian impacts. Mitigation will be onsite or immediately adjacent to the impact area within the ruderal riparian habitat.</p> <p>The County will compensate for the temporary and permanent loss of riparian vegetation through the preparation of a mitigation planting plan, including a species list and number of each species, planting locations within the mitigation area, and maintenance requirements. Plantings will consist of cuttings taken from local plants, or plants grown from local material.</p> <p>Planted species will be similar to those removed from the project area and will include Fremont’s cottonwood, Goodding’s willow, narrow-leaf willow, and valley oak. Native understory species, such as California blackberry, mugwort, and willow, or other suitable species will be planted. Plantings will be monitored annually for 3 years or as required in the project permits.</p> <p>If 75 percent of the plants survive at the end of the monitoring period, the revegetation will be considered successful. If the survival criterion is not met at the end of the monitoring period, planting and monitoring will be repeated after mortality causes have been identified and corrected.</p>	Post construction	County/Contractor/CDFW	County	
<p><b>Mitigation Measure BIO-7. Conduct Preconstruction Presence/Absence Surveys for Western Pond Turtle and Construct Exclusion Fencing, If Needed.</b></p> <p>To avoid and minimize impacts on western pond turtles, the County will retain a qualified wildlife biologist to conduct a preconstruction</p>	Prior to construction (1 week before and	County/Contractor/CDFW	County	

Mitigation Measure	Timing	Implementation Responsibility	Monitoring/Reporting Responsibility	Notes
<p>survey one week before and within 48 hours of disturbance in aquatic habitats. The surveys objectives are to determine presence or absence of pond turtles within the construction work area.</p> <ul style="list-style-type: none"> <li>• If possible, the surveys should be timed to coincide with the time of day and year when turtles are most likely to be active (during the cooler part of the day 8 a.m.–12 p.m. during spring, summer and late summer). Prior to conducting the presence/absence surveys the biologist should locate the microhabitats for turtle basking (logs, rocks, brush thickets) and determine a location to quietly observe turtles.</li> <li>• The surveys should include a 30 minute wait time after arriving onsite to allow startled turtles to return to open basking areas. The surveys should consist of a minimum 15 minute observation time per area where turtles could be observed.</li> <li>• Two preconstruction surveys, if conducted at the appropriate time to year, are sufficient to determine presence/absence.</li> <li>• If turtles are observed during either survey, they will be relocated outside of the construction area to appropriate aquatic habitat by a biologist with a valid memorandum of understanding from CDFW and as determined during coordination with CDFW.</li> <li>• If turtles are present they can either be hand-captured during dewatering or trapped and then moved.</li> <li>• If turtles are captured and moved up or downstream, install exclusion fence perpendicular to the river extending upslope an appropriate distance, determined based on topography and site vegetation. If this is determined to be infeasible, a monitor will need to be present during in-water construction (and construction within riparian habitat areas) to ensure that turtles do not move into the construction area.</li> </ul>	within 48 hours of disturbance in aquatic habitats)			
<p><b>Mitigation Measure BIO-8. Remove Vegetation during the Nonbreeding Season and Conduct Preconstruction Surveys for Swainson’s Hawk.</b></p> <p>To avoid and minimize impacts to Swainson’s hawk, which is protected under the MBTA and CFGC sections 3503 and 3503.5 and the CESA, the County or its contractor will implement the following restrictions and surveys:</p> <ul style="list-style-type: none"> <li>• Vegetation (trees and shrubs) removal will occur during the general non-breeding season for migratory birds (generally between September 15 and January 31).</li> <li>• If construction activities, including tree and shrub (and other vegetation) removal, are scheduled to occur during the migratory bird breeding season (generally between February 1 and September 15), the County will retain a qualified wildlife biologist to conduct nesting surveys before the start of construction. A minimum of two separate surveys will be conducted for the species. These surveys will occur in the project area and a 0.5 mile area around the project area. At least one survey should occur during the height of the breeding season (March 1 to June 1) and one within 1 week of the start of construction.</li> <li>• If no active nests are detected during these surveys, no additional mitigation is required.</li> <li>• If active nests are found in the survey area, a no-disturbance buffer will be established around the site to avoid disturbance or destruction of the nest site until the end of the breeding season (September 15) or until after a qualified wildlife biologist determines that the young have fledged and moved out of the project area. The extent of these buffers will be determined by the biologist in coordination with CDFW and will depend on the level of noise or construction disturbance, line-of-sight between the nest and the disturbance, ambient levels of noise and other disturbances, and other topographical or artificial barriers.</li> </ul>	Prior to and during construction (see timeframes)	County/Contractor/CDFW	County	
<p><b>Mitigation Measure BIO-9. Remove Vegetation during the Nonbreeding Season and Conduct Preconstruction Surveys for Other Special-Status and Non-Special-Status Migratory Birds</b></p> <p>To avoid and minimize impacts on special-status and other nesting migratory birds and raptors, which are protected under the MBTA and CFGC sections 3503 and 3503.5, the County or its contractor will implement the following restrictions and surveys:</p> <ul style="list-style-type: none"> <li>• Vegetation (trees and shrubs.) removal will occur during the non-breeding season for most migratory birds (generally between September 1 and January 31).</li> <li>• If construction activities, including tree and shrub (and other vegetation) removal, are scheduled to occur during the breeding season for migratory birds and raptors (generally between February 1 and August 31), the County will retain a qualified wildlife biologist with knowledge of the relevant species to conduct nesting surveys before the start of construction. A minimum of two separate surveys will be conducted for both migratory birds and raptors. Surveys for nesting migratory birds should be conducted within 30 days prior to the initiation of construction activities (including vegetation removal) that are scheduled to begin during the breeding season with at least one survey occurring within one week prior to the start of construction. These surveys will occur</li> </ul>	Prior to and during construction (see timeframes)	County/Contractor/CDFW	County	

Mitigation Measure	Timing	Implementation Responsibility	Monitoring/Reporting Responsibility	Notes
<p>in the project area and include trees, shrubs, and ground nesting areas within and immediately adjacent to the project area. Surveys for nesting raptors will occur in the project area and a 500-foot buffer area around the project area and should occur during the height of the breeding season (March 1 to June 1) with at least one survey occurring within one week prior to the start of construction.</p> <ul style="list-style-type: none"> <li>If no active nests are detected during these surveys, no additional mitigation is required.</li> <li>If active nests are found in the survey area, a no-disturbance buffer of 250 feet will be established around the site to avoid disturbance or destruction of the nest site until the end of the breeding season (September 15) or until after a qualified wildlife biologist determines that the young have fledged and moved out of the project area. The extent of these buffers will be determined by the biologist in coordination with CDFW and will depend on the level of noise or construction disturbance, line-of-sight between the nest and the disturbance, ambient levels of noise and other disturbances, and other topographical or artificial barriers. Suitable buffer distances may vary between species.</li> </ul>				
<p><b>Mitigation Measure BIO-10. Conduct Preconstruction Surveys and Implement Protective Measures for Western Burrowing Owl, If Necessary.</b></p> <p>In conformance with federal and state regulations regarding the protection of raptors, a preconstruction survey for burrowing owls will be completed, in accordance with CDFW guidelines described in the Staff Report on Burrowing Owl Mitigation (California Department of Fish and Game 2012), prior to the start of construction within suitable habitat and (where possible) in areas within 500 feet of the construction zone. Surveys should be conducted during the wintering (December 1 through January 31 recommended) and nesting (April 15 through July 15 recommended) seasons. Surveys should be conducted from 2 hours before sunset to 1 hour after, or from 1 hour before or 2 hours after sunrise. If no burrowing owls are located during these surveys, no additional action would be warranted. However, if breeding or resident owls are located on, or immediately adjacent to, the site the following measures will be implemented.</p> <ul style="list-style-type: none"> <li>No burrowing owls will be evicted from burrows during the nesting season (February 1 through August 31). Eviction outside the nesting season may be permitted pending evaluation of eviction plans and receipt of formal written approval from the CDFW authorizing the eviction.</li> <li>A 250-foot buffer, within which no new activity would be permissible, would be maintained between project activities and nesting burrowing owls. This protected area would remain in effect until August 31, or at the CDFW’s discretion and based on monitoring evidence, until the young owls are foraging independently.</li> </ul> <p>If accidental take (disturbance, injury, or death of owls) occurs, the CDFW would be notified immediately.</p>	Prior to and during construction (see timeframes)	County/Contractor/CDFW	County	
<p><b>Mitigation Measure BIO-11. Compensate for the Loss of Habitat for Western Burrowing Owl.</b></p> <p>If burrowing owls are found to occur in the project area, the following compensatory mitigation will be carried out in accordance with CDFW’s Staff Report on Burrowing Owl Mitigation (California Department of Fish and Game 2012).</p> <ul style="list-style-type: none"> <li>When destruction of occupied burrows is unavoidable during the nonbreeding season (September 1–January 31), unsuitable burrows will be enhanced (enlarged or cleared of debris) or new burrows created (by installing artificial burrows) at a ratio of 2:1 on protected lands approved by CDFW. Newly created burrows will follow guidelines established by CDFW.</li> <li>If active burrowing owl burrows are found and the owls must be relocated outside of the breeding season, the County or their contractor will offset the loss of foraging and burrow habitat on the project area by acquiring and permanently protecting a minimum of 6.5 acres of foraging habitat per occupied burrow identified on the project area. The protected lands should be located adjacent to the occupied burrowing owl habitat on the project area or in other occupied habitat near the project area. The location of the protected lands will be determined in coordination with CDFW. The project sponsor should provide funding for long-term management and monitoring of the protected lands. The monitoring plan should include success criteria, remedial measures, and an annual report to CDFW.</li> </ul> <p>If no burrowing owls are observed to occur in the project area, compensatory mitigation is not required.</p>	Post construction	County/Contractor/CDFW	County	
<p><b>Mitigation Measure BIO-12. Implement Protective Measures for Cliff Swallows to Avoid Disturbance to Active Nests.</b></p> <p>To the extent possible, the County or their contractor will limit construction activities that could disturb swallows, particularly bridge</p>	Prior to and during construction (see	County/Contractor/CDFW and/or USFWS	County	

Mitigation Measure	Timing	Implementation Responsibility	Monitoring/Reporting Responsibility	Notes
<p>removal, to the period outside the breeding season (September 1 to January 31).</p> <p>If construction activities are to occur during the swallows' breeding season, the following measures will be implemented:</p> <ul style="list-style-type: none"> <li>• Hire a qualified biologist to inspect the underside of the bridge during the swallows' nonbreeding season. Nests that are abandoned may be removed during this time only. To avoid damaging active nests, nests must be removed before the breeding season occurs (before February 1). A permit from CDFW and USFWS is required if active nests are to be removed.</li> <li>• After nests are removed, cover the underside of the viaduct with a 0.5- to 0.75-inch-mesh net, poultry wire, or other CDFW-approved swallow exclusion device. All devices will be installed before February 1. The device must be anchored so swallows cannot attach their nests to the bridge through gaps in the device. An alternative to netting is to continually hose down inactive nests until construction occurs. If netting is not in place by February 1 and swallows colonize the bridge, modifications to these structures will not begin until after the breeding season has ended (September 1) or until the young have fledged and all nest use has been completed.</li> </ul> <p>If steps are taken to prevent swallows from constructing new nests, work can proceed at any time of the year, notwithstanding other restrictions specified in the mitigation measures identified above.</p>	timeframes)			
<p><b>Mitigation Measure BIO-13. Conduct Nighttime Emergence Surveys for Bats and Examine Suitable Roost Trees Prior to Trimming or Removal.</b></p> <p>Prior to project construction, two bat emergence surveys should be conducted for the bridge expansion joint or other crevices that may support bat roosts. The surveys should be conducted during the period of April through mid-July when bat breeding colonies may be present. The survey should start 30 minutes-1 hour before dark and continue for at least 1 hour after dark. A bat acoustical recording device such as Pettersson bat detector should be used to determine which bat species are present. If any trees will be trimmed or removed for project access or construction, a qualified wildlife biologist will examine these trees prior to removal for nesting cavities and evidence of roosting bats. If bats or evidence of bats are observed, tree trimming and removal will be delayed until the bats leave the roosting sites or until CDFW authorizes trimming/ removal of the tree.</p>	Prior to and during project construction (30 minutes-1 hour before dark and 1 hour after dark, see timeframes)	County/Contractor/CDFW	County	
<p><b>Mitigation Measure BIO-14. Install Bat Exclusion Devices in Late August.</b></p> <p>If bats are observed to be utilizing tree cavities or the bridge for roosting bat exclusion methods will be utilized outside of the breeding season in August, as recommended in California Bat Mitigation—Techniques, Solutions, and Effectiveness (H. T. Harvey and Associates 2004), to ensure that direct impacts on bat roosts are avoided.</p> <p>Exclusion involves installing one-way devices that allow bats to exit roost structures but not to return. To implement an exclusion, all primary exit points are first identified and marked. All other emergence points larger than 0.25 inch are sealed with suitable material such as steel wool, wood, backer rod, expanding foam, or caulk. Access to unused portions of long crevices can also be minimized by sealing them with these materials. One-way valves are then placed over the primary exit points to prevent re-entry. Simple one-way valves can be constructed using wire mesh cones, polyvinyl chloride, and strips of clear plastic sheeting attached over exit points.</p> <p>Once the bats have been excluded, roosts spaces can be permanently filled with a suitable substance. Care should be taken to avoid sealing bats into a roost, particularly during the breeding season when non-flying young are present. To ensure that bats do not become trapped in the roost, a bat survey should be conducted from just before dark until complete darkness prior to sealing the roosting habitat.</p>	Prior to and during construction (see timeframes, August)	County/Contractor/CDFW	County	
<p><b>Mitigation Measure BIO-15. Include Bat-Friendly Designs in the Final Bridge Design.</b></p> <p>Implementation of the following bat-friendly designs or an alternative appropriate design that contains an expansion joint comparable to the existing one, would avoid long-term impacts on nursery or hibernation bat roosts by providing suitable replacement habitat to accommodate existing bat colonies if present. Off-structure mitigation for bats on bridges has been marginally or not at all effective and is not considered adequate mitigation (H. T. Harvey and Associates 2004).</p> <p>The following basic design recommendations (H. T. Harvey and Associates 2004) should serve as examples only as the final bridge design</p>	Prior to and during construction (see timeframes)	County/Contractor/CDFW	County	

Mitigation Measure	Timing	Implementation Responsibility	Monitoring/Reporting Responsibility	Notes
<p>depends on engineering requirements for the new bridge.</p> <p><u>Bridge Design—Two Separate Box Girder Roadways</u> Two-inch-thick, cast, lightweight concrete panels mounted on spacers on the two facing exterior box girder surfaces. These should be installed longitudinally. The top edge of the panels should be capped, with the panels mounted as close to the deck/girder joint as reasonable. They should extend down at least 36 inches (up to 72 inches, if possible). The gap created by mounting on spacers should be equal to the size of the gap in the existing expansion joints. It can be varied by mounting on tapered spacers. The total roost area should replicate that available in the existing bridge. This mitigation will provide primarily day-roost habitat but will not replace night-roost habitat lost with the box girder replacement design.</p> <p><u>Bridge Design—Two Separate Bulb T-Girder Roadways</u> Two-inch-thick, cast, lightweight concrete panels mounted on vertical surfaces of selected bulb T-girders. These should be installed longitudinally. The top edge of the panels should be capped, with the panels mounted as close to the deck/girder joint as reasonable. Panel height should be at least 24 inches, although 36 inches or more is preferable. The bottom, open portion of the panel will be mounted at least 12 inches above the girder bulb to permit unrestricted ingress/egress. The gap created by mounting on spacers should be equal to the size of the gap in the existing expansion joints. It can be varied by mounting on tapered spacers. The total roost area should replicate that available in the existing bridge. This design will provide primarily day-roost habitat. To replace lost night-roost habitat, lateral interstices between bulb T-girders should be designed, such as where the girders rest on pier platforms, to create pockets similar to those found in the existing bridge that trap warm air.</p> <p><u>Bridge Design—Single-Width Box Girder Design of Two Sections with Closure Pour</u> Two-inch-thick, cast, lightweight concrete panels mounted on spacers for one or both of the vertical surfaces of the closure pour. These should be installed longitudinally. The top edge of the panels should be capped, with the panels mounted as close to the deck/girder joint as reasonable. They should extend down at least 36 inches (up to 72 inches, if possible). The gap created by mounting on spacers should be equal to the size of the gap in the existing expansion joints. It can be varied by mounting on tapered spacers. The total roost area should replicate that available in the existing bridge. Hanging, cast, lightweight, concrete single-crevice sections mounted on the ventral surface of the closure pour. These should be installed centrally along the axis of the closure pour. They should extend down at least 36 inches (or farther, if possible). The total roost area should replicate that available in the existing bridge. These designs will provide primarily day-roost habitat. They will probably replace only a small percentage of the existing night-roost habitat lost with the box girder replacement design. To replace lost night-roost habitat, lateral interstices should be designed into the closure pour to create pockets similar to those found in the existing bridge that trap warm air.</p> <p><u>Bridge Design—Single-Width Bulb T-Girder Roadways with Closure Pour</u> Two-inch-thick, cast, lightweight concrete panels mounted on vertical surfaces of selected Bulb T-Girders. These should be installed longitudinally. The top edge of the panels should be capped, with the panels mounted as close to the deck/girder joint as reasonable. Panel height should be at least 24 inches, although 36 inches is preferable. The bottom, open portion of the panel will be mounted at least 12 inches above the girder bulb to permit unrestricted ingress/egress. The gap created by mounting on spacers should be equal to the size of the gap in the existing expansion joints. It can be varied by mounting on tapered spacers. The total roost area should replicate that available in the existing bridge. Hanging, cast, lightweight, concrete single-crevice sections mounted on the ventral surface of the closure pour. These should be installed centrally along the axis of the closure pour. They should extend down at least 36 inches (or farther, if possible). The total roost area should replicate that available in the existing bridge. These designs will provide primarily day-roost habitat. To replace lost night-roost habitat, lateral interstices between bulb T-girders</p>				



Mitigation Measure	Timing	Implementation Responsibility	Monitoring/Reporting Responsibility	Notes
<p>should be designed, such as where girders rest on pier platforms, to create pockets similar to those found in the existing bridge that trap warm air.</p> <p>Upon implementation of the chosen bat-friendly design, the structure(s) should be surveyed for night emergence just following construction during both the early and late breeding seasons (May to June and mid-July to mid-August). These surveys will provide information on the efficacy of the design and insights into adaptive management, which may be required to correct problems with the replacement habitat.</p>				
<p><b>Mitigation Measure BIO-16. Conduct Preconstruction Surveys and Relocation of American Badger.</b></p> <p>Prior to ground-disturbing activities, the contractor's biologist will conduct preconstruction surveys within the construction footprint for American badger den sites. American badgers range widely in search of ground squirrels and other burrowing rodents and are reliably found only at active den sites. If badger dens are present, a 50-foot buffer will be established around occupied dens.</p> <p>If a maternity den is present, the contractor's biologist will verify that a minimum 200-foot buffer is established through the pup-rearing season (February 15 through July 1). Buffers may be modified with the concurrence of the regulatory agencies.</p> <p>After the breeding season (February 15 through July 1), the contractor's biologist will clear active burrows located within the construction footprint of badgers using one-way gates installed over burrow entrances. Den sites identified by the contractor's biologist to be vacant will be demolished to prevent the reoccupation by American badgers. All mitigation measures for American badgers will be coordinated with the regulatory agencies prior to implementation.</p> <p>A written report documenting the American badger relocation will be provided to CDFW within 30 days by the project biologist.</p>		County/Contractor/CDFW	County	
<p><b>Mitigation Measure BIO-17. Avoid American Badger.</b></p> <p>Prior to ground-disturbing activities, if a maternity den is present, the project biologist will ensure that a minimum 200-foot buffer will be established through the pup-rearing season (February 15 through July 1). Buffers may be modified with the concurrence of CDFW. The project biological monitor will be present during ground-disturbing activities.</p>	Prior to and during construction (see timeframes)	County/Contractor/CDFW	County	
<p><b>Mitigation Measure BIO-18. Compensate for Temporary Loss and Permanent Fill of In-Channel Habitat for Special-Status Fish Species.</b></p> <p>The County will restore portions of the San Joaquin River temporarily disturbed by the water bladder dam construction and seasonal drainage disturbed by construction access to original grade and preconstruction conditions after construction is completed, and no permanent impacts will result.</p> <p>The County will compensate for the permanent fill of other waters of the United States in the San Joaquin River and seasonal drainage at a minimum ratio of 1:1 (1 acre restored or created for every 1 acre permanently affected). The actual compensation ratios will be determined through coordination with the Regional Water Quality Control Board (RWQCB) and U.S. Army Corps of Engineers (USACE) as part of the permitting process. The County will compensate for permanent loss of perennial drainage by implementing one or a combination of the following options.</p> <ul style="list-style-type: none"> <li>• Purchase credits for created riparian stream channel at a locally approved mitigation bank. The County will provide written evidence to the resource agencies that compensation has been established through the purchase of mitigation credits.</li> <li>• Compensate out-of-kind for loss of drainages by implementing compensatory mitigation for riparian forest impacts described above. The acreage restored to compensate for loss of drainages will be added to the acreage restored for loss of riparian habitat.</li> </ul>	Post construction	County/Contractor/Corps	County	
<p><b>Mitigation Measure BIO-19. Prevent Contaminants and Hazardous Materials from Entering the Stream Channel.</b></p> <p>The contractor will implement a SWPPP as part of the NPDES permit and a General Construction Activity Storm Water Permit to minimize the potential for sediment input to the San Joaquin River and potential adverse effects on Chinook salmon and steelhead migratory and rearing habitat. The contractors will also develop and implement a toxic materials control and spill response plan to regulate the use of hazardous materials, such as the petroleum-based products used as fuel and lubricants for equipment and other potentially toxic materials associated with project construction. In addition, the following measures will be implemented.</p> <ul style="list-style-type: none"> <li>• Falsework will be installed to keep bridge debris and construction and maintenance materials from falling into streams during demolition, construction, and substantial maintenance activities.</li> </ul>	Prior to and during construction	County/Contractor/Corps	County	

Mitigation Measure	Timing	Implementation Responsibility	Monitoring/Reporting Responsibility	Notes
<ul style="list-style-type: none"> <li>When concrete is poured to construct bridge footings or other infrastructure in areas of flowing water, work must be conducted to prevent contact of wet concrete with water (e.g., within a water bladder dam casing).</li> </ul>				
<p><b>Mitigation Measure BIO-20. Restrict In-Water Work to Avoid Special-Status Fish Spawning Seasons.</b> In-channel construction, including riverbank and channel bed construction below the OHWM, will be limited to the summer low-precipitation period, June 1 to October 15, to reduce the likelihood of adverse effects on emigrating and rearing juvenile steelhead and migrating adult steelhead, unless otherwise approved by appropriate resource agencies.</p>	Prior to and during construction	County/Contractor/NMFS or CDFW	County	
<p><b>Mitigation Measure BIO-21. Provide Alternate Migration Corridor through San Joaquin River Channel.</b> Water bladder dams will affect no more of the stream channel than is necessary to support completion of the construction activity. Flow will be diverted the minimum distance necessary to isolate the construction area. Water will be released downstream at an appropriate rate to maintain downstream flows at all times.</p>	During construction (during dry season)	County/Contractor/NMFS or CDFW	County	
<p><b>Mitigation Measure BIO-22. Retain Fish Biologist to Perform Fish Rescue Activities as Needed.</b> Because special-status fish might be present and subject to potential injury or mortality from water bladder dam installation and resulting isolation of fish, a qualified biologist will determine whether listed or proposed species are present or likely to be present near the project area. If special-status fish could be isolated by water bladder dam s, the project biologist will identify appropriate methods to capture, handle, exclude, and relocate those individuals. All fish exclusion and salvage activities will adhere to accepted NMFS and CDFW protocols.</p>	During construction	County/Contractor/NMFS or CDFW	County	
<p><b>Mitigation Measure BIO-23. Minimize Impacts on River Channel.</b> The following measures will be implemented to decrease impacts on the river channel and habitat.</p> <ul style="list-style-type: none"> <li>The duration and extent of in-water activities will be limited to the maximum extent practicable.</li> <li>The minimum amount of wood, sediment and gravel, and other natural debris will be removed to maintain and protect bridge function, ensure suitable fish passage conditions, and minimize disturbance of the streambed.</li> <li>Immediately upon completion of in-channel work, temporary fills (as needed), water bladder dams, and other in-channel structures will be removed in a manner that minimizes disturbance to downstream flows and water quality.</li> <li>Streamflow through the widened portion of the bridges must meet the velocity, depth, and other passage criteria for salmonids as described by NMFS and CDFW—or as developed in cooperation with NMFS and CDFW—to accommodate site-specific conditions.</li> <li>The river channel will be returned to pre-project conditions.</li> </ul>	During construction	County/Contractor/NMFS or CDFW	County	
<p><b>Mitigation Measure BIO-24. Minimize Noise Impacts on Special-Status Fish Species.</b> Potential injury and mortality associated with pile driving will be avoided or minimized by implementing the following measures.</p> <ul style="list-style-type: none"> <li>Vibratory hammers will be used to install the falsework/trestle bents and remove falsework piles. The permanent piers will be drilled.</li> <li>The smallest pile driver and minimum force necessary will be used to complete the work.</li> <li>Water bladder dams will be used to isolate in-channel work areas when existing piles are removed. The water bladder dams will isolate the pile removal areas and prevent excess sedimentation from being released in the channel.</li> </ul>	During construction	County/Contractor/NMFS or CDFW	County	
<p><b>Mitigation Measure BIO-25. Compensate for Permanent Loss of Seasonal Wetland.</b> For compliance with the CWA Section 404 permit, the County will be required to compensate for the permanent loss (fill) of seasonal wetland and to ensure no net loss of habitat functions. Loss of seasonal wetland will be compensated at a minimum ratio of 1:1 (1 acre of mitigation for every 1 acre filled). The actual compensation ratios will be determined through coordination with the RWQCB and USACE as part of the permitting process. Compensation may be a combination of mitigation bank credits and restoration/creation of habitat. The County will compensate for permanent loss of wetland habitat by implementing one or a combination of the following options.</p> <ul style="list-style-type: none"> <li>Purchase credits for seasonal wetland at a locally approved mitigation bank. The County will provide written evidence to the resource agencies that compensation has been established through the purchase of mitigation credits.</li> <li>Develop and ensure implementation of a wetland restoration plan that involves replacing the seasonal wetland on the project area after bridge demolition is completed. A restoration plan will be developed that describes where and when restoration will occur and who will be responsible for developing, implementing, and monitoring the restoration plan. The plan will also include a</li> </ul>	Prior to, during, and post construction	County/Contractor/Corps	County	

Mitigation Measure	Timing	Implementation Responsibility	Monitoring/Reporting Responsibility	Notes
<p>species list and number of each species, planting locations, and maintenance requirements. Plantings will be similar to those removed from the project area and will consist of cuttings taken from local plants. Plantings will be monitored annually for 3 years or as required in the project permits. If 75 percent of the plants survive at the end of the monitoring period, the revegetation will be considered successful. If the survival criterion is not met at the end of the monitoring period, planting and monitoring will be repeated after mortality causes have been identified and corrected. Mitigation sites will be protected in perpetuity in a conservation easement.</p>				
<p><b>Mitigation Measure BIO-26. Restore Temporarily Disturbed Drainage Habitat and Compensate for Permanent Loss of Drainage Habitat.</b>  The County will restore portions of the San Joaquin River temporarily disturbed by water bladder dam construction and seasonal drainage disturbed by construction access to original grade and preconstruction conditions after construction is completed, and no permanent impacts will result.</p> <p>The County will compensate for the permanent fill of other waters of the United States in the San Joaquin River and seasonal drainage at a minimum ratio of 1:1 (1 acre restored or created for every 1 acre permanently affected). The actual compensation ratios will be determined through coordination with the RWQCB and USACE as part of the permitting process. The County will compensate for permanent loss of perennial drainage by implementing one or a combination of the following options.</p> <ul style="list-style-type: none"> <li>• Purchase credits for created riparian stream channel at a locally approved mitigation bank. The County will provide written evidence to the resource agencies that compensation has been established through the purchase of mitigation credits.</li> <li>• Compensate out-of-kind for loss of drainages by implementing compensatory mitigation for riparian forest impacts described in Mitigation Measures BIO-1 through BIO-6. The acreage restored to compensate for loss of drainages will be added to the acreage restored for loss of riparian habitat.</li> </ul>	During and post construction	County/Contractor/Corps	County	
<b>Geology and Soils</b>				
<p><b>Mitigation Measure GEO-1. Stockpile Topsoil and Reuse Onsite.</b>  To minimize impacts on topsoil resources, Stanislaus County will require contractors to implement the following procedures.</p> <ul style="list-style-type: none"> <li>• The area of disturbance will be limited to the minimum needed for construction, staging, and access.</li> <li>• Where topsoil is removed, it will be sidecast and stockpiled for onsite reuse during site finishing. Site finishing will include topsoil replacement and revegetation with appropriate native species. Topsoil will be stockpiled separate from other excavated materials to facilitate effective reuse.</li> </ul>	During and post construction	County	County	
<p><b>Mitigation Measure GEO-2: Stop Work if Substantial Fossil Remains are Encountered during Covered Activities.</b>  If paleontological resources are discovered during project construction, all work within 100 feet of the discovery site will stop until a qualified paleontologist can assess the significance of the find and recommend appropriate treatment. The Stanislaus County will be responsible for ensuring that recommendations regarding treatment are implemented.</p>	During construction	County	County	
<b>Hazards and Hazardous Materials</b>				
<p><b>Mitigation Measure HAZ-1: Implement Asbestos and Lead-Based Paint Abatement and Subsurface Soil Investigation.</b>  All aspects of the proposed project associated with removal, storage, transportation, and disposal of lead-based paint will be in strict accordance with appropriate regulations of the California Health and Safety Code. Prior to demolition activities, loose or peeling paint on the steel bridge structural elements, as well as any painted surfaces on those elements proposed to be welded or torched, should be removed by a California Department of Public Health-certified lead paint abatement contractor and disposed of at a Class 1 disposal facility.</p> <p>Structural elements with intact paint may be managed as construction debris, subject to standard landfill profiling and disposal regulations.</p> <p>To address potential asbestos and ADL risk, a surface soil investigation should be conducted once the area of project disturbance is determined.</p>	Prior to demolition activities	County	County	Procedures, if determined necessary, will be implemented by the County during construction period.

Mitigation Measure	Timing	Implementation Responsibility	Monitoring/Reporting Responsibility	Notes
<p>The following scope is recommended:</p> <ul style="list-style-type: none"> <li>• 16 shallow soil samples be collected from areas within 30 feet of Crows Landing Road to be analyzed for total and soluble lead.</li> <li>• 8 shallow soil samples be collected from areas near the Crows Landing Road Bridge to be analyzed for asbestos content.</li> <li>• 8 shallow soil samples be collected from areas north and south of the Crows Landing Road Bridge that are adjacent to current and former agricultural fields to be analyzed for Title 22 heavy metals and organochlorine pesticides.</li> </ul> <p>The findings of the soil investigation should be evaluated to determine if additional measures, such as dust control, worker health and safety, and/or soil management procedures, may be necessary during project construction (Baseline Environmental Consulting 2010).</p>				
<p><b>Mitigation Measure HAZ-2: Stop Work and Implement Hazardous Materials Investigations and Remediation in the Event Hazardous Materials are Encountered during Construction.</b></p> <p>In the event that hazardous materials are encountered during construction, all construction activities in the area of the discovery will stop and the County will conduct a Phase I and, if required, Phase II hazardous materials investigations to identify the nature and extent of contamination and evaluate potential impacts on project construction and human health. If necessary, the County will also implement Phase III remediation measures consistent with all applicable local, state, and federal codes and regulations. Construction will not resume until remediation is complete. If waste disposal is necessary, the County will ensure that all hazardous materials removed during construction are handled and disposed of by a licensed waste-disposal contractor and transported by a licensed hauler to an appropriately licensed and permitted disposal or recycling facility, in accordance with local, state, and federal requirements.</p>	During construction	County	County	
<b>Noise</b>				
<p><b>Mitigation Measure NOI-1: Limit Construction Hours.</b></p> <p>Construction will be prevented from occurring between the hours of 10:00 p.m. and 6:00 a.m.</p>	During construction	County	County	Consistent with County requirements.
<p><b>Mitigation Measure NOI-2: Employ Noise-Reducing Construction Practices.</b></p> <p>Where feasible, the County's construction contractor will implement noise-reducing construction practices such that noise that occurs during construction hours is limited in the project area. Measures that can be used to reduce construction noise include but are not limited to:</p> <ul style="list-style-type: none"> <li>• locating equipment as far a practical from noise-sensitive uses;</li> <li>• requiring that all construction equipment powered by gasoline or diesel engines have sound-control devices that are at least as effective as those originally provided by the manufacturer and that all equipment be operated and maintained to minimize noise generation;</li> <li>• prohibiting gasoline or diesel engines from having unmuffled exhaust;</li> <li>• when practicable, using noise-reducing enclosures around stationary noise-generating equipment; and</li> <li>• when practicable, constructing barriers between noise sources and noise-sensitive land uses or taking advantage of existing barrier features (terrain, structures) or material stock piles to block sound transmission</li> </ul>	During construction	County	County	