

1.0 EXECUTIVE SUMMARY

PROJECT UNDER REVIEW

The North Connector Project (Project) consists of the construction of two sections of roadway, referred to as the West End and the East End. The purpose of the Project is to create additional east-west capacity north of Interstate 80 (I-80) for local traffic which currently must use I-80.

The Project is primarily located in unincorporated Solano County. For the purposes of this environmental document, the Project area is defined as the footprint of the proposed Project which includes the roadway, associated drainage, landscaping and other amenities (including a multi-use path in the East End), and immediately adjacent parcels that are directly affected by the Project alignment unless otherwise specified. The Project area is located to the north of I-80 which is a major west-east regional freeway connecting the San Francisco Bay Area with Sacramento and points east.

The West End is defined as the portion of roadway that is located between State Route 12 (SR12) West/Red Top Road intersection and Business Center Drive and is approximately 1 mile long. The East End is defined as the portion of roadway that is located between Suisun Creek and the Chadbourne Road undercrossing of SR12 East and is approximately 2.7 miles long. As shown in Figure 1-1, between the West End and the East End are existing and planned roadways that would link the two ends to create a continuous east-west roadway north of I-80.

The West End of the Project is primarily located within unincorporated Solano County. Existing land uses in this portion of the Project area are predominately agricultural with some commercial and residential development. The topography of the West End consists of rolling grass-covered hillsides with riparian corridors along local creeks.

The East End of the Project is also primarily located within unincorporated Solano County. Existing land uses in this portion of the Project area consist of agricultural farms and orchards, interspersed with residences and small businesses. The topography of the East End is generally flat with a well-defined riparian corridor lining Suisun Creek.

SUMMARY OF IMPACTS AND MITIGATION MEASURES

The following section provides an overview of the analysis contained within Chapter 4.0 Existing Conditions, Project Impacts, and Mitigation Measures, and Chapter 6.0 CEQA-Required Conclusions. Table 1-1 at the end of this chapter summarizes the significant impacts and mitigation measures associated with the Project.

POTENTIAL AREAS OF CONTROVERSY

Per CEQA Guidelines § 15123, this Environmental Impact Report (EIR) acknowledges the areas of controversy and issues to be resolved that are known to the Solano Transportation Authority (STA) and/or were raised during the prior environmental review process. Issues were identified during the Notice of Preparation (NOP) review period, during public scoping meetings, and in comment letters received during the circulation/review period of the Initial Study/Mitigated Negative Declaration (IS/MND), as well as the previous Draft EIR. A summary description of the issues raised during the NOP review period, in public scoping meetings, and in comment letters received, are discussed below.

- Land Use and Agricultural Resources – Issues and concerns related to conversion of farmlands (Williamson Act contract, conservation easements, property displacement (addressed in section 4.1 Land Use and Agricultural Resources)
- Traffic and Transportation – Issues and concerns related to volume, congestion, commute, cut-through traffic, timing compared to the I80/I680/SR12 Interchange project, construction schedule (addressed in section 4.2 Transportation and Traffic)
- Biological Resources – Issues and concerns related to potential impacts to sensitive species, Federally listed threatened and candidate species, and/or critical habitat (addressed in section 4.5 Biological Resources)
- Hydrology and Water Quality – Issues and concerns related to flooding of local creeks and upstream improvements (addressed in section 4.9 Hydrology and Water Quality)
- Population and Housing – Issues and concerns related to growth and development (addressed in section 4.11 Population and Housing)
- Public Services and Recreation – Issues and concerns related to bicycle lanes and pedestrian safety (addressed in section 4.12 Public Services and Recreation)
- Other Topics – Issues and concerns related to funding, entry access, right-of-way, signage, and consideration of alternatives (addressed in Chapter 3.0 Project Description and Chapter 5.0 Alternatives)

The issues raised during the NOP review period, in public scoping meetings, and in comment letters received, were taken into consideration in refining the Project design and preparing this EIR.

SIGNIFICANT IMPACTS

Under CEQA, a significant impact on the environment is defined as, “a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by a project including land, air, water, minerals, flora, fauna, ambient noise, and objects of historic or aesthetic significance.”

Based on the analysis completed for this EIR, impacts in the following resource areas would be considered significant or potentially significant without the implementation of mitigation measures:

- | | |
|---------------------------------------|-------------------------------|
| ❖ Land Use and Agricultural Resources | ❖ Cultural Resources |
| ❖ Traffic and Transportation | ❖ Geology and Soils |
| ❖ Air Quality | ❖ Hydrology and Water Quality |
| ❖ Noise | ❖ Hazards |
| ❖ Biological Resources | ❖ Population and Housing |
| ❖ Aesthetics | |

Mitigation measures have been identified and included in this EIR that would reduce significant and potentially significant impacts to a less-than-significant level.

SIGNIFICANT UNAVOIDABLE IMPACTS

There are no significant and unavoidable impacts related to the North Connector Project.

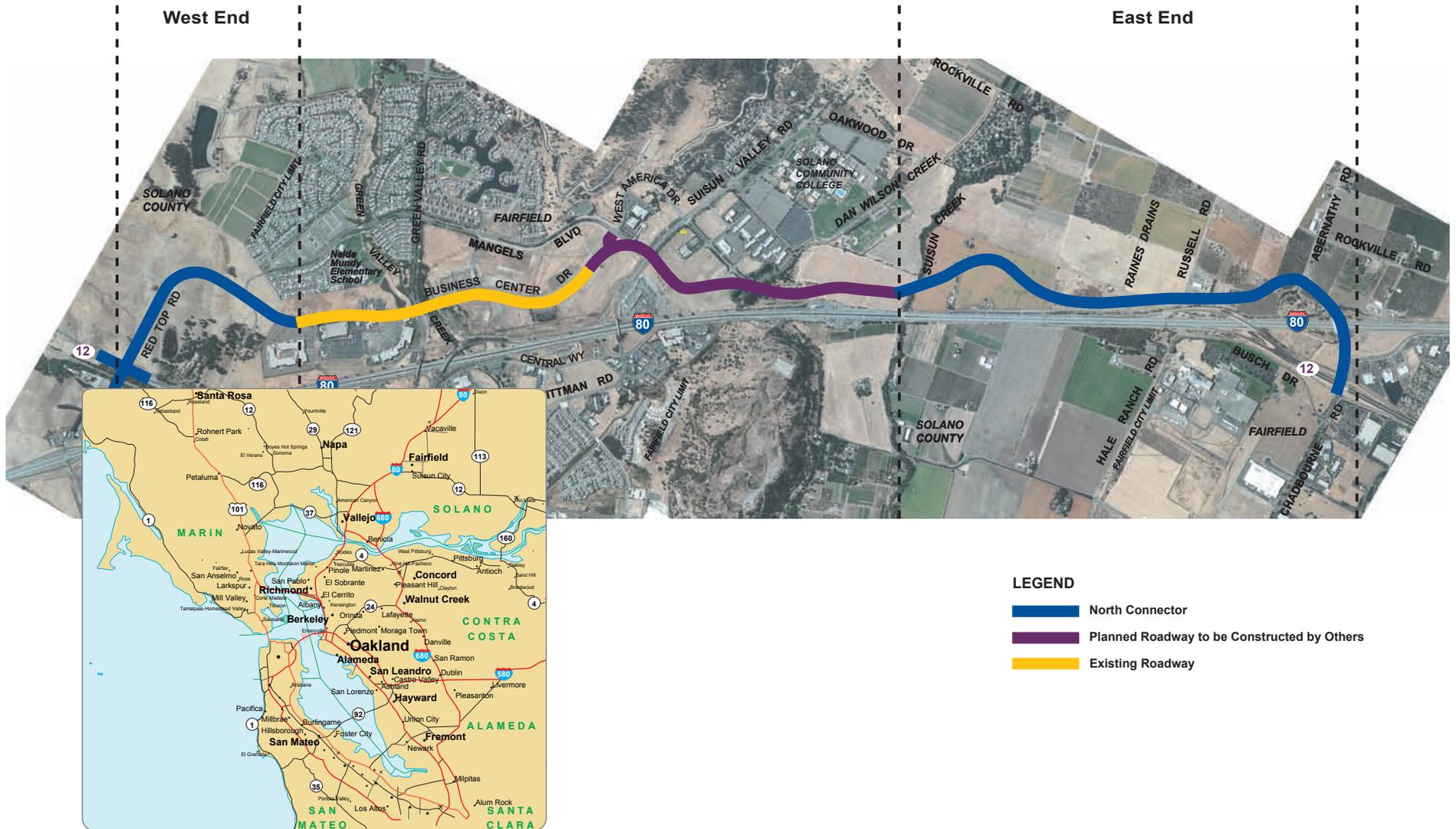


Figure 1-1. Project Location and Limits



Map not to scale

ALTERNATIVES TO THE PROJECT

- **No-Project Alternative** - Under the No-Project Alternative, the improvements proposed by the Project would not occur. Other planned and approved projects in the area would still be implemented.
- **Improvement of Existing Roadways Alternative (Existing Roadway Alternative)** – Under the Existing Roadways Alternative, the West End would be constructed as proposed in the Project. However the East End, improvements would not be constructed. Instead, Abernathy Road and Rockville Road and a portion of Suisun Valley Road would be widened and improved to accommodate additional traffic.
- **Enhanced Bus Service Alternative** – Under the Enhanced Bus Service Alternative, the improvements proposed by the Project would not occur. Other planned and approved projects in the area would still be implemented. Under this alternative, improved transit service strategies would be implemented. These strategies would focus on expanded bus services, extended routes, and shorter headways between stops.

CUMULATIVE IMPACTS

Cumulative impacts of the North Connector Project are evaluated in Chapter 6.0 of this EIR. With implementation of the mitigation measures presented in this document, cumulative impacts would be reduced to less-than-significant levels.

MITIGATION MONITORING

CEQA requires that public agencies set up monitoring or reporting programs for the purpose of ensuring compliance with those mitigation measures adopted or made as a condition of Project approval in order to mitigate or avoid significant environmental effects identified in EIRs. A mitigation monitoring and reporting program (MMRP) incorporating the mitigation measures included in this document will be considered and acted upon for adoption with the findings of this EIR and prior to approval of the Project.

SUMMARY OF IMPACTS

Table 1-1 summarizes the significant and potentially significant environmental impacts of the Project as identified in this EIR and mitigation measures to reduce or void these impacts. The table is arranged into four columns: 1) impact category, 2) impact statement; 3) mitigation measures; and 4) level of significance with mitigation. Levels of significance are categorized as follows: SU = Significant and Unavoidable; S = Significant or Potentially Significant; LTS = Less Than Significant. For a complete description of potential impacts and recommended mitigation measures, please refer to the specific sections within Chapter 4.0.

Table 1-1: Summary of Significant and Potentially Significant Impacts and Proposed Mitigation Measures

Impact Category	#	Impact Statement	Mitigation Measures	Level of Significance with Mitigation
<i>Land Use and Agricultural Resources</i>	4.1-1	The Project would convert Prime Farmland to non-agricultural uses (East End only). This is considered a significant adverse impact.	Mitigation Measure 4.1-1: Prior to construction of the East End of the North Connector Project, the STA shall acquire conservation easement(s) for 1.0 acres of Prime Farmland within the County for every acre of land considered impacted within the Project site that is designated as Prime Farmland. These easements would be held in trust by a public agency or other appropriate entity and be located within the limits of Solano County. Implementation of this measure would ensure permanent preservation of prime agricultural land at a 1:1 ratio, and would have a beneficial impact on the preservation of agricultural lands in Solano County. Table 4.1-5 provides a summary of the mitigation requirements for impacts to Prime Farmlands. Implementation of this measure would reduce impacts to lands designated as Prime Farmland to a less-than-significant level.	LTS
	4.1-2	The Project would convert lands subject to agricultural conservation easements to non-agricultural uses. This is considered a significant adverse impact.	Mitigation Measure 4.1-2: Prior to construction of the East End of the North Connector Project, the STA shall acquire conservation easement(s) for 1.25 acres of Prime Farmland within the County for every acre of land considered impacted within the Project site that is under conservation easement. These easements would be held in trust by a public agency or other appropriate entity and be located within the limits of Solano County. Because conservation easements provide permanent preservation of agricultural land, implementation of this measure would ensure permanent preservation of prime agricultural land at a 1.25:1 acre ratio, and would have a beneficial impact on the preservation of agricultural lands in Solano County. Table 4.1-5 provides a summary of the mitigation requirements for impacts to lands held under conservation easements. Implementation of this measure would reduce impacts to lands held in conservation easement to a less-than-significant level.	LTS

Table 1-1: Summary of Significant and Potentially Significant Impacts and Proposed Mitigation Measures

Impact Category	#	Impact Statement	Mitigation Measures	Level of Significance with Mitigation
<i>Traffic and Transportation</i>	4.2-1	During construction, the Project could result in inadequate emergency access. This is considered a potentially significant adverse impact.	Mitigation Measure 4.2-1: STA shall prepare a Transportation Management Plan (TMP) prior to beginning construction. The TMP shall be incorporated into the detailed design and implemented during construction. The TMP could include, but not be limited to, Motorists Information, Incident Management, Construction Strategies and Public Awareness Strategies. Detailed traffic handling plans shall also be developed that include restriping and staging elements to ensure safe free flow of traffic is maintained in the project area.	LTS
	4.2-2	The Project would exceed, either individually or cumulatively, a level of service standard established by Solano County or the City of Fairfield for designated roads or highways.	Mitigation Measure 4.2-2: Prior to completion of the East End of the North Connector, STA shall construct a double left turn lane from Suisun Valley Road onto I-80 Eastbound. The double left turn lane shall meet Caltrans design requirements and would reduce the LOS from E to D at this intersection.	LTS
<i>Air Quality</i>	4.3-1	The Project could potentially result in temporary increases in construction-related PM ₁₀ emissions during grading and construction activities. This is considered a potentially significant adverse impact.	Mitigation 4.3-1: The contractor shall be required to minimize or eliminate dust through the application of water or dust palliatives during construction and must use Caltrans Special Provisions and Standard Specifications, which include requirements to minimize or eliminate dust through the application of water or dust palliatives during Project construction. Implementation of this measure would reduce the potential exposure of sensitive receptors to dust (PM ₁₀) to a less-than-significant level.	LTS
<i>Noise</i>	4.4-1	The Project could potentially result in the exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels associated with construction activities. This is considered a potentially significant adverse	Mitigation Measure 4.4-1: The Project shall limit groundborne vibration and noise-generating construction activities, including use of heavy-duty trucks, to daytime hours of 7:00 a.m. to 7:00 p.m., Monday through Friday, and 8:00 a.m. to 5:00 p.m. on Saturdays. Construction activities shall not occur on Sundays or holidays except in circumstances where STA deems it necessary.	LTS

Table 1-1: Summary of Significant and Potentially Significant Impacts and Proposed Mitigation Measures

Impact Category	#	Impact Statement	Mitigation Measures	Level of Significance with Mitigation
		impact.		
	4.4-2	Construction of the Project could potentially cause a substantial temporary increase in ambient noise levels in the Project vicinity above levels existing without the Project due to construction activities. This is considered a potentially significant adverse impact.	<p>Mitigation Measure 4.4-2a: Noise-generating activities at the construction site or in areas adjacent to the construction site associated with the Project shall be restricted to daytime hours of 7:00 a.m. to 7:00 p.m., Monday through Friday, and 8:00 a.m. to 5:00 p.m. on Saturdays. Construction activities shall not occur on Sundays or holidays except in circumstances where STA deems it necessary.</p> <p>Mitigation Measure 4.4-2b: All internal combustion engine driven equipment shall be equipped with intake and exhaust mufflers which are in good condition and appropriate for the equipment.</p> <p>Mitigation Measure 4.4-2c: Unnecessary idling of internal combustion engines within 100 feet of residences shall be strictly prohibited.</p> <p>Mitigation Measure 4.4-2d: All construction equipment shall be staged at least 200 feet from residences and all stationary noise-generating construction equipment, such as air compressors and portable power generators, shall be located as far as practical from noise sensitive residences.</p>	LTS
<i>Biological Resources</i>	4.5-1	The Project could potentially impact the habitat of the Pallid Bat, Western Red Bat, and Hoary Bat, state species of special concern. This is considered a potentially significant adverse impact.	<p>Mitigation Measure 4.5-1: Preconstruction surveys shall be conducted before trees or potential roost structures are impacted or removed within the entire study area. A qualified biologist shall conduct this survey. If no bats are found during the survey, tree removal and structure demolition work shall be conducted within one month of the survey. If a maternity colony is observed during the surveys, no eviction/exclusion should be allowed during the maternity season (typically between April 15 and July 30). If a non-reproductive group of bats are found within a building or roost tree, they should be</p>	LTS

Table 1-1: Summary of Significant and Potentially Significant Impacts and Proposed Mitigation Measures

Impact Category	#	Impact Statement	Mitigation Measures	Level of Significance with Mitigation
			evicted by a qualified biologist and excluded from the roost site prior to work activities during the suitable time frame for bat eviction/exclusion (i.e., February 20 th to April 14 th and July 30 th to October 15 th).	
	4.5-2	The Project would have a substantial adverse effect to the California Red Legged Frog and its habitat. The California Red Legged Frog is a federally listed threatened species and a California species of concern. This is considered a significant adverse impact.	Mitigation Measure 4.5-2: In accordance with guidance received from USFWS, the Project shall mitigate for impacts to California red-legged frog habitat by creating a breeding pond for this species that would provide a greater than 2:1 ratio (replacement: impacted) of mitigation acreage (see Figure 3-4 for the approximate location of the red-legged frog breeding pond). The proposed location of the new breeding site is to the north and east of the new roadway alignment. In addition, a total of 35.4 acres of upland around this breeding pond shall also be preserved by a conservation easement or a deed restriction. This provides for 2:1 mitigation (preserved to impacted) for impacts to upland migration/dispersal habitat. The conservation easement shall usurp all development rights. The mitigation property would be owned in fee by the existing land owner, Solano County, or a qualified conservation organization. Allowable uses within this open space preserve shall be limited to maintenance of the pond. No further development, establishment of utilities, or any construction of any kind shall be allowed within the dedicated open space preserve. It is anticipated that final mitigation requirements, including the size of the breeding pond and the amount of upland dispersal habitat to be preserved will be determined in consultation with the USFWS.	LTS
	4.5-3	The Project may impact the habitat of the Pacific Pond Turtle, a state species of special concern. This is considered a potentially significant impact.	Mitigation Measure 4.5-3: Mitigation Measure 4.5-2 includes preservation of 35.4 acres of upland habitat. Preservation of this habitat would be considered adequate mitigation for potential impacts to the Pacific Pond Turtle, and would reduce any impacts to a less-than-significant level.	LTS
	4.5-4	The Project would have an	Mitigation Measure 4.5-4a: Suitable habitat shall be avoided	LTS

Table 1-1: Summary of Significant and Potentially Significant Impacts and Proposed Mitigation Measures

Impact Category	#	Impact Statement	Mitigation Measures	Level of Significance with Mitigation
		<p>adverse effect to the habitat of the Valley Elderberry Longhorn Beetle, a federally listed threatened species. This is considered a significant adverse impact.</p>	<p>and preserved to the extent feasible. Complete avoidance, resulting in no adverse effects, shall be assumed outside the 100-foot buffer that shall be established from the edge of the proposed bridge alignment over Suisun Creek and the preserved elderberry plants. Protection measures detailed in the USFWS' Conservation Guidelines for Valley Elderberry Longhorn Beetle (USFWS 1999) shall be implemented. All preserved plants shall be fenced off and these areas shall be designated as avoidance areas that shall be protected from disturbance during construction of the bridge. In addition, restoration and maintenance measures detailed in the USFWS' Conservation Guidelines for Valley Elderberry Longhorn Beetle (USFWS 1999) shall be implemented to restore any damage done to the 100-foot buffer area during construction. These areas shall be re-vegetated and appropriate erosion control measures shall be installed.</p> <p>All elderberry plants with one or more stems measuring 1.0 inch or more in diameter that would be removed by the Project shall be transplanted. Based on field surveys, it is anticipated that a total of 12 elderberry plants would be affected by the Project and would be transplanted and an additional 55 elderberry seedlings and/or cuttings shall be planted to mitigate for the number of stems (and their associated size classes) that would be impacted by the bridge construction. Prior to construction the area should be surveyed to determine the actual final number of plants that will be affected and transplanted, including calculation of the number of seedlings required. The elderberry plants and cuttings shall be transplanted to a conservation area along Suisun Creek. A biological monitor shall be present during all transplanting activities. Transplanting shall occur when plants are dormant (November through mid-February). Cuttings shall be taken when shoots are just beginning to newly sprout. The conservation area along Suisun Creek where the</p>	

Table 1-1: Summary of Significant and Potentially Significant Impacts and Proposed Mitigation Measures

Impact Category	#	Impact Statement	Mitigation Measures	Level of Significance with Mitigation
			<p>elderberry plants would be relocated, would receive protected status within the County. Dedication of the conservation area shall occur prior to any ground disturbing activities, including grading.</p> <p>Monitoring of the conservation area shall be conducted for ten consecutive years. A minimum survival rate of 60 percent of the elderberry plants/cuttings and 60 percent of the native riparian plantings is required throughout the monitoring period. If survival rates fall below 60 percent, replacement plants shall be installed within one year of discovery to bring the number of plants back to the original number of plantings. The USFWS may evaluate the site if there is severe damage to the plants due to circumstances beyond the applicant's control, such as flooding, fire, or vandalism. Monitoring of the site shall conform to USFWS and CDFG requirements and be submitted to those agencies by December 31 of each year.</p> <p>or</p> <p>Mitigation Measure 4.5-4b: Alternately, the STA may purchase credits in a USFWS-approved mitigation bank that provides habitat for the Valley Elderberry Longhorn Beetle. Final compensation requirements and mitigation ratios would be determined through consultation with USFWS. Purchase of mitigation credits shall occur prior to any ground disturbing activities, including grading. Two mitigation banks in the County that provide Valley Elderberry Longhorn Beetle habitat include the French Camp Conservation Bank (Sacramento, CA) and the River Ranch Conservation Bank (Rocklin, CA).</p>	
	4.5-5	The bridge proposed by the Project could potentially affect Steelhead trout habitat. This is	Mitigation Measure 4.5-5: To minimize potential impacts to steelhead, riparian tree removal and bridge construction shall be conducted between June 15 and October 15, when	LTS

Table 1-1: Summary of Significant and Potentially Significant Impacts and Proposed Mitigation Measures

Impact Category	#	Impact Statement	Mitigation Measures	Level of Significance with Mitigation
		considered a potentially significant adverse impact.	<p>steelhead are not expected to be in this reach of Suisun Creek.</p> <p>During a pre-Project meeting with NMFS on March 18, 2004, various mitigation options were discussed to compensate for this potential impact to steelhead and its habitat. Riparian trees removed for this Project shall be replaced at a ratio of 3:1 (three trees of the same species will be replanted for every tree removed). Riparian planting shall be conducted along Suisun Creek. A creek re-vegetation and enhancement plan has been prepared for this Project to address impacts to riparian trees. Mitigation for impacts to native trees is discussed later in this section.</p> <p>In addition, Best Management Practices (BMPs) shall be employed during construction to minimize and/or prevent water quality impacts to Suisun Creek.</p>	
	4.5-6	The Project would have an adverse effect on Waters of the United States and State, or federally protected waters. This is considered a significant adverse impact.	<p>Mitigation Measure 4.5-6: Various mitigation strategies will be employed to compensate for impacts to seasonal wetlands and other waters. Impacts to 0.57-acre of seasonal wetland habitat that will be impacted at the West End will be mitigated at a greater than 2:1 ratio by creating a 1.5-acre breeding pond for California red-legged frog that will provide seasonal wetland habitat. Additional impacts to waters of the U.S./State will be mitigated through creek enhancement and preservation of existing wetlands and creek corridors in the project vicinity. A proposed riparian mitigation area has been identified along Suisun Valley Creek (see Figure 3-2). The riparian mitigation area will be confirmed prior to the beginning of construction.</p>	LTS
	4.5-7	The Project could potentially result in impacts to nesting raptor species. This is considered a potentially significant adverse impact.	<p>Mitigation Measure 4.5-7a: In order to avoid impacts to nesting raptors, a nesting survey shall be conducted 15 days prior to commencing with construction work including any tree pruning, tree removal, staging, ground disturbing or construction activities, if this work would commence between</p>	LTS

Table 1-1: Summary of Significant and Potentially Significant Impacts and Proposed Mitigation Measures

Impact Category	#	Impact Statement	Mitigation Measures	Level of Significance with Mitigation
			<p>March 1 and September 1. Surveys should be conducted a minimum of three (3) separate days during the 15 days prior to the commencement of work activities. The raptor nesting surveys shall include examination of all trees within 1,000 feet of the entire proposed construction corridor, not just trees slated for removal.</p> <p>If nesting raptors are identified during the surveys, the dripline of the nest tree or shrub must be fenced with orange construction fencing and a 500-foot radius around the nest tree must be staked with bright orange lath or other suitable staking. If the nest site is on an adjacent property, the portion of the buffer that occurs on the Project site shall be fenced with orange construction fencing. This 500-foot buffer may be reduced in size if a qualified raptor biologist determines through monitoring that the nesting raptors are acclimated to people and disturbance, and otherwise would not be adversely affected by construction activities. At a minimum, however, the non-disturbance buffer shall be a radius of 200 feet around the nest tree or shrub. When construction buffers are reduced from the 500-foot radius, a qualified raptor biologist shall monitor distress levels of the nesting birds for one week after Project disturbance occurs. If at any time the nesting raptors show levels of distress that could cause nest failure or abandonment, the raptor biologist shall have the right to re-implement the full 500-foot buffer. Instances when the buffer could be reduced in size would be if the raptors were well acclimated to disturbance and/or if there were physical barriers between the nest site and the construction Project that would reduce disturbance to the nesting raptors.</p> <p>No construction or earth-moving activity should occur within the non-disturbance buffer until it is determined by a qualified raptor biologist that the young have fledged (that is, left the</p>	

Table 1-1: Summary of Significant and Potentially Significant Impacts and Proposed Mitigation Measures

Impact Category	#	Impact Statement	Mitigation Measures	Level of Significance with Mitigation
			<p>nest) and have attained sufficient flight skills to avoid Project construction zones. This typically occurs by August 1st. This date may be earlier than August 1st, or later, and would have to be determined by a qualified raptor biologist. Once the raptors have completed the nesting cycle, that is the young have reached independence of the nest, no further regard for the nest site shall be required. No other compensatory mitigation is required.</p> <p>Mitigation Measure 4.5-7b:</p> <p><u>Ground Nesting Raptors</u> A nesting survey shall be conducted for ground nesting raptors, such as western burrowing owl, short-eared owl and northern harrier. The ground nesting raptor survey should be conducted in accordance with the survey requirements detailed in the California Department of Fish and Game's (CDFG) October 17, 1995 Staff Report on Burrowing Owl Mitigation. Surveys shall be conducted in both breeding season (April 15-July 15) and non-breeding season (December-January) to assess use of the Project area by this species.</p> <p>If northern harriers or short-eared owls are identified nesting within the Project area, mitigation measures detailed above for nesting raptors should be implemented. If burrowing owls are found within the Project area during the non-breeding season (September 1 through January 31), impacts to burrowing owls will be avoided by establishing a fenced 160-foot buffer between the nest site(s) (i.e., the active burrow(s)) and any earth-moving activity or other disturbance within the Project area. If occupied burrows are found within 160 feet of the proposed Project area during the non-breeding season, and may be impacted, passive relocation measures will be implemented according to the Burrowing Owl Consortium</p>	

Table 1-1: Summary of Significant and Potentially Significant Impacts and Proposed Mitigation Measures

Impact Category	#	Impact Statement	Mitigation Measures	Level of Significance with Mitigation
			<p>Guidelines. If western burrowing owls must be passively relocated from the roadway alignment to remove them from harms way, these activities shall be approved by CDFG in advance. Passive relocation shall not commence before September 30th and shall be completed prior to February 1st.</p> <p>If burrowing owls are detected on the site during the breeding season (peak of the breeding season is April 15 through July 15), and appear to be engaged in nesting behavior, a fenced 250-foot buffer would be required between the nest site(s) (i.e. the active burrows(s)) and any earth-moving activity or other disturbance within the Project area. This 250-foot buffer could be removed once it is determined by a qualified raptor biologist that that young have fledged (that is, left the nest). Typically, the young fledge by August 31st. This date may be earlier than August 31st, or later, and would have to be determined by a qualified raptor biologist.</p> <p>Finally, if burrowing owls were found occupying burrows in the Project area, a qualified raptor biologist shall delineate the extent of burrowing owl habitat on the site. To mitigate impacts to burrowing owls, STA shall implement mitigation measures required by the CDFG which provide that six and a half acres (6.5 acres) of replacement habitat be set-aside (i.e., protected in perpetuity) for every occupied burrow, pair of burrowing owls, or unpaired resident bird. Such a set-aside will off-set permanent impacts to burrowing owl habitat. For example, if two pairs of burrowing owls are found occupying burrows on the study area, 13 acres of mitigation land must be acquired. Additionally, if one pair and one resident bird are identified, 13 acres of mitigation land must be acquired. The protected lands shall be adjacent to occupied burrowing owl habitat and at a location acceptable to CDFG. Land identified to off-set impacts to burrowing owls must be protected in perpetuity either by a</p>	

Table 1-1: Summary of Significant and Potentially Significant Impacts and Proposed Mitigation Measures

Impact Category	#	Impact Statement	Mitigation Measures	Level of Significance with Mitigation
			<p>conservation easement or via fee title acquisition. CDFG will likely require that a detailed mitigation and monitoring plan be developed for the burrowing owl mitigation area. This plan shall be prepared by the Project biologist and will be subject to CDFG approval. Mitigation lands will be protected in perpetuity and the applicant will provide an endowment fund for the long-term management of the burrowing owl mitigation lands.</p> <p>In lieu of this mitigation measure, with approval from CDFG, credit commensurate with the mitigation acreage requirements set forth above shall be purchased from a qualified burrowing owl mitigation bank in Solano County.</p>	
	4.5-8	<p>The Project could result in impacts to Passerine (common) and Special-Status Nesting Birds. This is considered a potentially significant adverse impact.</p>	<p>Mitigation Measure 4.5-8: In order to avoid impacts to common nesting birds and special-status birds, a nesting survey shall be conducted 15 days prior to commencing with construction work if this work would commence between March 1st and September 1st. Nesting surveys shall be conducted throughout the entire construction corridor 15 days prior to construction of the Project.</p> <p>If special-status birds are identified nesting within the Project area, a 100-foot non-disturbance radius around the nest must be fenced. Only the portion of the buffer that occurs on the Project site shall be fenced. No construction or earth-moving activity shall occur within this 100-foot staked buffer until it is determined by a qualified ornithologist that the young have fledged (that is, left the nest) and have attained sufficient flight skills to avoid Project construction zones. This typically occurs by July 1st. This date may be earlier or later, and would have to be determined by a qualified ornithologist. Similarly, the qualified ornithologist could modify the size of the buffer based upon site conditions and the bird's apparent acclimation to human activities.</p>	LTS

Table 1-1: Summary of Significant and Potentially Significant Impacts and Proposed Mitigation Measures

Impact Category	#	Impact Statement	Mitigation Measures	Level of Significance with Mitigation
			<p>If common passerine birds such as American robins, scrub jays, and northern mockingbird are identified nesting in any tree or shrub proposed for removal, tree removal shall be postponed until it is determined by a qualified ornithologist that the young have fledged and have attained sufficient flight skills to leave the Project site. Typically, most passerine birds can be expected to complete nesting by July 1st, with young attaining sufficient flight skills by this date that are sufficient for young to avoid Project construction zones. Unless otherwise prescribed for special-status bird species, upon completion of nesting no further protection or mitigation measures would be warranted for nesting birds.</p>	
	4.5-9	<p>The Project could result in impacts to Swainson's hawk. This is considered a potentially significant adverse impact.</p>	<p>Mitigation Measure 4.5-9: CDFG has prepared guidelines for conducting surveys for Swainson's hawk entitled: Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys in California's Central Valley (CDFG 2000). The following mitigation measure provides a summary of these survey requests. The survey recommendations were developed by the Swainson's Hawk Technical Advisory Committee (TAC) to maximize the potential for locating nesting Swainson's hawks, and thus reduce the potential for nest failures as a result of Project activities and/or disturbances. To meet the CDFG's recommendations for mitigation and protection of Swainson's hawks in this guideline, surveys shall be conducted for a half-mile radius around all Project activities and shall be completed for at least the two survey periods immediately prior to a Project's initiation, in accordance with CDFG's guidelines, which provide specific recommendations regarding the number of surveys based on the Project is scheduled to begin and the time of year the surveys are conducted.</p>	LTS

Table 1-1: Summary of Significant and Potentially Significant Impacts and Proposed Mitigation Measures

Impact Category	#	Impact Statement	Mitigation Measures	Level of Significance with Mitigation
			<p>If Swainson’s hawks are found to be nesting on or in the immediate vicinity of the Project area in the future when the proposed Project is implemented, consultation with CDFG and mitigation compensation shall be required. At that time, the necessity of acquiring a Fish and Game Section 2081 management authorization should be determined. CDFG has prepared a Staff Report Regarding Mitigation for Impacts to Swainson’s Hawks in the Central Valley of California (CDFG 1994) (hereinafter the Mitigation Guidelines) that prescribes avoidance and mitigation guidelines for impacts to Swainson’s hawk nesting and foraging habitats. The Mitigation Guidelines require applicants to replace any impacted Swainson’s hawk nesting and/or foraging habitat with other suitable Swainson’s hawk nesting/foraging habitat. If Swainson’s hawks are found to be nesting on or within the area of influence of the Project (within 1,000 feet of the Project), impacts to nesting Swainson’s hawks would be regarded as significant and adverse, and mitigation compensation would be required. If Swainson’s hawk are found to be nesting on or in the immediate vicinity of the Project area, STA shall set aside land as mitigation in a 1:1 ratio for all disturbed habitat within the Project area.</p> <p>If Swainson’s hawks are not found to be nesting in the immediate vicinity of the Project site immediately prior to a Project’s initiation, STA shall mitigate for impacts to foraging habitat within 5 miles of a known Swainson’s hawk nest. Since the Project site is within 5 miles of at least one active nest tree (in 2007), STA will set aside 0.75 acre of habitat in perpetuity for every acre of foraging habitat impacted by the Project. If an active Swainson’s hawk nest is found within 5 to 10 miles of the Project, STA shall set aside .5 acre in perpetuity for every acre of foraging habitat impacted by the Project.</p>	

Table 1-1: Summary of Significant and Potentially Significant Impacts and Proposed Mitigation Measures

Impact Category	#	Impact Statement	Mitigation Measures	Level of Significance with Mitigation
			<p>The CDFG Mitigation Guidelines states that acceptable mitigation to offset impacts to Swainson’s hawk foraging habitat can be met by Fee Title acquisition of Swainson’s hawk habitat, or by acquisition of the right to record a conservation easement over lands that can be managed for this hawk species (hereinafter Habitat Management Lands). If STA acquires land through Fee Title, the land would have to be donated to a suitable conservation organization for management. In addition to providing Habitat Management Lands, STA would be assessed a management fee for the long-term management of the Habitat Management Lands by a suitable conservation organization. In lieu of these mitigation measures, with approval from CDFG, STA may purchase mitigation credits commensurate with the acreage of impacts to foraging and/or nesting habitat at a CDFG approved Swainson’s hawk mitigation bank.</p>	
	4.5-10	<p>The Project could result in impacts to American Badger, a California species of special concern. This is considered a potentially significant adverse impact.</p>	<p>Mitigation Measure 4.5-10: A preconstruction survey shall be conducted for the American badger within the sphere of influence of the proposed Project, within 7 days prior to grading of the Project. Surveys shall be conducted by a wildlife biologist with experience identifying badger burrows. Survey methods would include conducting parallel transects through the grassland community looking for badger burrows. Any badger burrow identified should be staked in the field and mapped on Project site maps.</p> <p>If active badger burrows are identified within the sphere of influence of the proposed Project, they should be avoided. If avoidance is not feasible, a biologist should determine if the burrow is being used for breeding. If young are determined to be present, the burrow should be avoided until young vacate the burrow. If the burrow is simply being used as refugia by the badger, as approved by CDFG, a one way eviction door will be installed to remove the badger from its burrow. If it digs back</p>	LTS

Table 1-1: Summary of Significant and Potentially Significant Impacts and Proposed Mitigation Measures

Impact Category	#	Impact Statement	Mitigation Measures	Level of Significance with Mitigation
			into the burrow, as approved by CDFG, live traps should be established at the burrow entrances to trap and remove badgers from the area of impact.	
	4.5-11	The Project could potentially conflict with local policies and ordinances pertaining to tree preservation. This is considered a potentially significant adverse impact.	Mitigation Measure 4.5-11: The Project could potentially conflict with local policies and ordinances pertaining to tree preservation. This is considered a potentially significant adverse impact.	LTS
Aesthetics	4.6-1	The Project could potentially degrade the existing visual character or quality of the site and its surroundings in the West End. This is considered a potentially significant adverse impact.	<p>Mitigation Measure 4.6-1a: In areas of rolling grasslands in the West End, contour grading shall be utilized to minimize alteration of the natural terrain. Slope rounding shall also be employed in conjunction with contour grading as to provide a smoother and more natural appearing finished grade and smoother transition between grade slopes and natural topography.</p> <p>Mitigation Measure 4.6-1b: In the West End, landscaping and native species should be used to reflect the rural character of the surrounding areas. Trees (if planted) shall be of species consistent with the existing natural landscape and spaced to allow for view corridors. Graded slopes should be re-seeded with native grasses.</p>	LTS
Cultural Resources	4.7-1	The Project could potentially result in a substantial adverse change in the significance of an historical or archeological resource pursuant to Section 15064.5. This is considered a potentially significant adverse impact.	Mitigation Measure 4.7-1: Should any previously undiscovered cultural (historic, archeological) and/or paleontologic resources be found during construction, work shall stop, in accordance with CEQA §15064.5(f) and consistent with local requirements, until such time that the resource can be evaluated by a qualified archaeologist/paleontologist and appropriate mitigative action taken as determined necessary. Project personnel shall not collect or move any cultural or paleontologic resources found on the Project site.	LTS

Table 1-1: Summary of Significant and Potentially Significant Impacts and Proposed Mitigation Measures

Impact Category	#	Impact Statement	Mitigation Measures	Level of Significance with Mitigation
			Implementation of this mitigation measure would reduce impacts associated with cultural and/or paleontologic resources to a less-than-significant level.	
	4.7-2	The Project could potentially result in the direct or indirect destruction of a unique paleontological resource or site or unique geologic feature.	Mitigation Measure 4.7-2: Implementation of Mitigation Measure 4.7-1 described above would reduce impacts related to paleontological resources or unique geologic features to a less-than-significant level.	LTS
	4.7-3	The Project could potentially result in disturbance to human remains, including those interred outside of formal cemeteries. This is considered a potentially significant adverse impact.	Mitigation Measure 4.7-3: If human remains are found during construction, STA shall stop construction work and immediately contact the Solano County Coroner. Both state and local law requires that the Solano County Coroner, upon recognizing the remains as being of Native American origin, take responsibility for contacting the Native American Heritage Commission within 24 hours. The Commission has various powers and duties to provide for the ultimate disposition of any Native American remains, as does the assigned Most Likely Descendant. Sections 5097.98 and 5097.99 of the Public Resources Code also call for "protection to Native American human burials and skeletal remains from vandalism and inadvertent destruction." STA shall provide a preconstruction worker training to achieve compliance with this requirement for protection of human remains. Worker training shall instruct workers as to the potential for discovery of cultural or human remains, the need for proper and timely reporting of such finds, and the consequences of failure thereof. Additionally, a qualified archaeologist shall intermittently monitor the construction site to ensure compliance with Public Resources Code sections 5097.98 and 5097.99.	LTS
Geology and Soils	4.8-1	The Project is located in an area that could expose people or structures to substantial adverse effects due to rupture of a known	Mitigation Measure 4.8-1: To minimize potential damage from ground shaking, development associated with this Project must meet Solano County seismic safety standards, as established by the Health and Safety Element of the Solano County	LTS

Table 1-1: Summary of Significant and Potentially Significant Impacts and Proposed Mitigation Measures

Impact Category	#	Impact Statement	Mitigation Measures	Level of Significance with Mitigation
		earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map. This is considered a potentially significant adverse impact.	General Plan. All Project structures (including roadways) would be designed to the Maximum Credible Earthquake (MCE) in accordance with current design standards under the Solano County Road Improvement Standards and Land Development and Subdivision Requirements.	
	4.8-2	The Project is located in an area that has the potential to expose people or structures to substantial adverse effects due to strong seismic ground shaking caused by a moderate or major earthquake within the local vicinity. This is considered a potentially significant adverse impact.	Mitigation Measure 4.8-2: To minimize potential structural distress, the Project shall be designed and constructed according to the most current earthquake resistance standards for Seismic Zone 4, as outlined in the current California Building Code.	LTS
	4.8-3	The Project is located in an area that has the potential to expose people or structures to substantial adverse effects due to seismic-related ground failure, including liquefaction. This is considered a potentially significant adverse impact.	Mitigation Measure 4.8-3: Any new bridges/overcrossing structures shall be supported upon a deep foundation system, which extends through the potentially liquefiable zones and bears upon the underlying dense gravelly layers. The most suitable method(s) would be selected based on site-specific subsurface investigations conducted during the detailed design phase. Furthermore, to minimize potential liquefaction impacts, sub-excavation, dynamic compaction, or dewatering methods would be implemented during construction. The most suitable method(s) would be selected based on site-specific subsurface investigations conducted during the final design phase of the Project.	LTS
	4.8-4	The Project is located in an area that has the potential to expose people or structures to substantial adverse effects due to landslides. This is considered a potentially significant adverse	Mitigation Measure 4.8-4: Soil investigations, including geologic mapping and soil/rock borings, shall be conducted and used in the design of the proposed grading of the Project to address issues of weak soil, existing landslides, colluvial movement and the composition of bedrock material. The investigations shall be conducted during the final design phase	LTS

Table 1-1: Summary of Significant and Potentially Significant Impacts and Proposed Mitigation Measures

Impact Category	#	Impact Statement	Mitigation Measures	Level of Significance with Mitigation
		impact.	of the Project. In the event that potential for landslide is identified, stabilization measures, including physical reinforcement of the hillside, shall be evaluated for installation, as required by the Project Geotechnical Engineer or Engineering Geologist.	
	4.8-5	The use of on-site soils for fill material during Project construction could result in substantial soil erosion or the loss of topsoil. This is considered a potentially significant adverse impact.	<p>Mitigation Measure 4.8-5a: Fill materials (within 5 vertical feet of proposed improvements) shall generally contain rock fragments no larger than 6 inches in maximum diameter. Placement of larger rock fragments or oversized material is possible at the discretion of the Project Geotechnical Engineer or Engineering Geologist in deeper fills, provided that the large fragments are not nested and proper compaction can be achieved. Select fill shall have a Plasticity Index of less than 15, a Liquid Limit of less than 40, maximum aggregate size of 4 inches and have 15 percent to 60 percent of the material passing the No. 200 sieve. Select fill shall be generated from portions of the basalt, sandstone, and some select tuff layers found within the Project area.</p> <p>Mitigation Measure 4.8-5b: Due to the moderate to highly expansive nature of some materials that will be generated as fill, exposed within cut slopes, or present within the subgrade of the proposed alignment, for planning purposes new cut and fill slopes shall be planned for gradients no steeper than 2:1. If steeper slopes are required to be constructed, STA shall conduct further investigation, testing, and analysis in order to develop adequate slope design criteria and possible engineered solutions for steeper slopes. Such solutions may include: fill slope construction with select fill; engineered slopes with geotextile reinforcements; soil improvement additives such as lime; the use of retaining walls; or, a combination thereof.</p> <p>Mitigation Measure 4.8-5c: Fill and cut slopes shall be constructed in accordance with the requirements of local</p>	LTS

Table 1-1: Summary of Significant and Potentially Significant Impacts and Proposed Mitigation Measures

Impact Category	#	Impact Statement	Mitigation Measures	Level of Significance with Mitigation
			<p>jurisdictions.</p> <p>Mitigation Measure 4.8-5d: Any undocumented fills encountered within the proposed alignment shall be removed for their full depth and replaced with compacted engineered fill, under the direction of the geotechnical engineer of record. Earthen fill materials that do not contain more than 3 percent organics can be re-used as general fill. Organic-rich fill shall not be used in areas of proposed roadway or other improvements.</p>	
	4.8-6	<p>The presence of high groundwater in the Project area (West End only) may result in substantial soil erosion or the loss of topsoil. This is considered a potentially significant adverse impact.</p>	<p>Mitigation Measure 4.8-6a: Special dewatering procedures shall be implemented for deep excavations below the groundwater level, depending on the time of year of construction. Special considerations to collect and control seepage, especially at material contacts/faults shall be required.</p> <p>Mitigation Measure 4.8-6b: Each proposed cut area shall be evaluated for material stability and excavability, including providing recommended stable slope inclinations. STA will select the most suitable method(s) based on site-specific subsurface investigations. The investigations will be conducted during the final design phase of the Project.</p> <p>Mitigation Measure 4.8-6c: Specific recommendations shall be provided for construction and monitoring fill construction including staged construction. STA will select the most suitable method(s) based on site-specific subsurface investigations. The investigations will be conducted during the final design phase of the Project.</p>	LTS
	4.8-7	<p>Portions of the Project would be located on soil that is unstable, or that would become unstable as a result of the Project, and potentially result in soil</p>	<p>Mitigation Measure 4.8-7: Special consideration shall be given to fill placement techniques in order to minimize the settlement potential of the deep fills. Such techniques may include: increasing relative compaction to a minimum of 95 percent (versus the standard 90 percent); surcharging the fills</p>	LTS

Table 1-1: Summary of Significant and Potentially Significant Impacts and Proposed Mitigation Measures

Impact Category	#	Impact Statement	Mitigation Measures	Level of Significance with Mitigation
		subsidence. This is considered a significant adverse impact.	with additional load and later removal; dynamic compaction; use of geotextiles; or a combination thereof. STA will select the most suitable method(s) based on site-specific subsurface investigation. The investigations will be conducted during the final design phase of the Project.	
	4.8-8	The West End of the Project site is located in an area that has expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property. This is considered a potentially significant adverse impact.	Mitigation Measure 4.8-8: In the West End, maintenance, repair, and/or occasional replacement of the slopes and/or improvements shall be provided for on an as-needed basis for the lifetime of the Project. Other engineering solutions may also be required to reduce the potential for creep.	LTS
<i>Hydrology and Water Quality</i>	4.9-1	The Project could potentially violate water quality standards or waste discharge requirements. This is considered a potentially significant adverse impact.	<p>Mitigation Measure 4.9-1a: The Project will be required to adhere to the conditions of the NPDES Permit, including the C.3 requirements for stormwater discharge treatment measures and appropriate source control and site design measures for the alignment.</p> <p>Mitigation Measure 4.9-1b: To avoid potential long-term impacts to water quality, the Project shall be designed to include bioswales to retain and treat stormwater runoff from the roadway before entering the City or County's stormwater drainage systems.</p> <p>Mitigation Measure 4.9-1c: To comply with temporary water quality impact resulting from construction activities, a SWPPP shall be prepared prior to grading activities. The SWPPP must list BMPs that shall be followed to minimize contaminants entering storm drains as a result of storm runoff.</p> <p>The Project shall implement one or a combination of typical treatment BMPs that have been approved for use by the</p>	LTS

Table 1-1: Summary of Significant and Potentially Significant Impacts and Proposed Mitigation Measures

Impact Category	#	Impact Statement	Mitigation Measures	Level of Significance with Mitigation
			<p>SWRCB, including:</p> <ul style="list-style-type: none"> • Biofiltration strips and swales • Infiltration basins • Detention devices • Dry weather flow diversions • Gross solid removal devices • Media Filters • Multi-chamber Treatment Trains • Wet Basins <p>The Project shall implement one or a combination of the above-mentioned treatment BMPs into Project design. At the current level of design, it is not possible to identify design-specific BMPs for the Project. Design-specific BMPs shall be identified in the SWPPP prepared by the contractors prior to construction.</p>	
	4.9-2	<p>The Project could substantially alter the existing drainage pattern of the site or area, through the alteration of the course of a stream or river, in a manner which would result in substantial erosion, siltation, or flooding, on- or off-site. This is considered a potentially significant adverse impact.</p>	<p>Mitigation Measure 4.9-2a: In order to maintain bank stability in the area of the new bridge across Suisun Creek, riparian trees to be removed shall be cut above-grade and the tree stumps shall be left in place, except as needed to accommodate bridge construction.</p> <p>Mitigation Measure 4.9-2b: During the design phase of the Project, the Project engineer shall integrate design-specific detailed BMPs to address potential water quality impacts arising from the Project. BMPs shall include, but not be limited to, the following:</p> <ul style="list-style-type: none"> • Preservation of existing vegetation is the identification and protection of desirable grasses, plants and trees to retain their erosion and sediment control benefits. The contractor shall preserve existing vegetation at areas on the site where no construction activity is planned. Vegetation to be preserved should be delineated 	LTS

Table 1-1: Summary of Significant and Potentially Significant Impacts and Proposed Mitigation Measures

Impact Category	#	Impact Statement	Mitigation Measures	Level of Significance with Mitigation
			<p>on the plans, included in the contractor's file and included in the SWPPP.</p> <ul style="list-style-type: none"> The Project shall utilize concentrated flow conveyance systems in planning and construction. Concentrated flow conveyance systems consist of permanent design features that are used alone or in combination to intercept and divert surface flows and to convey discharge concentrated flows with a minimum of soil erosion, both within the Project limits and downstream. These include ditches, berms, dikes and swales; overside drains; flared culvert end sections; outlet protection/velocity dissipation devices. <p>Surface protection consists of a system of permanent design measures that are used alone or in a combination to minimize erosion from completed disturbed surfaces. Vegetated surfaces shall be incorporated into the Project to address stabilization of completed slope and surface areas to prevent erosion from storm water and non-storm water runoff. Permanent erosion control will be applied in any specific area where work in that area is determined to be substantially complete. Hard surfaces consist of concrete, rock, or rock mortar placed to achieve slope protection.</p>	
	4.9-3	Project construction activities could potentially create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff. This is considered a potentially	Mitigation Measure 4.9-3: Existing vegetation shall be preserved as much as practical. Areas of existing vegetation to be preserved shall be identified and delineated on Project plan sheets in the SWPPP. All disturbed areas shall be stabilized with vegetation or hard surface treatments upon completion of construction in any specific area. All inactive disturbed soil areas shall be stabilized with both sediment and temporary erosion control 14 days prior to the onset of the rainy season (October 15 th to April 15 th). During the Rainy season, Project	LTS

Table 1-1: Summary of Significant and Potentially Significant Impacts and Proposed Mitigation Measures

Impact Category	#	Impact Statement	Mitigation Measures	Level of Significance with Mitigation
		significant adverse impact.	construction shall minimize soil disturbances and temporary or permanent erosion control measures shall be undertaken to reduce soil erosion impacts to receiving water quality.	
	4.9-4	The Project could substantially degrade water quality. This is considered a potentially significant adverse impact.	<p>Mitigation Measure 4.9-4a: To reduce or eliminate the potential for stormwater or pollutant stormwater discharge to occur, during the final design phase permanent Project-specific pollution prevention BMPs, treatment BMPs, and critical temporary construction site BMPs shall be identified and incorporated into the Project plans, specifications, and estimates.</p> <p>Mitigation Measure 4.9-4b: To reduce or eliminate the potential for a non-storm water or pollutant storm water discharge to occur as a result of construction activities, the Project contractor in accordance with both the requirements under the Statewide Stormwater NPDES and General Construction Permits will implement a site specific SWPPP to control water pollution during all construction activities. The SWPPP will be approved and implemented prior to the commencement of any ground-disturbing activities. The SWPPP will identify BMPs that will be implemented to reduce or eliminate the potential for short-term impacts to water quality as a result of construction.</p> <p>The types of BMPs that will be utilized to control erosion and sedimentation of drainage channels in disturbed areas are:</p> <ul style="list-style-type: none"> • Erosion control barriers such as silt fences, hay bales, and <p>Drain inlet protection such as gravel bags, etc.</p>	LTS
Hazards	4.10-1	The Project has the potential to expose the public to significant hazards through the routine transport, use, or disposal of	Mitigation Measure 4.10-1a: Lead and asbestos shall either be abated if found during construction, or STA shall provide special construction worker health and safety procedures during demolition activities.	LTS

Table 1-1: Summary of Significant and Potentially Significant Impacts and Proposed Mitigation Measures

Impact Category	#	Impact Statement	Mitigation Measures	Level of Significance with Mitigation
		<p>hazardous materials or through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment. This is considered a potentially significant adverse impact.</p>	<p>An asbestos and lead-based paint survey shall be performed for all structures constructed prior to 1980 that will be demolished during Project construction activities. If asbestos-containing materials are determine to be present, the materials shall be abated by a certified asbestos abatement contractor in accordance with BAAQMD Regulation 11, Rule 2 and DTSC hazardous materials laws and regulations. All work shall be conducted in accordance with applicable construction worker health and safety requirements, including CalOSHA Construction Safety Orders for lead (Title 8 CCR Section 1532.1) and asbestos (Title 8 CCR Section 1529). These requirements may include air monitoring during construction, worker training, and preparation of a Lead Compliance Plan prior to construction.</p> <p>Mitigation Measure 4.10-1b: Soils within the existing right-of-way of SR12 or I-80 that would be disturbed during construction shall be tested prior to construction for total and/or soluble lead to properly classify the soils and ensure that all necessary soil management and disposal procedures are followed.</p> <p>Mitigation Measure 4.10-1c: Prior to commencement of construction, a minimum of four soil samples from soils immediately beneath railroad tracks located in the West End shall be taken. These samples shall be analyzed for Title 22 metals, total petroleum hydrocarbons (TPH), semi-volatile organic compounds (SVOCs), and polychlorinated biphenyls (PCBs).</p> <p>Concentrations of contaminants in the soils shall be compared to construction worker health and safety and hazardous waste thresholds, as defined by RWQCB Environmental Screening Levels (ESLs) for construction/trench worker direct contact. If</p>	

Table 1-1: Summary of Significant and Potentially Significant Impacts and Proposed Mitigation Measures

Impact Category	#	Impact Statement	Mitigation Measures	Level of Significance with Mitigation
			<p>the concentrations of contaminants exceed construction worker health and safety standards, additional site safety measures, such as use of personal protective equipment and/or dust control procedures may be required during some construction activities to minimize exposure to the contaminated soils. If the concentrations of contaminants exceed hazardous waste thresholds, then excavated soils must be managed during construction and may require off-site disposal. Depending on the extent of contamination identified, STA shall report concentrations that exceed hazardous waste thresholds to the Solano County Department of Environmental Management or other appropriate regulatory agency, conduct additional investigation and/or remediation under existing regulatory programs, such as those described in the Regulatory Setting section of this DEIR analysis.</p> <p>Mitigation Measure 4.10-1d: An investigation of groundwater quality shall be required should excavation to the depth of groundwater (which may be located as shallow as 10 ft below ground surface (bgs) in portions of the Project area) be proposed near areas where groundwater may have been affected by reported releases of hazardous materials.</p> <p>Concentrations of contaminants in groundwater shall be compared to construction worker health and safety thresholds and groundwater discharge permit thresholds. If the concentrations of contaminants exceed RWQCB ESLs, worker health and safety measures construction worker health and safety standards, additional site safety measures, such as use of personal protective equipment, may be required during some construction activities to minimize exposure to the contaminated groundwater. If the concentrations of contaminants exceed permit thresholds, then STA shall manage dewatered groundwater during construction and treat</p>	

Table 1-1: Summary of Significant and Potentially Significant Impacts and Proposed Mitigation Measures

Impact Category	#	Impact Statement	Mitigation Measures	Level of Significance with Mitigation
			<p>and/or dispose off-site. Depending on the extent of contamination identified, the discovery of groundwater contamination may require reporting to the Solano County Department of Environmental Management or other appropriate regulatory agency, and may trigger requirements for additional investigation and/or remediation under existing regulatory programs.</p> <p>Mitigation Measure 4.10-1e: During detailed design and prior to construction, a minimum of eight four-point composite samples from areas historically under agricultural cultivation shall be collected and analyzed for Title 22 metals and organochlorine pesticides.</p> <p>Concentrations of contaminants in the soils shall be compared to construction worker health and safety and hazardous waste thresholds. If the concentrations of contaminants exceed construction worker health and safety standards, additional site safety measures, such as use of personal protective equipment and/or dust control procedures, may be required during some construction activities to minimize exposure to the contaminated soils. If the concentrations of contaminants exceed hazardous waste thresholds, then excavated soils must be managed during construction and may require off-site disposal. Depending on the extent of contamination identified, concentrations that exceed hazardous waste thresholds may require reporting to the Solano County Department of Environmental Management or other appropriate regulatory agency, and may trigger requirements for additional investigation and/or remediation under existing regulatory programs.</p> <p>Mitigation Measure 4.10-1f: Prior to construction a qualified environmental professional shall take a minimum of four soil</p>	

Table 1-1: Summary of Significant and Potentially Significant Impacts and Proposed Mitigation Measures

Impact Category	#	Impact Statement	Mitigation Measures	Level of Significance with Mitigation
			<p>samples from areas adjacent to each agricultural outbuilding affected by the Project. These samples shall be analyzed for Title 22 metals, organochlorine pesticides, and total petroleum hydrocarbons (TPH) as gasoline, diesel, and motor oil. If evidence of contaminated soil results from the sampling, further remediation shall be conducted.</p> <p>Concentrations of contaminants in the soils shall be compared to construction worker health and safety and hazardous waste thresholds. If the concentrations of contaminants exceed construction worker health and safety standards, additional site safety measures, such as use of personal protective equipment and/or dust control procedures, may be required during some construction activities to minimize exposure to the contaminated soils. If the concentrations of contaminants exceed hazardous waste thresholds, then excavated soils shall be managed during construction and may be disposed of off-site. Depending on the extent of contamination identified, STA shall report concentrations that exceed hazardous waste thresholds to the Solano County Department of Environmental Management or other appropriate regulatory agency, and may conduct additional investigation and/or remediation under the regulatory agency's direction.</p>	
Population and Housing	4.11-1	The Project would not displace substantial numbers of people, but would result in the displacement of existing business tenants. This is considered a significant adverse impact.	Mitigation Measure 4.11-1: Solano County (acting as the lead agency) shall comply with the requirements of the State of California's Relocation Assistance Law, Government Code § 7260, et seq. The county shall provide qualified displaced businesses (eligibility is dependant on tenancy, status during purchasing process, etc.) relocation benefits. These benefits may include financial compensation, assistance in obtaining and becoming established in a suitable replacement location, supply of information concerning other federal and state programs which may be of assistance, and other advisory services to minimize hardships to business owners.	LTS

Table 1-1: Summary of Significant and Potentially Significant Impacts and Proposed Mitigation Measures

Impact Category	#	Impact Statement	Mitigation Measures	Level of Significance with Mitigation
			Compliance with the requirements set forth by the State of California's Relocation Assistance Law would reduce displacement impacts to a less than significant level.	
<p>Legend:</p> <p>SU = Significant and Unavoidable</p> <p>S = Significant or Potentially Significant</p> <p>LTS = Less Than Significant</p>				

This page intentionally left blank.