

---

INITIAL STUDY/PROPOSED MITIGATED NEGATIVE DECLARATION

# **Pacific Gas & Electric Valve Lot Relocation Project**

Prepared for



September 2011



To conserve resources this document was printed on 100% recycled paper.  
Please recycle!

# PROPOSED MITIGATED NEGATIVE DECLARATION

Pursuant to the California Environmental Quality Act (CEQA)  
Division 13, Public Resources Code

Solano Transportation Authority  
One Harbor Street, Suite 130  
Suisun City, CA 94585

## Project Description

The Solano Transportation Authority (STA) proposes to relocate an existing Pacific Gas & Electric (PG&E) valve lot from its current location between Interstate I-680 (I-680) and Lopes Road in the City of Fairfield. The valve lot would be relocated to a parcel of vacant land on the east side of I-680, approximately 0.2 mile the east of the existing lot. New gas pipelines would be constructed to connect existing transmission lines in the project area to the relocated valve lot. Once the relocation is complete, the existing valve lot and associated pipelines would be deactivated.

## Determination

This proposed Mitigated Negative Declaration (MND) is included to give notice to interested agencies and the public that the Solano Transportation Authority (STA) intends to adopt an MND for this project. This does not mean that the STA's decision regarding the project is final. This MND is subject to modification based on comments received by interested agencies and the public.

An initial study has been prepared by STA. On the basis of this study it is determined, pending public review, that the proposed action with the incorporation of the identified mitigation measures will not have a significant effect on the environment:

### Biological Resources

**Mitigation Measure IV-1a:** A qualified biologist shall conduct a preconstruction clearance survey at Wetland W-61b and Drainage OW-61a for California red-legged frogs immediately preceding the commencement of construction activities. If California red-legged frogs are found, the biologist shall contact the U.S. Fish and Wildlife Service (USFWS) and the project shall be halted until the USFWS provides guidance on how to proceed.

**Mitigation Measure IV-1b:** A California red-legged frog sensitivity training will be conducted for all on-construction personnel working within Wetland W-61b and Drainage OW-61a. Training components will include training on appropriate avoidance methods including species identification and protocols for contacting the biologist and USFWS in the event of a sighting. Handouts will be prepared and provided to all construction personnel including color photographs for species identification, protocols, and contact phone numbers.

The qualified biologist will be onsite during all initial ground disturbance activities within Wetland W-61b and Drainage OW-61a. After initial ground-disturbance activities are complete, the qualified biologist will appoint a member of the construction team to act as the on-site construction monitor

and will provide additional training to this person as required. Both the qualified biologist and the appointed construction monitor will have the authority to stop or redirect project activities to ensure protection of resources and compliance with all environmental permits and conditions of the project. If the biologist or construction monitor has requested that work stop because of take of any listed species, the USFWS and the CDFG will be notified within one working day by email or telephone. The biologist and construction monitor will complete a daily log summarizing activities and environmental compliance.

**Mitigation Measure IV-1c:** During project activities, all trash that may attract predators shall be properly contained, removed from the work site and disposed of regularly. Following construction, all trash and construction debris shall be removed from work areas.

**Mitigation Measure IV-1d:** After construction is complete, all temporarily disturbed wetland and drainage areas will be restored to pre-project conditions (also see **Mitigation Measure IV-4b**).

**Mitigation Measures IV-2:** If construction activities would commence anytime during the nesting/breeding season of native bird species potentially nesting on the site (typically February through August in the project region), a pre-construction survey for nesting birds should be conducted within one week of the commencement of construction activities.

The survey area shall include the project site and accessible/visible areas within 500 feet of the site. If active nests are found in areas that could be directly affected, or in areas that would be subject to prolonged construction-related noise, a no-disturbance buffer zone should be created around the nest during the breeding season or until a qualified biologist determines that all young have fledged, or that the project activity would not affect the nesting success. The size of the buffer zone and types of activities restricted within them would take into consideration the CDFG staff report guidance for mitigation of Swainson's hawk impacts and would be confirmed through consultation with the CDFG, taking into account factors such as the following:

- Noise and human disturbance levels at the project site at the time of the survey and the noise and disturbance levels expected during construction activities;
- Distance and amount of vegetation or other screening between areas where construction activities would occur and the nest; and
- Sensitivity of individual nesting species and behaviors of the nesting birds.

**Mitigation Measure IV-3:** Prior to the removal of the abandoned portable classroom on the project site, a focused survey shall be conducted by a qualified biologist to confirm the presence or absence of an active bat roost. Should an active maternity roost be identified, the roost shall not be disturbed until the roost is vacated and juveniles have fledged, as determined by the biologist. Once all young have fledged, then the structure may be removed. If a roost of non-breeding bats is identified, then the bats may be passively excluded using CDFG-approved methods.

**Mitigation Measure IV-4a:** Prior to the commencement to construction activities on the project site, a wetland delineation shall be conducted and the results shall be submitted to the ACOE for verification.

If jurisdictional wetlands are present onsite and if these wetlands would be impacted by the project, then a Section 404 permit from the ACOE and a Section 401 Certification from the RWCQB shall be obtained prior to the commencement of construction activities. All conditions of these permits/certifications shall be implemented. Any unavoidable loss of jurisdictional wetlands shall be compensated through purchasing credits at an ACOE approved wetland mitigation bank within the service area for the project site. Purchase of mitigation bank credits shall achieve a no-net-loss standard.

**Mitigation Measure IV-4b:** Prior to conducting any construction activities within Wetland W-61b and the two drainage ditches (OW-61a and OW-45a), the jurisdictional status of Wetland W-61b and OW-61a should be confirmed, and all required permits and authorizations shall be obtained from the ACOE, RWQCB, and CDFG. STA shall comply with all conditions obtained in those authorizations. Project-related disturbances to these features would be temporary, and following the completion of construction, W-61b, OW-61a, and OW-45a shall be restored to their baseline conditions.

Prior to the temporary disturbance of the wetland and drainage areas, a restoration plan shall be prepared by a qualified biologist. The plan shall describe the plant species in the wetland/drainage disturbance area, including the species present, the relative abundance of these species, and the relative abundance of native and non-native species. This information shall define the pre-disturbance condition to which the disturbed areas shall be restored. The plan shall also detail methods for ensuring that the disturbed areas are restored to a biological condition equivalent to or exceeding their pre-disturbance condition. At a minimum, the plan shall include the following:

1. methods for controlling the spread of invasive plant species into recently disturbed areas;
2. methods for determining if new planting is necessary or if the disturbed habitats will naturally revegetate with the surrounding plant species;
3. a monitoring schedule;
4. planting procedures, if it is determined that the site will not naturally revegetate with appropriate vegetation; and
5. corrective measures to be implemented if restoration efforts are not initially successful, such as the removal of non-native species and the planting of native species.

## Cultural Resources

**Mitigation Measure V-1:** In the event that buried archaeological resources are encountered, STA shall ensure that construction, excavation, and/or grading activities within 100 feet of the find are temporarily halted until a qualified archaeologist, hired by STA, can assess the significance of the find and provide proper management recommendations to be incorporated into the project. Prehistoric cultural materials include, but are not limited to, shell midden deposits, hearth remains, stone and/or shell artifacts, and/or burials. Historic materials, including but not limited to, whole or fragmentary ceramic, glass or metal objects, wood, nails, brick, or other materials may occur on the project site in deposits such as old privies or dumps.

Prior to project construction, a qualified archeologist shall conduct an archeological survey on the project site and areas to be disturbed by the project to assess the probability of discovering archeological resources during project construction. If based on the results of the survey, the site is found to contain significant archaeological resources (as determined by the CEQA Guidelines) by a

qualified archaeologist, funding shall be provided STA by to identify, record, report, evaluate, and recover the resources as necessary. Construction within the area of the find shall not recommence until impacts to the archaeological resource are mitigated. Additionally, as required by Public Resources Code Section 5097.993, STA must inform project personnel that collection of any Native American artifact is prohibited by law.

**Mitigation Measure V-2:** In the event that buried paleontological resources are encountered during project grading, site preparation, and/or construction; construction and/or grading activities within 100 feet of the find shall be temporarily halted until a qualified paleontologist can assess the significance of the find and provide proper management recommendations. Paleontological resources include, but are not limited to, fossils and material remains.

**Mitigation Measure V-3:** If human remains are encountered during ground-disturbing activities within the project area, STA shall require that work within 25 feet of the discovery shall be stopped and the project contractor shall immediately notify the Solano County Coroner. At the same time, a qualified archaeologist meeting federal criteria under 36 CFR 61 shall be contacted by STA to assess the situation and consult with the appropriate agencies. If the human remains are of Native American origin, the Coroner shall notify the Native American Heritage Commission within 24 hours of this identification. The Native American Heritage Commission will identify a Most Likely Descendant (MLD) to inspect the site and provide recommendations for the proper treatment of the remains and any associated grave goods.

Upon completion of the assessment, the qualified archaeologist shall prepare a report documenting the background to the finds, and provide recommendations for the treatment of the human remains and any associated cultural materials, as appropriate and in coordination with the recommendations of the MLD. The report shall be submitted to STA, the County, and the Northwest Information Center. Once the report is reviewed and approved by the agencies identified above, and any appropriate treatment completed, project construction activity within the area of the find may resume.

**Mitigation Measure V-4:** Prior to the issuance of grading permits, STA shall require that the project contractor provide documentation that all construction crews that will work on the project have undergone a training session to inform them of the presence and nature of federal or state-eligible cultural resources and the potential for previously undiscovered archaeological resources and human remains within the project area, of the laws protecting these resources and associated penalties, and of the procedures to follow should they discover cultural resources during project-related work.

## Hydrology and Water Quality

**Mitigation Measure IX-1:** Prior to project construction, a Stormwater Pollution Prevention Program (SWPPP), with Best Management Practices (BMPs) incorporated, shall be prepared to ensure that impacts to water quality are minimized and are in compliance with SWRCB regulations.

**Mitigation Measure IX-2:** Prior to the issuance of grading permits, a project-specific grading plan and erosion, sediment, and runoff control plan shall be prepared for City review and approval.

## Traffic and Transportation

**Mitigation Measure XVI-1:** Prior to beginning work, a Traffic Control Plan (TCP) and construction schedule shall be prepared and submitted to the City of Fairfield Traffic Engineer for approval. The Traffic Control Plan shall include the following measures:

- The TMP shall identify locations of temporary detours and signage to facilitate local traffic patterns and through-traffic requirements.
- Construction activities will be coordinated to avoid blocking or limiting access to homes and businesses to the extent possible. Residents and businesses will be notified in advance about potential access or parking effects before construction activities begin.
- The TMP will be prepared to address short-term disruptions in existing circulation patterns during construction. For example, the TMP will identify the locations of temporary detours or temporary roads to facilitate local traffic circulation and through-traffic requirements.

## Utilities and Service Systems

**Mitigation Measure XVII-1:** Prior to project construction, a project-specific Debris Management Plan shall be prepared. The debris management plan shall include information regarding the estimated total volume or weight of waste generated by the project and means for diverting the waste, including the solid waste facilities to be used.

*This page intentionally left blank.*

# Table of Contents

Project Description .....	1
Environmental Factors Potentially Affected .....	1
Determination.....	21
Environmental Impact Checklist .....	23
I. Aesthetics.....	23
II. Agriculture and Forest Resources .....	25
III. Air Quality .....	28
IV. Biological Resources .....	32
V. Cultural Resources .....	44
VI. Geology and Soils.....	48
VII. Greenhouse Gas Emissions.....	53
VIII. Hazards and Hazardous Materials .....	56
IX. Hydrology and Water Quality .....	59
X. Land Use and Planning.....	65
XI. Mineral Resources .....	67
XII. Noise .....	68
XIII. Population and Housing.....	72
XIV. Public Services .....	74
XV. Recreation.....	77
XVI. Transportation and Traffic.....	78
XVII. Utilities and Service Systems .....	81
XVIII. Mandatory Findings of Significance.....	84
List of Appendices .....	86
All Sources Consulted .....	87
Lead Agency and Report Preparers .....	90

## List of Figures

Figure 1:	Project Location Map .....	2
Figure 2:	Alternative Project Locations .....	4
Figure 3:	Project Site Plan .....	7
Figure 4:	Off-Site PipelinesFigure 4 .....	9
Figure 5:	Areas of Disturbances.....	13
Figure 6:	Acquisition and Easement Locations.....	15
Figure 7:	Wetlands and Waters of the United States in the Project Vicinity .....	35

## List of Tables

Table 1:	Project Pipeline Details.....	6
Table 2:	Project Acquisition and Easements .....	11
Table 3:	Project Approvals .....	18
Table 4:	Average Daily Project Construction Emissions .....	29
Table 5:	State Office of Planning and Research Land Use Noise Compatibility Guidelines .....	69
Table 6:	Construction Equipment Noise .....	70

# Pacific Gas & Electric Valve Lot Relocation Project Initial Study

## Project Description

### **1. Project Title:**

Pacific Gas & Electric Valve Lot Relocation Project

### **2. Lead Agency Name and Address:**

Solano Transportation Authority  
One Harbor Center, Suite 130  
Suisun City, CA 94585

### **3. Contact Person and Phone Number:**

Janet Adams, Deputy Executive Director/Director of Projects  
(707) 424-6075

### **4. Project Concept:**

The Solano Transportation Authority (STA) proposes to relocate an existing Pacific Gas & Electric (PG&E) valve lot (project) from its current location between Interstate I-680 (I-680) and Lopes Road in the City of Fairfield. The new PG&E valve lot would be relocated to a parcel of vacant land on the east side of I-680, approximately 0.2 mile east of the existing lot (see **Figure 1**). New gas pipelines would connect existing transmission lines in the project area to the new valve lot location. Once the relocation is complete and the new valve lot is operational, the existing valve lot and associated pipelines would be deactivated.

The existing PG&E valve lot is part of PG&E's gas transmission system which brings natural gas from Rio Vista and transports it to PG&E's service areas in Mendocino, Napa and Solano Counties. The valve lot acts as a gas control center enabling PG&E to shut down gas flow for routine maintenance and repair operations.

The location of the existing valve lot conflicts with planned transportation improvements which are part of the Interstate 80/Interstate 680/State Route 12 Interchange project, a separate transportation project being implemented by the California Department of Transportation (Caltrans) and sponsored by STA.<sup>1</sup> The valve lot is being relocated to avoid future conflicts with the planned transportation improvements in this area which include replacing and realigning the Green Valley overcrossing and widening and realigning Lopes Road.

---

<sup>1</sup> The I-80/I-680/SR12 Interchange project is included in the current financially constrained element of the Metropolitan Transportation Commission's (MTC) Regional Transportation Plan (Transportation 2035 Plan). The Interchange project involves reconstructing the I-80, I-680, and SR 12 interchange complex and realigning/replacing local roadways and interchanges in the area.



Project Location Map

Figure

**Project and Project Site:** The project would replace the existing 1.3-acre valve lot with a new valve lot location of comparable size. PG&E has indicated that a valve lot of 1.3 acres would be necessary to provide functional use for their current needs in order to accommodate equipment, circulation, and pipeline operational and maintenance activities.

Selection of a project site included the following screening criteria:

- The site selected should be at least 1.3 acres in size to be functionally equivalent to the existing valve lot;
- The site selected should be in an area of compatible land uses and not in close proximity to residential areas;
- The site selected should allow for the necessary pipelines to traverse areas of non-sensitive land uses (public roads) to connect to the valve lot; and
- The site selected should be easily accessible by emergency service providers/responders (police and fire).

**Alternative Project Locations Considered:** STA considered five locations for project (see **Figure 2**) Both Alternatives A and B are located west of I-680 and Lopes Road. Alternative A is located within the state right-of-way along the I-80 eastbound off-ramp. Alternative B is located southwest of Lopes Road's intersection with the I-80 eastbound off-ramp. Both Alternative C and D are located east of I-680. Alternative C is located along Central Way, adjacent to residential uses along Thompson Court. Alternative D is located along Ritchie Road across from existing residential uses.

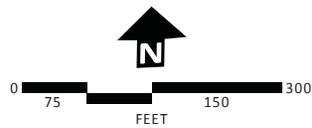
Since project initiation, Alternatives A through D have been rejected as project locations due to the following feasibility issues:

- **Alternative A:** Maintenance and operation access to the site would be limited as Alternative A is located along the I-80 eastbound off-ramp. During construction of the Interchange project, PG&E would need to coordinate site access with STA as the Interchange project would encroach on the site. Limited access during construction of the Interchange project could increase response times to accessing the site during emergency situations. Further, the site would be impacted by future phases of the Interchange project decreasing the acreage available for use as a valve lot. The site would not provide sufficient acreage to meet PG&E's requirements to meet their operational needs. Thus, this site was dismissed as the preferred location.
- **Alternative B:** This site had been designated for development during the time of project initiation and has since been developed for commercial uses with associated parking. Further, this site would not provide sufficient acreage to meet PG&E's requirements to meet their operational needs. Thus, this site was dismissed as the preferred location.
- **Alternative C:** This site would be located approximately 100 feet west of single-family residential homes along Thompson Court. Alternative C was dismissed as the preferred location given its proximity to these residential homes.
- **Alternative D:** This site would be located approximately 200 feet east and north of single-family residential homes along Thompson Court and Ritchie Road. Alternative D was dismissed as the preferred location given its proximity to these residential homes.



**Legend**

Alternative X Alternative Locations



Alternative Project Locations

Figure

Source: GTS, 2011.

### **5. Project Location and Setting:**

The existing valve lot would be relocated within a 7.69 acre site, owned by the Fairfield Suisun Unified School District (APN 045-300-070) (see **Figure 1**), located at 3630 Ritchie Road in the City of Fairfield within Solano County. The relocated valve lot would occupy a 1.3-acre portion of the school district parcel (northern portion of the property). The 7.69 acre parcel would be divided into two separate parcels: 1) one 1.3-acre parcel for the relocated PG&E valve lot and portions of the pipelines leading to the valve lot which would be acquired by STA; and, 2) the remainder of the parcel (6.39 acres) for future development (development of which is not part of this project).

The project site for the valve lot is currently vacant, but was previously occupied by the Green Valley Middle School. The school has been relocated, the buildings demolished and the site has remained vacant since 2004. A portable classroom unit which is no longer used is located on the western portion of the project site, which would be removed as part of the project prior to construction.

The 7.69 acre site is bound by Ritchie Road to the west, commercial/industrial businesses to the north, and Grobric Court to the east. Cordelia Automotive, a mechanical automotive service business, and Classic Powder Coating, a metal refinishing business is immediately north of the project site. Inserv Company, a water treatment product and equipment business, is east of the project site. Vacant areas are immediately south of the project site. I-680 and I-80 are located 0.15 miles to the west and north of the project site, respectively. Green Valley Creek is 0.1 miles northeast of the project site. The Village of Cordelia Historic District is 0.2 miles south of the project site.

### **6. Environmental Impact Analysis:**

This analysis discusses the direct and indirect environmental effects of project development, including site preparation and grading, construction of project features, and operational impacts associated with the project. The analysis is intended to provide sufficient information to facilitate project approval and implementation.

This initial study has been prepared in accordance with the California Environmental Quality Act (CEQA) requirements and will assist STA decision makers in determining whether the environmental effects from the project would result in potentially significant and/or significant environmental impacts. Where such impacts are identified, mitigation measures are provided that would reduce these impacts to a less-than-significant level.

All mitigation measures would reduce impacts to a less-than-significant level, and STA will include the mitigation measures as a condition of project approval and incorporate into the project design. This initial study determined, inclusive of defined mitigation measures, that the project would not have significant impacts, and further environmental review is not required by CEQA.

### **7. General Plan Designation:**

City of Fairfield General Plan: Public Facilities (PF)

### **8. Zoning:**

City of Fairfield Zoning: Public Facilities (PF)

## 9. Description of Project:

The project entails the relocation of an existing PG&E valve lot, the installation of new gas pipelines, and the abandonment of five existing gas pipelines in the City of Fairfield.

The existing PG&E valve lot is located between I-680 and I-80, to the east of Lopes Road (See **Figure 1**). The project would relocate the existing valve lot to a new location on the east side of I-80 (the project site) 0.2 mile (approximately 1,000 feet) east of its current location. All activities on the existing valve lot would cease as the lot would be deactivated and all pipeline maintenance equipment on site would be removed once the new valve lot is operational.

**Figure 3** shows the project site plan. As shown in the figure, all major piping and valves on the project site would be installed below ground with the exception of aboveground pipeline extensions with valve/hand wheels to regulate gas flow. The installation of pipelines and the valve/hand wheels aboveground on the project site would require excavations of approximately 5 to 10 feet, depending on the location. The final height of the aboveground equipment would be at ground level. Additionally, a pipeline inspection gauge (pig) launcher would be installed at the project site. Pig launchers are pipeline maintenance equipment used to clean the pipeline or assess corrosion along a pipeline. Piping associated with the pig launcher would be approximately 4 to 5 feet above ground.

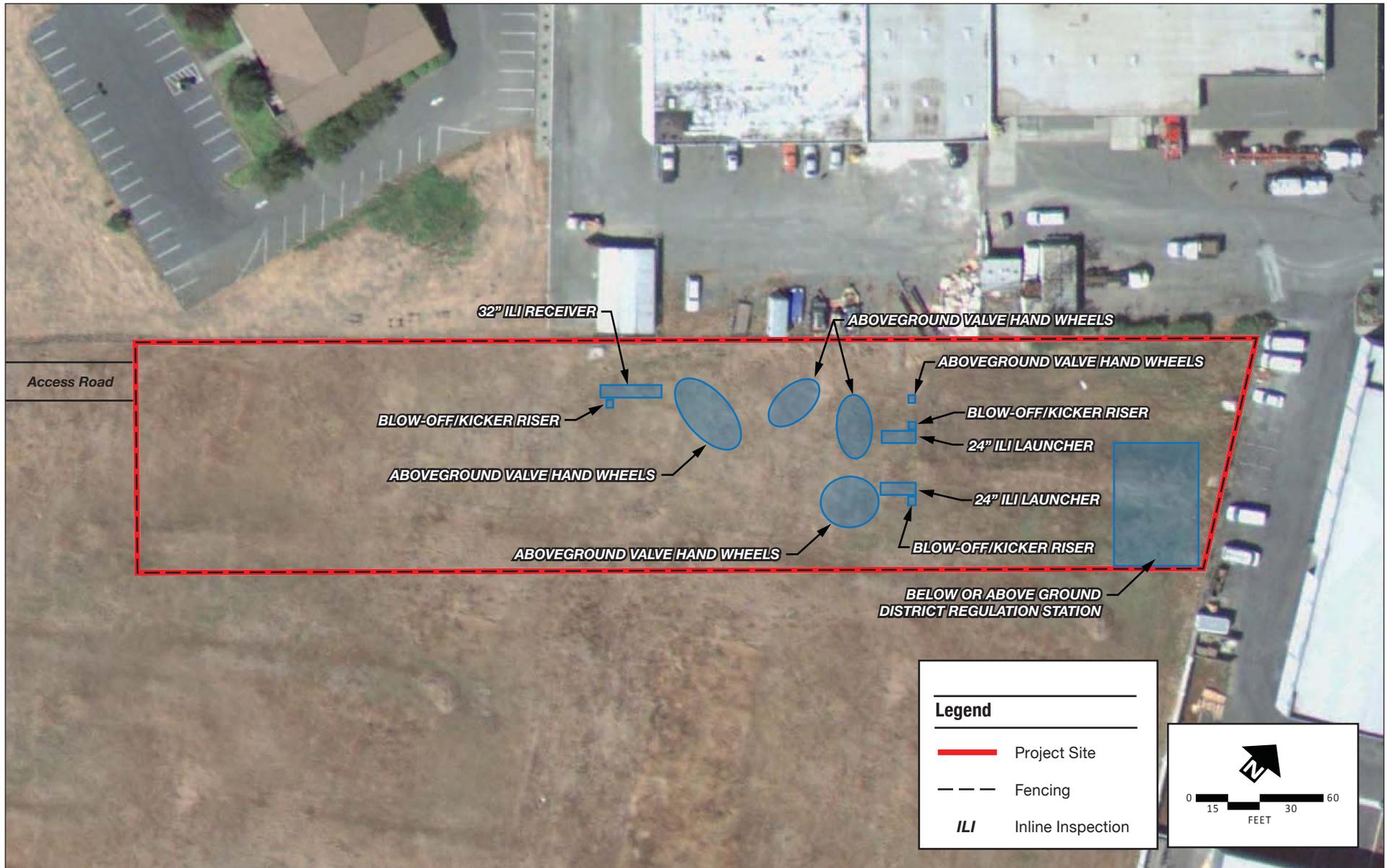
Following construction activities on the project site, the finished valve lot would be approximately 1 foot above grade with an aggregate base (gravel). Maintenance equipment and pipelines installed on the project site would be enclosed with a 7-foot high chain-linked fence. Although there would be no permanent lighting on the project site associated with the project, temporary lighting from construction pipeline tie-in activities would occur.

Five new underground gas pipelines would be installed to connect the existing natural gas system to the relocated valve lot (see **Figure 4**). Of the five pipelines, two pipelines would route gas to the valve lot and three pipelines would route gas from the valve lot to PG&E's existing gas distribution system. **Table 1** lists the diameter and length of the project pipelines. The capacity of the natural gas pipelines or PG&E's gas delivery system would not increase as a result of the project.

Table 1: Project Pipeline Details

Pipeline	Diameter	Length
<b>Pipelines Routing Gas to the Valve Lot</b>		
L-210A	32 inches	100 feet
L-210B	16 inches	600 feet
<b>Pipelines Routing Gas from the Valve Lot</b>		
L-210A	24 inches	1,900 feet
L-210B	16 inches	1,900 feet
L-210C	24 inches	900 feet

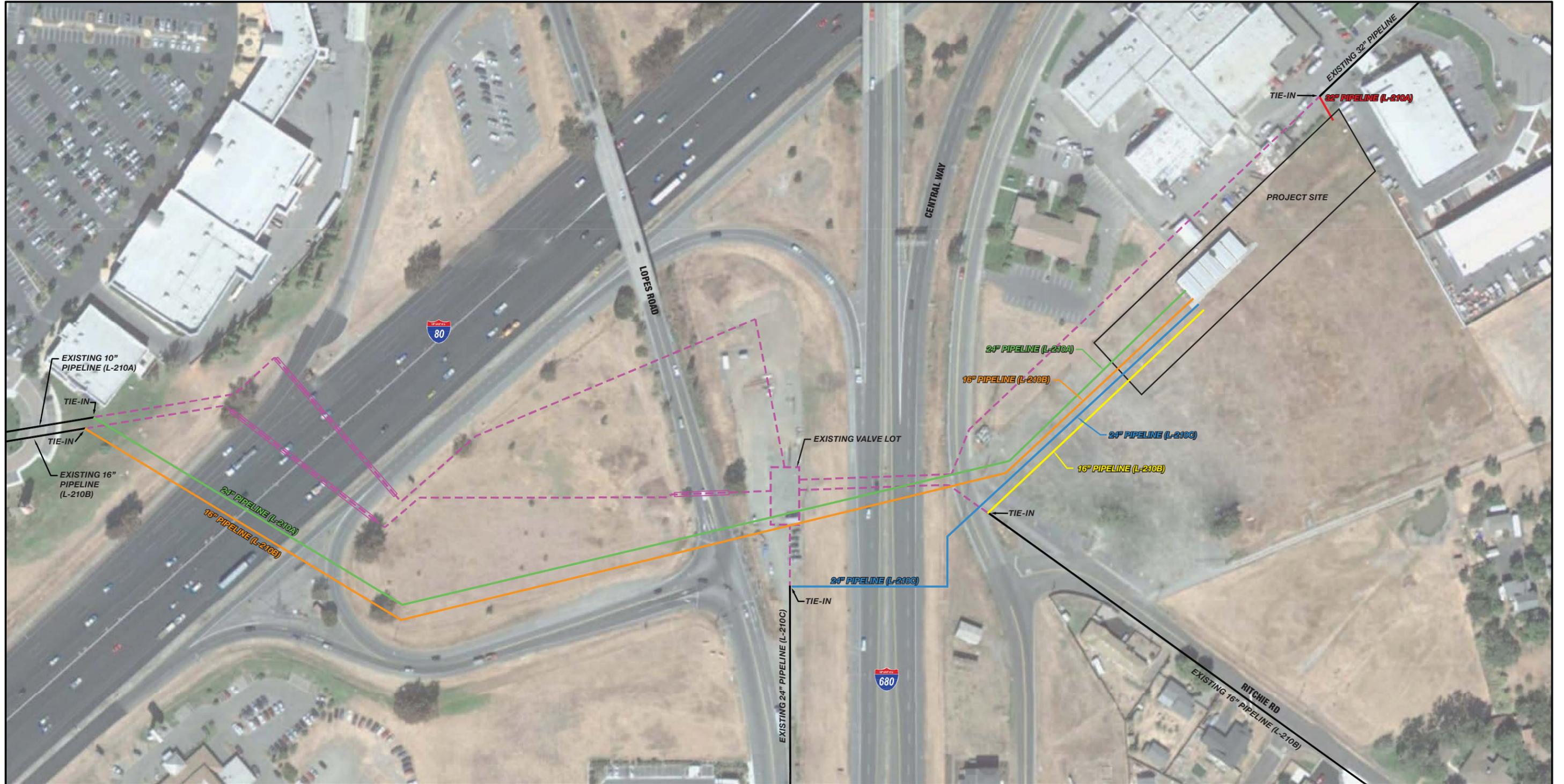
Source: GTS, 2011; Circlepoint, 2011.



Project Site Plan

Figure

*This page intentionally left blank.*



**Legend**

- EXISTING PIPELINES**
- Existing Transmission System to Remain
  - - - Existing Pipelines and Valve Lot (To be deactivated)

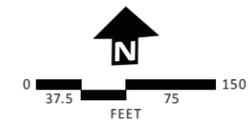
**PROJECT PIPELINES**

PIPELINES ROUTING GAS TO THE VALVE LOT

- L-210 A
- L-210 B

PIPELINES ROUTING GAS FROM THE VALVE LOT

- L-210 A
- L-210 B
- L-210 C



Off-Site Pipelines

Figure

Figure 4: Off-Site Pipelines (back)

Installation of the new pipelines and installing tie-ins to the existing transmission pipeline system would require construction within the project area. Construction to install pipelines under roadways, including I-680, I-80, and Central Way would utilize trenchless construction methods, such as the guided boring method<sup>2</sup> or horizontal directional drilling<sup>3</sup>, to limit surface ground disturbances. In other areas, trenching and open-cut methods would be used to install the pipelines. The direct buried sections of the pipelines would be excavated to a maximum depth of 8 feet; the new pipelines would be located at a minimum depth of 5 feet. At pipeline tie-in areas, bell holes<sup>4</sup> would be excavated to maximum depth of 18 feet.

**Figure 5** shows the areas of surface disturbances and subsurface disturbances related to project construction. Installation of the two pipelines traversing I-80 and I-680 (L-210A and L-210B) would require the removal of two eucalyptus trees located within the Caltrans’ right of way, on an island between I-680 and I-80 to the west of Lopes Road. Areas disturbed due to pipeline installation would be restored to their original condition following construction. If excess soils remain after construction, the soils would be taken to an approved off-site location.<sup>5</sup>

The project would require that STA acquire the 1.3 acre project site from the Fairfield Suisun Unified School District, and secure permanent and temporary easements needed for operation/maintenance and construction staging purposes. **Table 2** lists the Assessor Parcel Numbers (APN) and acreages associated with the acquisition and easements. **Figure 6** shows the location of the fee acquisition and easements.

Table 2: Project Acquisition and Easements

APN	Owner	Acreage
<b>Fee Acquisition</b>		
0045-3000-070	Fairfield Suisun Unified School District	1.3 acres
<i>Total Acreages under Fee Acquisition</i>		<i>1.3 acres</i>
<b>Permanent Easements</b>		
0045-300-070	Fairfield Suisun Unified School District	0.66 acres

<sup>2</sup> The guided boring method of pipeline installation is a 3-step process. First, a pilot tube is pushed through the ground from a jacking shaft to a reception shaft at the end location. Second, the pilot bore is enlarged from the jacking shaft to the reception shaft using augers inside a steel casing. Lastly, the pipe is pushed behind the steel casing, and the steel casing is extracted at the reception shaft simultaneously.

<sup>3</sup> Horizontal directional drilling (HDD) is a surface-launched process whereby a pilot bore is drilled by pushing a drill pipe and drill bit from the entry point along a curved pathway to the exit point. When the pilot bore is complete, the bore is reamed in one or more passes to enlarge the bore to the diameter that can accommodate the pipe. The steel pipe is then pulled into the bore back to the entry point.

<sup>4</sup> Bell holes are excavations made at the section joints of a pipeline. PG&E would excavate the soils to make it safe for construction employees to work.

<sup>5</sup> Excess soils may be generated if the pipelines traversing I-680 are installed using the horizontal directional drilling method.

<i>Permanent Easements, continued.</i>		
0045-300-040	James L. & Cheryl C. Campi	0.12 acres
<i>Total Acreages under Permanent Easement</i>		<i>0.78 acres</i>
<b>Temporary Easements</b>		
0045-300-070	Fairfield Suisun Unified School District	5.73 acres
0045-300-120	Patrick B. Johnson	0.37 acres
0045-300-130	Lillian Collins Johnson	0.10 acres
0045-300-040	James L. & Cheryl C. Campi	0.02 acres
<i>Total Acreages under Temporary Easement</i>		<i>6.08 acres</i>

Source: GTS, 2011; Circlepoint, 2011.

Pipes would be hauled to the project site from the pipe storage yard in Stockton via Interstate 5 (I-5), which connects with I-80 in Sacramento. Construction equipment and work crews would access the project site and construction areas by use of local public roads including: Business Center Drive, Green Valley Road, Lopes Road, Central Way, Ritchie Road, Grobric Way, Cordelia Road, Business Center Drive, and I-680. A temporary access road in the north side of I-80 would extend off the I-80 on-ramp from Green Valley Road. Construction staging areas associated with project would store materials and equipment within a temporary fenced area. **Figure 6** shows the temporary easements to be used as construction staging areas. Disturbances on these construction areas would be temporary and limited to the construction phase of the project after which these areas would be returned to pre-construction conditions.

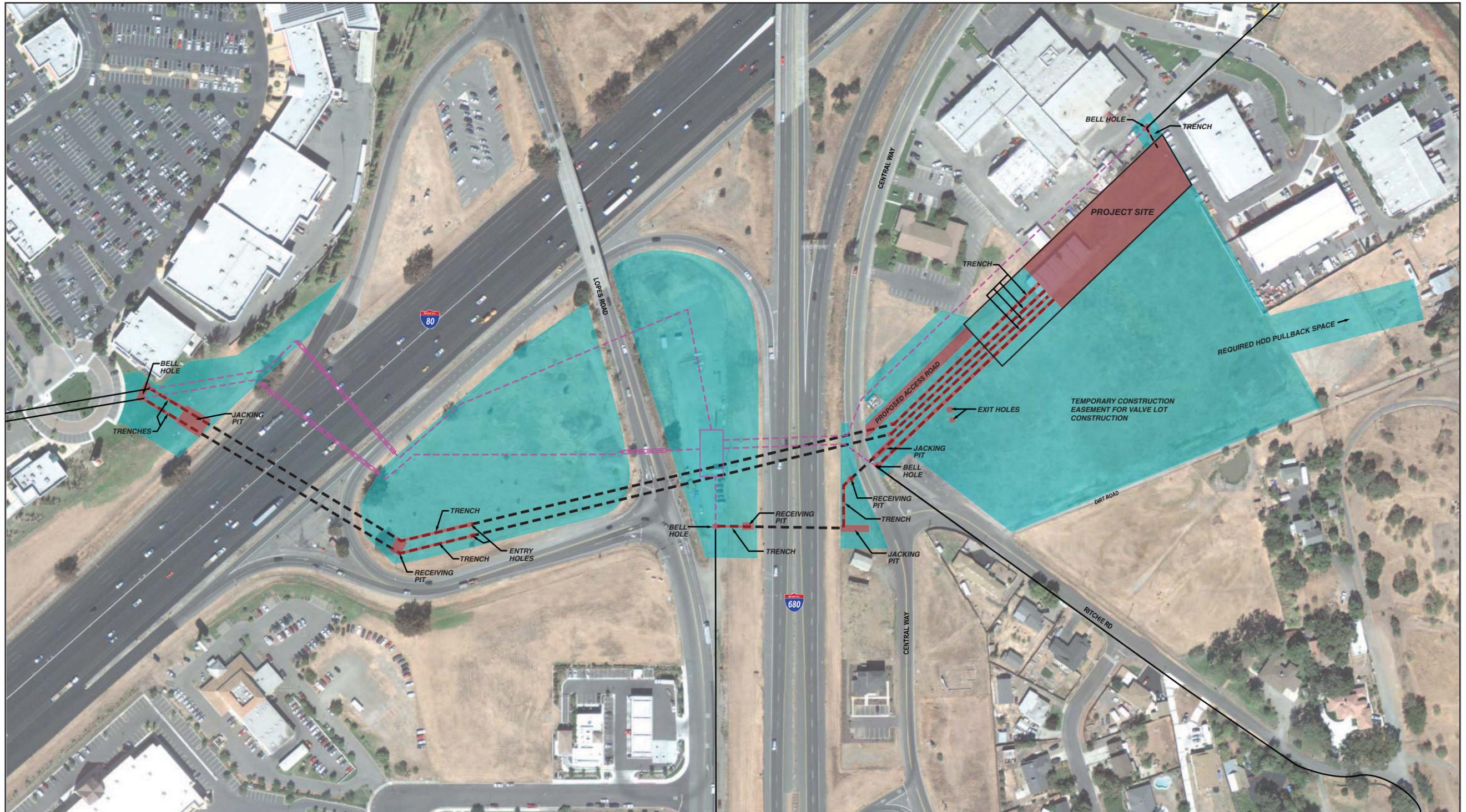
Once the valve lot relocation is complete, the portions of the pipeline connecting to the existing lot would be deactivated pursuant to applicable regulations and requirements.<sup>6</sup> **Figure 5** depicts the existing pipelines to be deactivated. The deactivated pipelines would be abandoned in place and all activities utilizing the existing pipelines would cease.

Project construction will comply with the City of Fairfield’s construction noise regulation. Chapter 25, Article X of the City of Fairfield Code of Ordinances prohibits construction activities, including the operation of tools or equipment used in construction, grading or demolitions works, between the hours of 10 PM and 7 AM, except by written permission of the Director of Public Works.

**Circulation and Parking:** Primary and secondary access would be provided to the project site. The primary access road would begin at the parcel’s intersection with Ritchie Road running northeast along the northern boundary of the property and the second access location would be provided at the northeast corner of the project site from Grobric Court. The project would not create or provide any parking spaces.

---

<sup>6</sup> Code of Federal Regulations (CFR), Title 49, Parts 192.727; California Department of Transportation Encroachment Permit Manual, Section 600; and PG&E’s Utility Work Procedures (Deactivation and/or Retirement of Underground Gas Facilities).

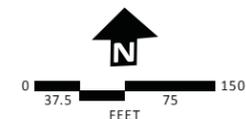


**Legend**

**Areas of Disturbance**

- Construction Impact Areas (Temporary Construction Easements)
- Soil Disturbance Area

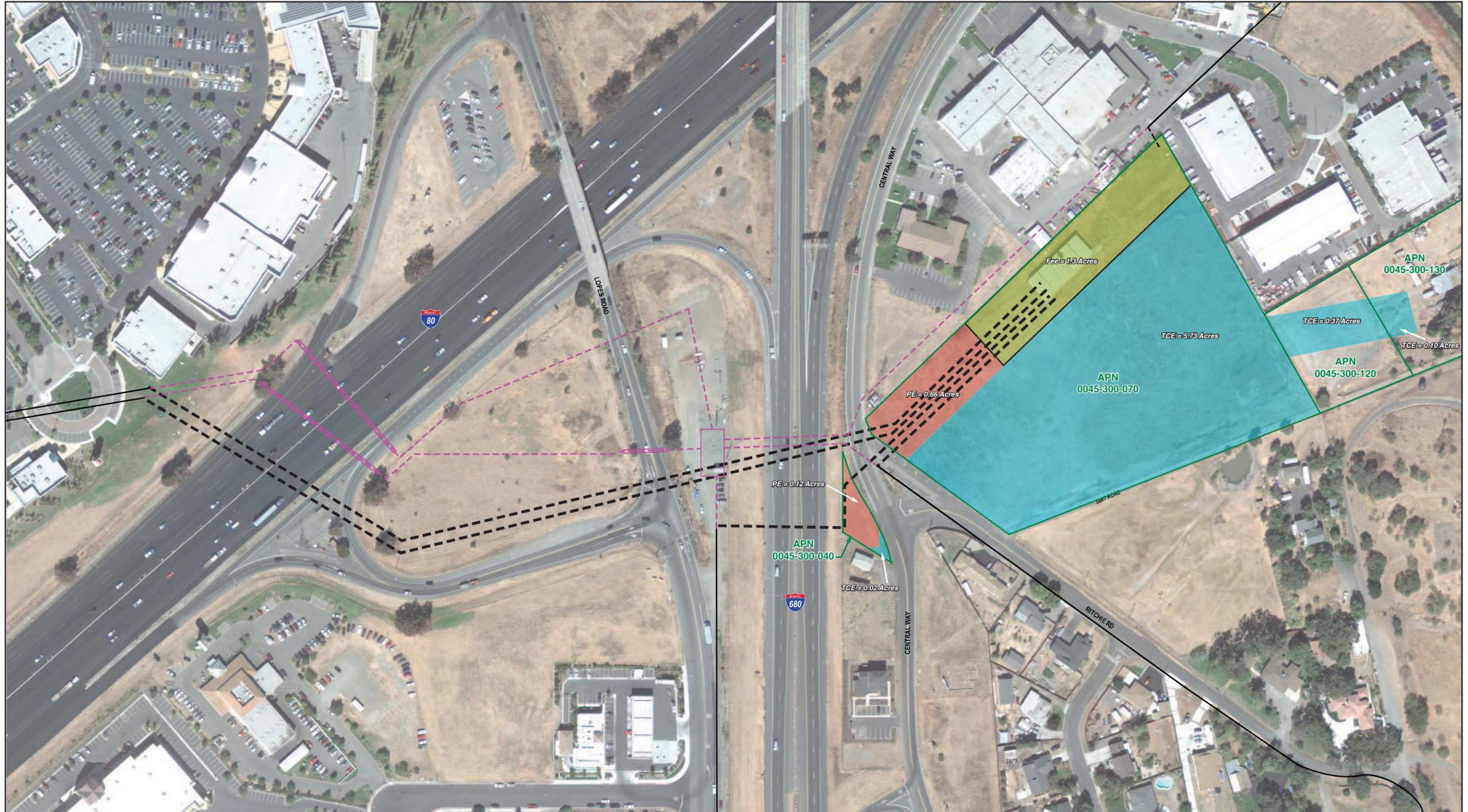
- Project Pipeline
- Existing Pipeline
- Existing Pipeline (To be abandoned)



\* Areas of disturbance include permanent and temporary disturbances.

Area of Disturbance **Figure**

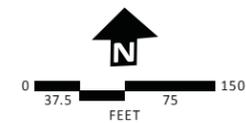
Figure 5: Areas of Disturbances (back)



\* Areas of disturbance include permanent and temporary disturbances.

**Legend**

- Permanent Easement (PE)
- Project Valve Lot Location (Fee Acquisition)
- Temporary Construction Easement (TCE)
- APN Parcel
- Project Pipeline
- Project Permanent Easement Areas
- Existing Pipeline
- Existing Pipeline (To be abandoned)



**Acquisition and Easement Locations**

Figure

Figure 6: Acquisition and Easement Locations (back)

**Grading and Drainage Plan:** Grading activities on the project site would be designed to maintain the existing topography onsite; stormwater is currently directed to an existing storm drain inlet located approximately 200 feet from the northeast corner of the project site. A grading plan would be completed for the project site and would be designed to maintain this existing stormwater flow pattern. Stormwater calculations will also be included in the grading plan.

**Utilities and Site Improvements:** The project site would not require utility services such as water, wastewater, or solid waste disposal due to the nature of the project; there would be no structures on the project site that would sustain a population.

**Project Operation:** Similar maintenance and operation activities that have occurred on the existing valve lot site would occur at the project site. Workers would perform yearly maintenance operations and in-line inspections once every seven to ten years. Maintenance operations would require a work truck and two to four personnel. In-line inspection activities, such as pig runs<sup>7</sup>, typically would require one side boom<sup>8</sup>, one water truck, approximately 10 to 15 crew trucks, one backhoe, and approximately 20 personnel. In-line inspections would require the use of hazardous materials such as aerosol cleaners and may also generate hazardous pipeline liquids. If necessary, workers may be onsite several times a year for operational purposes other than the maintenance and in-line inspection activities described above. Prior to any maintenance operations or in-line inspection activities, PG&E would determine clearance requirements associated with the new valve lot and transmission lines. The clearance will determine the safety protocols required during PG&E operations for maintenance or inspection activities.

The project site would allow for better emergency vehicle access to the valve lot than the existing valve lot location. The existing valve lot is located within the Caltrans's right-of-way along the I-80 eastbound off-ramp. The project site was selected in part because it would enable better emergency vehicle access.

**Construction Schedule:** Construction of the project is planned to begin early May 2012 and would be completed over approximately six months. During construction, workers are anticipated to be on site five to seven times a week, as schedule requires. The project is expected to become fully operational by December 2012.

**Requested Actions:** Table 3 lists the discretionary and ministerial approvals requested for the project.

---

<sup>7</sup> Pig runs are part of in-line inspection activities when a pig is sent down a pig launcher.

<sup>8</sup> A side boom is a type of construction crane used to lay piping.

Table 3: Project Approvals

Agency/Provider	Permit/Approval
City of Fairfield	Grading Permit
California Department of Fish and Game	Section 1602 Streambed Alteration Agreement*
California Regional Water Quality Control Board	National Pollutant Discharge Elimination System (NPDES) General Construction Permit Section 401 Certification*
U.S. Army Corp of Engineers	Section 404 Permit*

Source: Circlepoint, 2011.

Notes: \* Needed only if it is determined that project would impact jurisdictional wetlands.

## Environmental Factors Potentially Affected

This initial study includes an evaluation of impacts based on the CEQA Guidelines Appendix G environmental Checklist. Each checklist item is explained in the discussion following the checklist and, if necessary, mitigation measures are provided to reduce impacts to a less-than-significant level. In accordance with CEQA, all answers take into account the whole of the action, including on- and off-site effects, direct and indirect effects, and effects from both construction and operation of any new development.

Each checklist criterion is marked to identify whether there is an environmental impact.

- *No Impact* indicates that there is no impact.
- *Less-than-Significant Impact* means that while there is some impact, the impact is below the threshold of significance adopted by STA, or that mitigation measures required by law will reduce these impacts to a less-than-significant level.
- *Significant Unless Mitigation Incorporated* indicates that a potentially significant or significant impact has been identified in the course of this analysis and mitigation measures have been provided in this initial study to reduce such an impact to a less-than-significant level.
- *Significant Impact* indicates that the project would have an impact on the environment, and that appropriate and feasible mitigation measure should be identified to reduce the impact to a less-than-significant level. If a significant impact cannot be reduced to less-than-significant then an Environmental Impact Report (EIR) is required.
- *Cumulative Impacts* are discussed in **Section XVIII, Mandatory Findings** of this initial study. The project is considered in combination with the projected buildout of the County's General Plan in combination with the planned interchange project to determine if the cumulative impact is significant or less than significant. If a significant cumulative impact is identified, the project's contribution to the significant *cumulative impact* is considered.

The environmental factors checked below would be affected by the project, involving at least one impact that is a significant impact as indicated by the checklist on the following pages. Mitigation measures have been provided for each significant impact, reducing all to a less-than-significant level.

- |   |  |
|---|--|
| <input type="checkbox"/> Aesthetics                             | <input type="checkbox"/> Agriculture and Forestry Resources      |
| <input type="checkbox"/> Air Quality                            | <input checked="" type="checkbox"/> Biological Resources         |
| <input checked="" type="checkbox"/> Cultural Resources          | <input type="checkbox"/> Geology & Soils                         |
| <input type="checkbox"/> Greenhouse Gas Emissions               | <input type="checkbox"/> Hazards & Hazardous Materials           |
| <input checked="" type="checkbox"/> Hydrology & Water Quality   | <input type="checkbox"/> Land Use & Planning                     |
| <input type="checkbox"/> Mineral Resources                      | <input type="checkbox"/> Noise                                   |
| <input type="checkbox"/> Population & Housing                   | <input type="checkbox"/> Public Services                         |
| <input type="checkbox"/> Recreation                             | <input checked="" type="checkbox"/> Transportation & Circulation |
| <input checked="" type="checkbox"/> Utilities & Service Systems | <input type="checkbox"/> Mandatory Findings of Significance      |

## Determination

On the basis of this initial evaluation:

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

I find that the proposed project COULD have a significant effect on the environment, but mitigations identified in this Initial Study will reduce these impacts to a less than significant level, and a MITIGATED NEGATIVE DECLARATION will be prepared.

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

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

I find that although the proposed project could have a significant effect on the environment, there WILL NOT be a significant effect in this case because all potentially significant effects (a) have been analyzed adequately in an earlier EIR pursuant to applicable standards and (b) have been avoided or mitigated pursuant to that earlier EIR, including revisions or mitigation measures that are imposed upon the proposed project.

Janet Adams

Janet Adams  
Deputy Executive Director/Director of Projects

9/19/11

Date

*This page intentionally left blank.*

# ENVIRONMENTAL IMPACT CHECKLIST

## I. Aesthetics

	Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
--	--------------------	--	------------------------------	-----------

**Would the project:**

a) Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Substantially damage scenic resources, including but not limited to: trees, rock outcroppings, and historic buildings within a state scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

There are no scenic vistas designated by Solano County within the project area. The City of Fairfield Scenic Vistas and Roadways Plan identifies several scenic vistas in the vicinity of the project area. The Suisun Marsh Scenic Vista Area is located approximately 0.5 mile south of the project site and the Nelson Hill Scenic Vista Area is located approximately 1 mile east of the project site. Both the Green Valley Scenic Vista Area and the Suisun Valley Scenic Vista Area are located across I-80 to the north of the project site.

There are no official state scenic highways designated by the California Department of Transportation (Department) in the project area.<sup>9</sup> However, Solano County and the City of Fairfield designate portions of I-680 and I-80 in the project vicinity as local scenic roadways. Both I-680 and I-80 are located approximately 0.15 mile to the west and north of the project site, respectively. The portions of I-680 and I-80 within Solano County are county-designated scenic roadways. Similarly, the portion of I-680 within the City of Fairfield

<sup>9</sup> California Department of Transportation (Caltrans). California Scenic Highway Mapping System. <[http://www.dot.ca.gov/hq/LandArch/scenic\\_highways/index.htm](http://www.dot.ca.gov/hq/LandArch/scenic_highways/index.htm)>. Accessed May 24, 2011.

urban limit line<sup>10</sup> is a city-designated scenic roadway. Cordelia Road, located approximately 0.4 mile south of the project site, is also a city-designated scenic roadway.

The existing visual character of the project area is urbanized with man-made structures. Properties surrounding the project site are occupied by multi-story industrial buildings and associated asphalt-paved surface parking and landscaped areas. The project site is currently vacant; structures associated with the previous use as a middle school facility have been removed. Areas to the south of the project site remain vacant.

Existing lighting in the vicinity of the project site includes natural sources, interior and exterior lighting associated with adjacent commercial and industrial development, and vehicle traffic along the freeways and local roadways. There is no source of lighting on the project site.

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

***Less-than-Significant Impact.*** There are several scenic vistas as designated by the City within the vicinity of the project area, including the Suisun Marsh Scenic Vista Area, the Nelson Hill Scenic Vista Area, the Green Valley Scenic Vista Area, and the Suisun Valley Scenic Vista Area. In the project area, views to the scenic vistas are from public roadways near the project site, from Central Way and Ritchie Road. Views to the north from Central Way and Ritchie Road are dominated by I-680, I-80, the interchange, and highway road signs. Facilities associated with the highways limit these northerly views of the Green Valley Scenic Vista Area and the Suisun Valley Scenic Vista Area. Views to the east from Central Way and Ritchie Road include industrial and commercial buildings, overhead power lines, and transmission towers. These obstructions limit views of the Nelson Hill Scenic Vista Area to the east. The Suisun Marsh Scenic Vista Area is not visible from Central Way and Ritchie Road as the project area is generally flat and would not provide views to the flat wetland areas to the south. Although the project site is in the vicinity of several scenic vistas, views from the public roadways in the project area are dominated by the adjacent freeways and existing development.

Implementation of the project would not adversely affect views of the scenic vistas from the viewpoints along the public roadways, specifically those from Central Way and Ritchie Road. The project would not create structures that would obstruct or block views to scenic vistas in the project area. Project features including installation of the pipelines, associated valve/hand wheels, and pipeline maintenance equipment, would not exceed 5 feet in height. Given the limited height of the proposed structures on the project site, implementation of the project would not block views of scenic vistas from public roadways. This impact is considered less-than-significant. No mitigation is required.

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

***No Impact.*** Two non-native trees are located in Caltrans' right-of-way on an island between I-680 and I-80, to the west of Lopes Road. These trees would be removed as part of off-site project construction. These trees are highway landscaping and not considered scenic resources.

---

<sup>10</sup> Urban limit lines are growth boundaries drawn around a city, county, or metropolitan area outside of which little or no development can occur.

Although portions of I-680 and I-80 in the project vicinity are designated by the County and City as scenic roadways, they are not officially designated state scenic highways. There are no officially designated state scenic highways in the City of Fairfield. Thus, the project would not damage scenic resources within a state scenic highway. No mitigation is required.

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

**Less-than-Significant Impact.** The surrounding area is developed with commercial and industrial business uses. A majority of the project site is vacant; an abandoned portable classroom unit is located on the western portion of the project site.

As shown in **Figure 3**, the majority of project features would be installed below ground with the exception of aboveground pipeline extensions with valve/hand wheels to regulate gas flow. The final height of the aboveground equipment would be at ground level. Additionally, a pig launcher would be installed at the project site. Pig launchers are pipeline maintenance equipment used to clean the pipeline or assess corrosion along a pipeline. Piping associated with the pig launcher would be approximately 4 to 5 feet above ground. These structures would result in minimal permanent changes to the existing visual character of the area, and would not substantially visually degrade the project site and its surrounding. Therefore, the project would have a less-than-significant impact to the quality of visual character in the area. No mitigation is required.

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

**No Impact.** The project would not introduce new substantial sources of nighttime lighting or daytime glare. Proposed structures on the project site, including pipeline extensions, valve/hand wheels, and pipeline maintenance equipment, would be matte grey in color and would not surpass 5 feet in height. Daytime glare would not be produced from these matte structures. The project would not install permanent outdoor lighting on the project site. Lighting on the project site may be used particularly during pipeline tie-in activities, but would be temporary and limited to construction. Thus, project impacts related to light or glare would not have an impact. No mitigation is required.

## II. Agriculture and Forest Resources

	Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
<b>Would the project:</b>				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland) to non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with existing zoning for agricultural use, or with a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Result in the loss of forest land or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The California Department of Conservation administers the Farmland Mapping and Monitoring Program (FMMP), California's statewide agricultural land inventory. Three classifications of farmland, including Prime Farmland, Farmlands of Statewide Importance, and Unique Farmland, are mapped and considered valuable. Conversion of farmlands within these categories to non-agricultural uses is typically considered significant and unavoidable impact to agricultural resources. Other categories of land that are mapped include Grazing Lands, Urban and Built-Up Land, and Other Land.

There are no farmlands in the project area. The Department of Conservation's Important Farmland Inventory map for Solano County identifies the project area as Urban and Built-Up Land.<sup>11</sup> The project area is not under a Williamson Act contract or zoned for agricultural use.

In regards to forestry resources, the City of Fairfield Zoning Map does not show any designated forest lands or timberlands in the City.<sup>12</sup> The project area is developed and is not zoned for forest or timberland uses.

Given the above, the project would not impact agriculture and forest resources. No mitigation is required.

---

<sup>11</sup> California Department of Conservation. Farmland Mapping and Monitoring Program, Solano County Important Farmlands, 2008. <<ftp://ftp.consrv.ca.gov/pub/dlrp/FMMP/pdf/2008/sol08.pdf>>. Accessed May 3, 2011.

<sup>12</sup> City of Fairfield. Zoning Map. <<http://www.fairfield.ca.gov/gov/depts/cd/planning/zoning/map.asp>>. Accessed May 3, 2011.

### III. Air Quality

	Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
--	--------------------	--	------------------------------	-----------

**Would the project:**

a) Conflict with or obstruct implementation of the applicable Air Quality Attainment Plan or Congestion Management Plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Create objectionable odors affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

The project site is located within the San Francisco Air Basin (Basin), which is regulated by the Bay Area Air Quality Management District (BAAQMD). Pursuant to the federal Clean Air Act, the BAAQMD is required to reduce emissions of criteria pollutants for which the Basin is in non-attainment. The Basin is considered a non-attainment area for ground-level ozone (O<sub>3</sub>) and fine particulate matter (PM<sub>2.5</sub>) under both the Federal Clean Air Act (federal CAA) and the California Clean Air Act (CCAA).

The Basin is also considered non-attainment for respirable particulate matter (PM<sub>10</sub>) under the CCAA. The Basin is in attainment for carbon monoxide (CO) under both state and federal ambient air quality standards.

**Methodology**

**Appendix A** includes the URBEMIS 2007 model calculations for project-related emissions.

The BAAQMD CEQA guidelines do not contain specific screening criteria for utility valve lots or similar public/institutional uses. Air quality emissions were estimated for the project using the URBEMIS2007 model (Version 9.2.4) to quantify the construction-period and operational-period air quality emissions. The URBEMIS model calculates standard transportation-related emissions. Although the URBEMIS model does not include a selection to evaluate utility valve lot-type of land use, project emissions were estimated using a blank land use selection and filling out information for use as a public facility.

Project specific construction-related information entered into URBEMIS include the total acreage of land to be disturbed by the project (surface disturbances), the number of vehicle trips expected with project construction, construction-phasing and associated construction equipment to be used during each construction phase. The information entered into URBEMIS is summarized below:

- Approximately 15.5 acres of surface disturbances would be associated with the project during construction.
- Approximately 30 truck trips would occur over the entire 6 month construction period. Thus, the vehicle trip rate associated with the project during construction would be approximately 0.16 vehicle truck trips per day.
- The project’s construction period, which is planned to begin in May 2012, would last approximately 6 months. Construction activities would be limited to grading and excavating for pipeline installation. Activities related to removing the portable classroom unit on the western portion of the project site would occur prior to construction. The project’s construction period would be dedicated to grading and excavating activities to install the project pipelines and aboveground pipeline extensions with valve/hand wheels on the project site.
- Construction equipment would be used during the grading and excavating activities to install the project pipelines and aboveground pipeline extension with valve/hand wheel on the project site would include 1 water truck, 1 dump truck, 3 support trucks, 3 pickups, 1 boom truck, 4 welding trucks with gas or diesel driven welders, 1 vacuum truck, 1 X-ray truck, 1 off-road crane, 3 side booms, 1 cat excavator, 1 loader/backhoe, 1 air compressor, and the occasional truck for pipeline deliveries. Each construction equipment would be used a maximum of 4.5 hours per day for the duration of the construction period.

With this information, URBEMIS2007 calculated the average daily construction emissions estimated for the project. **Table 4** shows the project’s estimated construction emissions compared to the BAAQMD CEQA thresholds

Table 4: Average Daily Project Construction Emissions

	Average Daily Construction Emissions (lb/day)			
	ROG	NOx	PM <sub>10</sub>	PM <sub>2.5</sub>
BAAQMD CEQA Thresholds	54	54	82 (exhaust)	82 (exhaust)
Project Construction Emissions	5.73	49.31	2.11	0.85

Source: Circlepoint, 2011.

**a) Conflict with or obstruct implementation of the applicable Air Quality Attainment Plan or Congestion Management Plan?**

**No Impact.** The Bay Area 2010 Clean Air Plan (CAP) was adopted by BAAQMD in September 2010, and is the current regional Clean Air Plan under the federal CAA.

To address the non-attainment status for ozone (O<sub>3</sub>) for the region, the CAP explains how the Basin will achieve compliance with the California Ambient Air Quality Standards (CAAQS) for one-hour O<sub>3</sub> and eight-

hour O<sub>3</sub>, and also explains how the region will reduce transport of O<sub>3</sub> and ozone precursors, such as volatile organic compounds (VOCs) and nitrogen oxides (NO<sub>x</sub>), to neighboring air basins. To achieve these state and federal standards, the CAP contains mobile and stationary source controls, transportation control measures, land use and local impact measures, and energy and climate measures to be implemented throughout the region.

The CAP is based on regional population, housing, and employment projections through 2020 compiled by the Association of Bay Area Governments (ABAG). As such, a project would conflict with or obstruct implementation of the regional air quality plan if it would be inconsistent with the regional growth assumptions, in terms of population, employment, or regional growth in Vehicle Miles Traveled (VMT).

The project would not result in any increase in population or employment in the region since the project does not include any housing or commercial development that could increase local area or regional growth or provide a service that would induce growth. The project is simply moving an existing gas valve lot to another location.

The temporary activities associated with the project would not conflict with or obstruct implementation of the applicable air quality plan (i.e., the BAAQMD 2010 CAP). No mitigation is required.

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

***Less-than-Significant Impact.*** The project would not introduce a new source of air pollutant emissions. In general, long-term air pollutant emissions related to the project would stem from the operational activities on the valve lot. Operational activities associated with the project include maintenance activities, which would occur once a year, and in-line inspections of the pipelines, which would occur once every seven to ten years. These operational activities already occur on the existing valve lot and would be transferred to the new valve lot as part of relocation. Given the limited amount of maintenance activities expected to occur on the project site during operation, emissions associated with these maintenance activities are negligible. Operation of the utility valve lot would not contribute substantially to an existing or projected air quality violation.

The project would result in daily emissions during the six-month construction period. Construction activities associated with the project would result in emissions of criteria air pollutants from the use of construction equipment, such as construction trucks, cranes, side booms, excavators, loader/backhoes, and air compressors. As shown in **Table 3** above, the project would not exceed the thresholds for construction-related air quality emissions for any criteria pollutants. Further, the project would incorporate basic construction mitigation measures as recommended by BAAQMD listed below:

- All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day.
- All haul trucks transporting soil, sand, or other loose material off-site shall be covered.
- All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.
- All vehicle speeds on unpaved roads shall be limited to 15 mph.
- All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible. Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used.

- Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes (as required by the California airborne toxics control measure Title 13, Section 2485 of California Code of Regulations). Clear signage shall be provided for construction workers at all access points.
- All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified visible emissions evaluator.
- Post a publicly visible sign with the telephone number and person to contact at the lead agency regarding dust complaints. This person shall respond and take corrective action within 48 hours. BAAQMD's phone number shall also be visible to ensure compliance with applicable regulations.

Given that the project's construction emissions would not exceed BAAQMD thresholds and that the project would incorporate the best management practices identified above to reduce construction emissions, the project would not contribute substantially to an existing or projected air quality violation. This impact is less than significant. No mitigation is required.

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

***Less-than-Significant Impact.*** Operational emissions from the project would stem from maintenance activities, which would occur once a year, and in-line inspections of the pipelines, which would occur once every seven to ten years. Due to limited project operations, the project's operational air quality emissions would be negligible. As discussed above, the project would not exceed the threshold for construction emissions for any criteria pollutants. Thus, the project would not contribute to the exceedance of any criteria air pollutant violation established by the BAAQMD, the project would not result in a cumulatively considerable increase in a criteria pollutant. No mitigation is required.

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

***Less-than-Significant Impact.*** Operation of the project is not expected to cause any localized emissions that could expose sensitive receptors to unhealthy long-term air pollutant levels. There are no sensitive receptors (e.g., residential developments, hospitals, daycare facilities) within the vicinity of the project construction area; the closest single-family residential neighborhood is located approximately 0.16 mile south of the project site. Thus, impacts are less than significant. No mitigation is required.

**e) Create objectionable odors affecting a substantial number of people?**

***Less-than-Significant Impact.*** According to the BAAQMD CEQA Guidelines, objectionable odors are typically emitted by industrial and commercial operations such as wastewater treatment plants, sanitary landfills, petroleum refineries, chemical factories, and paint and coating operations. Given the nature of the project, operational impacts would not generate objectionable odors.

During construction and excavation, diesel powered vehicles and equipment used on the site could create localized odors. These odors would be temporary and would dissipate in the outdoor construction environment. Therefore, the project would not create objectionable odors and impacts would be less than significant. No mitigation is required.

## IV. Biological Resources

	Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
--	--------------------	--	------------------------------	-----------

**Would the project:**

a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as candidate, sensitive, or special status species in local or regional plans, policies, regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Have a substantial adverse impact on federally protected wetlands as defined by Section 404 of the Clean Water Act (including but not limited to: marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with an established resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Conservation Community Plan, or other approved local, Regional, or state habitat Conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

A Biological Evaluation Report for the project was prepared by Pacific Biology. Josh Philips, Principal Biologist of Pacific Biology, conducted a reconnaissance-level field survey on June 2, 2011 and August 23, 2011 to characterize the biological resources on and near the project site and to evaluate the potential of special-status species occurring based on the suitability of habitat, known range and life history requirements, and other factors. Due to access restrictions, portions of the project site could only be viewed from roadside areas. These areas included the valve lot property, portions of the pipeline alignment area bordering I-680 to the west (currently being used as a construction staging area), and portions of the area west of Lopes Road bounded by highway on-ramps. These areas were viewed with binoculars from publically accessible locations.

Information from this section is drawn from the Biological Evaluation Report, which is included in its entirety as **Appendix B** to this initial study. The identification of jurisdictional resources (wetland, creeks, drainages, etc.) in the project area and the potential for special-status plant and wildlife species to occur in areas impacted by the project are discussed below.

### ***Jurisdictional Resources***

Wetlands, creeks, streams, and permanent and intermittent drainages are subject to the jurisdiction of the U.S. Army Corps of Engineers (ACOE) under Section 404 of the Federal Clean Water Act (CWA). The California Department of Fish and Game (CDFG) also generally has jurisdiction over these resources pursuant to Sections 1602-1603 of the CDFG Code. Creeks and wetlands are also subject to regulation of the Regional Water Quality Control Board (RWQCB) under both the federal CWA and the State of California's Porter-Cologne Water Quality Control Act.

Rabbit's-foot grass, curly dock, and areas of salt grass were observed on portions of the 7.69 acre school district parcel including the 1.3 acre portion of the site for the relocated valve lot. These plant species are generally associated with wetlands, but can be found in non-wetland areas as well. Italian ryegrass, bristly ox-tongue, and bird's-foot trefoil were also present on the 7.69 acre parcel and 1.3 acre portion of the site for the relocated valve lot. These species are as equally likely to occur in wetlands as in non-wetland areas. Given the occurrence of plant species known to occur within wetlands, a formal jurisdictional wetland delineation should be prepared to determine the if wetlands are present and their extent within the 7.69 acre parcel and 1.3 acre portion of the site for the valve lot relocation. Such a delineation would also determine if wetlands present on the site would also be classified as jurisdictional and therefore require a permit from the US Army Corps of Engineers if they would be impacted (filled or indirectly affected) by the project.<sup>13</sup> The project site does not appear to have a direct connection with a Waters of the U.S., and therefore, may be considered "isolated" and not jurisdictional. Additionally, both the 7.69 acre parcel and 1.3 acre portion of the site for the valve lot relocation are in a disturbed condition. The 7.69 acre parcel formally contained school buildings which were demolished leaving the site vacant with gravel areas. It is possible that the wetland-associated plant species occurring on the project site could be the result of an

---

<sup>13</sup> Due to access restrictions, it was not possible to enter the project site. Site access is required to conduct a formal wetland delineation.

artificial hardpan<sup>14</sup> created by gravel left on the site and/or depressions from building foundations. Alternatively, the presence of wetland-associated plants could be due to natural conditions such as a high water table or other factors. Regardless, given the presence of wetland-associated plants, a formal jurisdictional delineation should be conducted on the valve lot property and submitted to the ACOE for verification of any identified waters of the U.S. In the absence of these steps, it is assumed that the project would result in the fill of potentially jurisdictional wetlands on the valve lot property.

The jurisdictional delineation prepared for the I-80/I-680/SR 12 Interchange project identified a seasonal wetland (W-61b) in the western-most portion of new pipelines L-210A and L-210B (see **Figure 7**). This jurisdictional seasonal wetland is located in the northern roadside of I-80, at the end of Business Center Drive. There is also a roadside drainage ditch (OW-61a), classified as a jurisdictional “other waters,” between the seasonal wetland and I-80. Both of these features, the seasonal wetland and the roadside drainage ditch, would be crossed by the project pipeline alignment L-210A and L-210B and would be temporarily disturbed during construction.<sup>15</sup>

A roadside drainage ditch (OW-45a), located parallel to and east of Lopes Road, was determined to be a jurisdictional “other waters.” This feature would cross the project pipeline alignment and would be temporarily disturbed during construction.

### ***Special-Status Plants Species***

Special-status plants include those species that are state or federally listed as Rare, Threatened or Endangered; federal candidates for listing; proposed for state or federal listing; or included on Lists 1, 2, 3, or 4 of the California Native Plant Society’s Inventory of Rare and Endangered Plants of California (CNPS Inventory).

The historic use of the property and its current vegetative composition make the potential occurrence of special-status plant species highly unlikely. More specifically, the property was previously used as a middle school facility, appears to have been graded, and currently contains a dense growth of non-native grasses and ruderal plant species. Additionally, there are large areas of gravel and the soils appear to be heavily disturbed. These conditions are not conducive to rare plants and are not associated with local occurrences of rare plant species. Special-status plants are not expected to occur on the location of the valve lot.

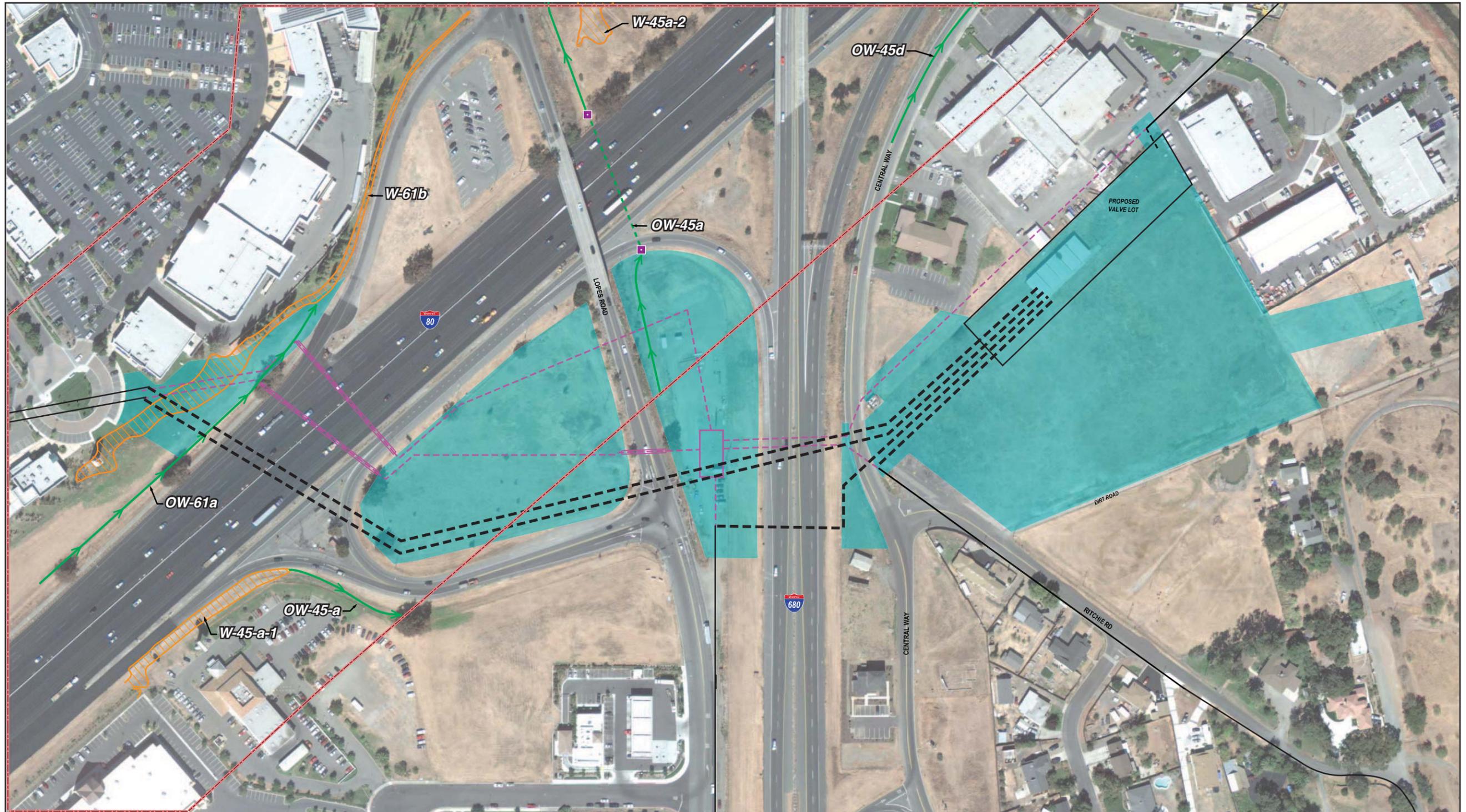
### ***Special-Status Wildlife Species***

Special-status wildlife species include those that are state or federally listed as Threatened or Endangered, proposed for listing as Threatened or Endangered, designated as state or federal candidates for listing, a federal Bird of Conservation Concern, a state Species of Special Concern, a state Fully Protected Animal, or included on the CDFG Special Animals List.

---

<sup>14</sup> “Hardpan” refers to the dense layer of soil usually found below the uppermost topsoil layer that is largely impervious to water.

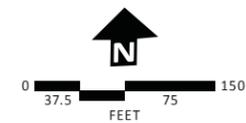
<sup>15</sup> Both of these water features (W-61b and OW-61a) would be permanently impacted (filled) by the I-80/I-680/SR12 Interchange project.



**Legend**

- |   |                                     |   |   |
|---|-------------------------------------|---|---|
|  | Areas of Disturbance                |  | Seasonal Wetland                        |
|  | Proposed Pipeline                   |  | Culvert                                 |
|  | Existing Pipeline                   |  | Seasonal Drainage in Culvert            |
|  | Existing Pipeline (To be abandoned) |  | Area Delineated for Interchange Project |

\* Areas of disturbance include permanent and temporary disturbances.



**Wetlands and Waters of the United States in the Project Vicinity**

Figure

Figure 7: Wetlands and Waters of the United States in the Project Vicinity (back)

There are 32 locally occurring special-status wildlife species identified for the project region. Table 1 of **Appendix B** identifies these species along with their regulatory status, habitat requirements, and an evaluation of their potential occurrence on the site. Many of the species are not expected to occur on areas impacted by the project due to the lack of suitable habitat. Of the 32 special-status wildlife species known to occur in the project region, 8 special-status wildlife species have some potential to occur in areas affected by the project. These include: the California red-legged frog, Swainson's hawk, tricolored blackbird, white-tailed kite, loggerhead shrike, and several special-status bat species (Pallid bat, Fringed myotis, and the Long-legged myotis). **Appendix B** discusses in detail the specific information regarding the on-site potential occurrences for each species. The discussion below summarizes where each species would potentially be located in areas impacted by the project.

California red-legged frog (*Rana draytonii*) is a federally threatened species and a California Species of Special Concern. While some wetland vegetation is present on the 7.69 acre parcel and 1.3 acre portion for the valve lot relocation, there are no ponds or other aquatic features present. The project site is not located between areas of suitable California red-legged frog habitat, and therefore is not part of a potential movement route for the species. The potential occurrence of California red-legged frog in the off-site construction areas would be limited to Wetland W-61b and Roadside Drainage OW-61a.<sup>16</sup> If the species was to occur in these areas, potential uses would be limited to dispersal and refuge habitat due to the absence of long-lasting standing water. Both of these areas border I-80 and a shopping center and provide low quality potential habitat for California red-legged frog. Additionally, individual frogs potentially moving between Mangels Pond and Green Valley Creek (via W-61b or OW-61a) would need to cross Green Valley Road or cross beneath the road in a culvert, both of which pose an obstacle to dispersal via the project site to and from Green Valley Creek.

The California red-legged frog is not expected to occur in the drainage ditch adjacent to Lopes Road (OW-45a) because the ditch is ephemeral and separated from areas of potentially suitable habitat by heavily traveled roads, highways, and/or culverts. The species is also not expected to occur on the project site because it does not contain any ponds or other areas of long-lasting water and it is separated from Green Valley Creek by industrial development.

Swainson's hawk (*Buteo swainsoni*) is a Federal Bird of Conservation Concern and a California Threatened species. Several moderate-sized trees occur on and near the project site, primarily consisting of eucalyptus and pine trees. The potential for a Swainson's hawk to nest in one of these trees is considered low for the following reasons: (1) these are not the preferred species of nest trees; (2) the trees are not part of a riparian woodland or adjacent to optimal foraging habitat; and (3) the proximity of the trees to I-80 and I-680. However, it is still possible that a Swainson's hawk could nest on or near the project site.

---

<sup>16</sup> Both of these water features (W-61b and OW-61a) would be permanently impacted (filled) by the I-80/I-680/SR12 Interchange Project.

Tricolored blackbird (*Agelaius tricolor*) is a Federal Bird of Conservation Concern and a California Species of Special Concern. Potential nesting habitat for this species is limited to Wetland W-61b. Given the relatively small size of the wetland, the general absence of adjacent foraging habitat, and its roadside location, the potential for tricolored blackbirds to nest at this location is considered low. However, should the species occur, the project installation of the gas pipelines could result in the direct loss or noise-related disturbance of an active nest.

White-tailed kite (*Elanus leucurus*) is a California Fully Protected Species. Potential nesting habitat is present on and near the project site. Any required tree removal could result in the loss of an active white-tailed kite nest. Additionally, loud noise associated with construction activities has the potential to disturb nesting occurring in close proximity to the site and to result in the abandonment of an active nest.

Loggerhead shrike (*Lanius ludovicianus*) is a Federal Bird of Conservation Concern and a California Species of Special Concern. It is possible that this species could nest on or near the project site. Any required tree or shrub removal could result in the loss of an active loggerhead shrike nest. Additionally, loud noise associated with construction activities has the potential to disturb nesting occurring in proximity to the site and to result in the abandonment of an active nest.

Pallid bat (*Antrozous pallidus*) is a California Species of Special Concern; the Fringed myotis (*Myotis thysanodes*) and Long-legged myotis (*Myotis volans*) are listed on the California Special Animals List. These special-status bat species could use the abandoned building on the valve lot property for roosting. The building could be used as a maternity roost during the period of May through August, or as a day-roost by non-breeding bats during this period or other times of the year. As the building is to be removed from the project site, there is potential that an active roost used by special-status bat species could be disturbed.

**a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as candidate, sensitive, or special status species in local or regional plans, policies, regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?**

***Less than Significant with Mitigation Incorporated.*** As discussed above, implementation of the project may impact the California red-legged frog, Swainson's hawk, tricolored blackbird, white-tailed kite, loggerhead shrike, and several special-status bat species (Pallid bat, Fringed myotis, and the Long-legged myotis).

California red-legged frog. The project would temporarily disturb Wetland W-61b and Roadside Drainage OW-61a. However, these areas would be restored following construction activities. Therefore, the project would not result in the permanent loss of habitat potentially used by the California red-legged frog or create a barrier to movement by the species. However, should California red-legged frogs be present at the time of construction, individual frogs could be harmed by construction activities. Any loss or harm to the species caused by the project would be considered a potentially significant impact. Implementation of **Mitigation Measures IV-1a** through **IV-1d** would reduce potential impacts to California red-legged frog to a less-than-significant level.

**Mitigation Measure IV-1a:** A qualified biologist shall conduct a preconstruction clearance survey at Wetland W-61b and Drainage OW-61a for California red-legged frogs immediately preceding the commencement of construction activities. If California red-legged frogs are found, the biologist shall contact the U.S. Fish and Wildlife Service (USFWS) and the project shall be halted until the USFWS provides guidance on how to proceed.

**Mitigation Measure IV-1b:** A California red-legged frog sensitivity training will be conducted for all on-construction personnel working within Wetland W-61b and Drainage OW-61a. Training components will include training on appropriate avoidance methods including species identification and protocols for contacting the biologist and USFWS in the event of a sighting. Handouts will be prepared and provided to all construction personnel including color photographs for species identification, protocols, and contact phone numbers.

The qualified biologist will be onsite during all initial ground disturbance activities within Wetland W-61b and Drainage OW-61a. After initial ground-disturbance activities are complete, the qualified biologist will appoint a member of the construction team to act as the on-site construction monitor and will provide additional training to this person as required. Both the qualified biologist and the appointed construction monitor will have the authority to stop or redirect project activities to ensure protection of resources and compliance with all environmental permits and conditions of the project. If the biologist or construction monitor has requested that work stop because of take of any listed species, the USFWS and the CDFG will be notified within one working day by email or telephone. The biologist and construction monitor will complete a daily log summarizing activities and environmental compliance.

**Mitigation Measure IV-1c:** During project activities, all trash that may attract predators shall be properly contained, removed from the work site and disposed of regularly. Following construction, all trash and construction debris shall be removed from work areas.

**Mitigation Measure IV-1d:** After construction is complete, all temporarily disturbed wetland and drainage areas will be restored to pre-project conditions (also see **Mitigation Measure IV-4b**).

**Significance after Mitigation:** **Mitigation Measures IV-1a** through **IV-1d** would require pre-construction surveys, species sensitivity training for all construction personnel, removal of predators from project site, and restoration of potential wetland and drainage habitat. Impacts to the California red-legged frog would be less than significant following mitigation.

Swainson's hawk. For the reasons also discussed above, while considered unlikely, it is still possible that a Swainson's hawk could nest on or near the project site. Therefore, any required tree removal could result in the loss of an active Swainson's hawk nest. Additionally, loud noise associated with construction activities has the potential to disturb nesting occurring in proximity to the site and to result in the abandonment of an active nest. Project impacts that result in the loss or disturbance of an active Swainson's hawk nest are considered a potentially significant impact. Implementation of **Mitigation Measures IV-2** would reduce potential impacts to Swainson's hawk and other bird species to a less-than-significant level.

**Mitigation Measures IV-2:** If construction activities would commence anytime during the nesting/breeding season of native bird species potentially nesting on the site (typically February through August in the project region), a pre-construction survey for nesting birds should be conducted within one week of the commencement of construction activities.

The survey area shall include the project site and accessible/visible areas within 500 feet of the site. If active nests are found in areas that could be directly affected, or in areas that would be subject to prolonged construction-related noise, a no-disturbance buffer zone should be created around the nest during the breeding season or until a qualified biologist determines that all young have fledged, or that the project activity would not affect the nesting success. The size of the buffer zone and types of

activities restricted within them would take into consideration the CDFG staff report guidance for mitigation of Swainson's hawk impacts and would be confirmed through consultation with the CDFG, taking into account factors such as the following:

- Noise and human disturbance levels at the project site at the time of the survey and the noise and disturbance levels expected during construction activities;
- Distance and amount of vegetation or other screening between areas where construction activities would occur and the nest; and
- Sensitivity of individual nesting species and behaviors of the nesting birds.

**Significance after Mitigation:** Implementation of **Mitigation Measure IV-2**, which requires a construction buffer to be in place or avoiding construction until after the young have fledged, would protect active nests and ensure compliance with state and federal laws protecting active bird's nests. Impacts to the Swainson's hawk and other bird species would be less than significant with mitigation.

Tricolored blackbird. As detailed above, the potential for tricolored blackbirds to nest onsite is considered low. However, should the species occur, installation of the project pipeline alignment could result in the direct loss or noise-related disturbance of an active nest. Project impacts that result in the loss or disturbance of an active tricolored blackbird nest are considered a significant impact. Implementation of **Mitigation Measures IV-2** above would reduce potential impacts to the tricolored blackbird and other bird species to a less-than-significant level.

White-tailed kite. There are potential white-tailed kite nesting habitat present on and near the project site. Construction of the project may result in the potential to disturb nesting due to loud noise or may result in the loss of an active nest due to tree removal. Project impacts that result in the loss or disturbance of an active white-tailed kite nest are considered a potentially significant impact. Implementation of **Mitigation Measures IV-2** above would reduce potential impacts to the white-tailed kite nest and other bird species to a less-than-significant level.

Loggerhead shrike. It is possible that loggerhead shrike could nest on or near the project site. Construction of the project may result in the potential to disturb nesting due to loud noise or may result in the loss of an active nest due to tree removal. Project impacts that result in the loss or disturbance of an active loggerhead shrike nest are considered a significant impact. Implementation of **Mitigation Measures IV-2** above would reduce potential impacts to the loggerhead shrike nest and other bird species to a less-than-significant level.

Special-status bat species. The project would remove an abandoned portable classroom unit residing on the western portion of the project site. Special-status bat species may be using the abandoned building for roosting purposes. There is a potential that an active roost used by the special-status bat species may be disturbed during building removal. Any loss or harm to the roosting special-status bat species caused by the project would be considered a significant impact. Implementation of **Mitigation Measures IV-3** would reduce potential impacts to special-status bat species to a less-than-significant level.

**Mitigation Measure IV-3:** Prior to the removal of the abandoned portable classroom on the project site, a focused survey shall be conducted by a qualified biologist to confirm the presence or absence of an active bat roost. Should an active maternity roost be identified, the roost shall not be disturbed until the roost is vacated and juveniles have fledged, as determined by the biologist. Once all young have fledged, then the structure may be removed. If a roost of non-breeding bats is identified, then the bats may be passively excluded using CDFG-approved methods.

**Significance after Mitigation:** By delaying removal activities until after the special-status bat species have fledged, as stated in **Mitigation Measure IV-3**, impacts to the special-status bat species would be avoided and would be less than significant with mitigation.

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

**No Impact.** Sensitive plant communities are communities that are of limited distribution statewide or within a county or region and are often vulnerable to environmental effects of projects. These communities may or may not contain special-status species or their habitat. The current version of the California Department of Fish and Game's (CDFG) *List of California Terrestrial Natural Communities* indicates which natural communities are of special status given the current state of the California classification. There are no sensitive plant communities on the project site according to the list of natural communities published by the CDFG. No mitigation is required.

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

**Less than Significant with Mitigation Incorporated.** As discussed above, the project pipeline alignments for L-210A and L-210B would temporarily disturb one jurisdictional wetland and two other jurisdictional waters. Due to site access restrictions, a formal jurisdictional wetland delineation would be required to determine the extent of wetlands or other waters of the U.S. on the 7.69 acre parcel and 1.3 acre portion for the relocated valve lot and if identified wetlands are considered to be jurisdictional. The site does not appear to have a direct connection with a Waters of the U.S., and therefore, may be considered "isolated" and not jurisdictional. Although rabbit's-foot grass and curly dock, plant species generally associated with wetlands, were observed on the project site, these species can also be found in non-wetland areas. The project site is in a disturbed condition; it is possible that the wetlands-associated plant species occurring on the project site would be the result of artificial hardpan created by gravel left on the site and or depressions from building foundations. Alternatively, the presence of wetland-associated plants could be due to natural conditions such as a high water table or other factors. Given the presence of wetland-associated plants, and because only the ACOE has the authority to make the determination of if a wetland is jurisdictional for federal Clean Water Act purposes, a formal jurisdictional delineation should be conducted on the project site and submitted to the ACOE for verification. **Mitigation Measure IV-4a** and **IV-4b** would address project impacts to the potential wetland on the project site and the jurisdictional wetland and jurisdictional other waters crossed by the project pipeline alignment.

**Mitigation Measure IV-4a:** Prior to the commencement to construction activities on the project site, a wetland delineation shall be conducted and the results shall be submitted to the ACOE for verification.

If jurisdictional wetlands are present onsite and if these wetlands would be impacted by the project, then a Section 404 permit from the ACOE and a Section 401 Certification from the RWCQB shall be obtained prior to the commencement of constructions activities. All conditions of these permits/certifications shall be implemented. Any unavoidable loss of jurisdictional wetlands shall be compensated through purchasing credits at an ACOE approved wetland mitigation bank within the service area for the project site. Purchase of mitigation bank credits shall achieve a no-net-loss standard.

**Mitigation Measure IV-4b:** Prior to conducting any construction activities within Wetland W-61b and the two drainage ditches (OW-61a and OW-45a), the jurisdictional status of Wetland W-61b and OW-61a should be confirmed, and all required permits and authorizations shall be obtained from the ACOE, RWQCB, and CDFG. STA shall comply with all conditions obtained in those authorizations. Project-related disturbances to these features would be temporary, and following the completion of construction, W-61b, OW-61a, and OW-45a shall be restored to their baseline conditions.

Prior to the temporary disturbance of the wetland and drainage areas, a restoration plan shall be prepared by a qualified biologist. The plan shall describe the plant species in the wetland/drainage disturbance area, including the species present, the relative abundance of these species, and the relative abundance of native and non-native species. This information shall define the pre-disturbance condition to which the disturbed areas shall be restored. The plan shall also detail methods for ensuring that the disturbed areas are restored to a biological condition equivalent to or exceeding their pre-disturbance condition. At a minimum, the plan shall include the following:

1. methods for controlling the spread of invasive plant species into recently disturbed areas;
2. methods for determining if new planting is necessary or if the disturbed habitats will naturally revegetate with the surrounding plant species;
3. a monitoring schedule;
4. planting procedures, if it is determined that the site will not naturally revegetate with appropriate vegetation; and
5. corrective measures to be implemented if restoration efforts are not initially successful, such as the removal of non-native species and the planting of native species.

**Significance after Mitigation:** **Mitigation Measure IV-4a** would require a specialist to confirm the presence or absence of wetlands on the project site. If wetlands are found to be present on the project site, applicable authorizations would be obtained and credits would be purchased at a wetlands mitigation bank as indicated above. **Mitigation Measure IV-4b** would require applicable permits/certifications to be obtained for temporary disturbances to the wetland and drainage ditches along the project pipeline alignment. The areas would be restored to their pre-disturbance condition following construction. Implementation of **Mitigation Measures IV-4a** and **IV-4b** would reduce potential project impacts to jurisdictional wetlands and other waters to a less-than-significant level.

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

**No Impact.** Wildlife corridors are described as pathways or habitat linkages that connect discrete areas of natural open space otherwise separated or fragmented by topography, changes in vegetation, and other natural or manmade obstacles such as urbanization. The project site is located adjacent to I-680, I-80, and other existing development in an urbanized setting. Thus, project implementation would not create a barrier or obstruction to an existing regional wildlife movement. Further, the project pipelines would be located underground, and would also not interfere with wildlife movement. No mitigation is required.

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

**Less-than-Significant Impact.** Installation of the pipelines traversing I-80 and I-680 would require the removal of two eucalyptus trees located within the California Department of Transportation's (Department) right-of-way, on an island between I-680 and I-80 to the west of Lopes Road. The two trees removed during project construction would be replaced and replanted in the general vicinity as agreeable to the Department. Thus, impacts would be considered less than significant. No mitigation is required.

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

**No Impact.** A multi-species habitat conservation plan (HCP) is being prepared for Solano County by the Solano County Water Agency (Agency). The final administrative draft HCP was prepared in May 2009 but has not been formally adopted. The Agency plans to adopt the HCP in the fall of 2012.<sup>17</sup>

The project area would be within the jurisdiction of the Solano County Multispecies HCP if adopted. Relocation of the valve lot and off-site construction activities would not conflict with the HCP as the project is located in a developed and urbanized area. The project area borders the I-80 and I-680 in a highly disturbed area and would not impact the species protected under the HCP. Thus, the project would not impact or conflict with a habitat conservation plan or natural community conservation plan. No mitigation is required.

---

<sup>17</sup> Lee, Chris, Supervising Environmental Scientist, Solano County Water Agency. Personal communication, May 3, 2011.

## V. Cultural Resources

	Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
--	--------------------	--	------------------------------	-----------

**Would the project:**

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

A records search was prepared by the California Historical Resources Information System (CHRIS) on June 7, 2011, for the project site. The report is included in its entirety as **Appendix C** to this initial study.

### **Historical Period Resources**

Review of historical literature and maps indicate a high potential for identifying unrecorded historical period resources in the project area. A 1951 U.S. Geological Survey topographic map of the Cordelia quadrangle depicts one building, the Green Valley Middle School, and a transmission line located on the project site. These two unrecorded building/structures would meet the California Office of Historic Preservation's minimum age standard of 45 years or older to be of historical value. The Village of Cordelia Historic District is located south of the project area. The Village was determined eligible for the National Register of Historical Places (NRHP) in 1989, and several buildings have been designated eligible for NRHP designation. The closest NRHP eligible structure to the project site is Erik Erikson House, located approximately 0.1 mile south of the project site. There are no officially designated historic structures located in the project vicinity.

### **Native American Cultural Resources**

Several Native American resources have been discovered in close vicinity to the project area. Native American resources in Solano County have been found on ridges, mid-slope benches, valleys, and near intermittent and perennial watercourses. The project site is located on an alluvial valley adjacent to a hill on the outskirts of a marshland and is in close proximity to the Green Valley Creek. Given this, the project site is located within an area of high sensitivity for identifying archeological resources, included unrecorded Native American resources.

Per the records search, there are no known recorded Native American resources in or adjacent to the project area. The project site is located in an urbanized area and has already been disturbed previously for use as a school facility.

### ***Paleontological Resources***

No paleontological resources, sites, or unique geological features have been recorded in or adjacent to the project site. A paleontological resources search performed using the University of California Museum of Paleontology's (UCMP) Miocene Mammal Mapping Project (MioMap) indicated no previous finds of paleontological resources on or in the immediate vicinity of the project sites. According to the MioMap database, the closest paleontological find is located approximately 14 miles southeast of the project site in the community of Clyde.<sup>18</sup>

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

**No Impact.** The records search identified two structures on the project site that would meet the minimum age requirement for eligibility as a historical resource. The project area was included in the areas surveyed for the Historical Resources Evaluation Report (HRER) prepared for the Interstate 80/Interstate 680/State Route 12 Interchange project. The HRER documents all potential historical resources within the area surveyed. Both structures were not identified as a historical resource or eligible historical resource in the HRER. Based on this information, the two structures, the transmission line and a building associated with the Green Valley Middle School, are not considered historical resources or potential historical resources and no impacts to historical resources would occur by the project. No mitigation is necessary.

#### **b) Cause a substantial adverse change in the significance of an archaeological resource, pursuant to Section 15064.5?**

**Less than Significant with Mitigation Incorporated.** Although the records search identified no known archeological resources in the project area, project construction may potentially uncover unknown or unrecorded archeological resources. Soil disturbances during project construction could damage or destroy archeological artifacts without the incorporation of mitigation measures. This is considered a potentially significant impact. **Mitigation Measure V-1** would address the impacts related to the potential discovery of archeological resources and reduce impacts to a less-than-significant level.

**Mitigation Measure V-1:** In the event that buried archaeological resources are encountered, STA shall ensure that construction, excavation, and/or grading activities within 100 feet of the find are temporarily halted until a qualified archaeologist, hired by STA, can assess the significance of the find and provide proper management recommendations to be incorporated into the project. Prehistoric cultural materials include, but are not limited to, shell midden deposits, hearth remains, stone and/or shell artifacts, and/or burials. Historic materials, including but not limited to, whole or fragmentary ceramic, glass or metal objects, wood, nails, brick, or other materials may occur on the project site in deposits such as old privies or dumps.

---

<sup>18</sup> University of California Museum of Paleontology. Miocene Mammal Mapping Project (MioMap). <<http://www.ucmp.berkeley.edu/miomap/>>. Accessed June 10, 2011.

Prior to project construction, a qualified archeologist shall conduct an archeological survey on the project site and areas to be disturbed by the project to assess the probability of discovering archeological resources during project construction. If based on the results of the survey, the site is found to contain significant archaeological resources (as determined by the CEQA Guidelines) by a qualified archaeologist, funding shall be provided STA by to identify, record, report, evaluate, and recover the resources as necessary. Construction within the area of the find shall not recommence until impacts to the archaeological resource are mitigated. Additionally, as required by Public Resources Code Section 5097.993, STA must inform project personnel that collection of any Native American artifact is prohibited by law.

**Significance after Mitigation:** Implementation of **Mitigation Measure V-1** would reduce all potential project impact to archeological resources to a less-than-significant level.

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

**Less than Significant with Mitigation Incorporated.** As the project site has already been disturbed for school facility uses, the potential for identifying paleontological resources in or adjacent to the project site is low. While no recorded paleontological resources have been identified in the project area, there is potential to encounter unknown paleontological resources during project construction. This is considered a potentially significant impact. **Mitigation Measure V-2** would address potential impacts to unknown paleontological resources and reduce impacts to a less-than-significant level.

**Mitigation Measure V-2:** In the event that buried paleontological resources are encountered during project grading, site preparation, and/or construction; construction and/or grading activities within 100 feet of the find shall be temporarily halted until a qualified paleontologist can assess the significance of the find and provide proper management recommendations. Paleontological resources include, but are not limited to, fossils and material remains.

**Significance after Mitigation:** Implementation of **Mitigation Measure V-2** would reduce all potential project impact to paleontological resources to a less-than-significant level.

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

**Less than Significant with Mitigation Incorporated.** There is no existing record regarding the findings of human remains during previous ground disturbances related to school facility uses on the project site. The records search indicated a high potential for Native American resources, including human remains, to be encountered in the project area. If human remains of Native American origin are discovered during project construction, it would be necessary to comply with regulations governing the disposition of Native American remains. This is considered a potentially significant impact. **Mitigation Measures V-3** and **V-4** would address the impacts related to the potential discovery of human remains as set forth by the State of California and administered by the Native American Heritage Commission (Public Resources Code Section 5097).

**Mitigation Measure V-3:** If human remains are encountered during ground-disturbing activities within the project area, STA shall require that work within 25 feet of the discovery shall be stopped and the project contractor shall immediately notify the Solano County Coroner. At the same time, a qualified archaeologist meeting federal criteria under 36 CFR 61 shall be contacted by STA to assess the situation and consult with the appropriate agencies. If the human remains are of Native American origin, the Coroner shall notify the Native American Heritage Commission within 24 hours of this identification. The Native American Heritage Commission will identify a Most Likely Descendant (MLD) to inspect the site and provide recommendations for the proper treatment of the remains and any associated grave goods.

Upon completion of the assessment, the qualified archaeologist shall prepare a report documenting the background to the finds, and provide recommendations for the treatment of the human remains and any associated cultural materials, as appropriate and in coordination with the recommendations of the MLD. The report shall be submitted to STA, the County, and the Northwest Information Center. Once the report is reviewed and approved by the agencies identified above, and any appropriate treatment completed, project construction activity within the area of the find may resume.

**Mitigation Measure V-4:** Prior to the issuance of grading permits, STA shall require that the project contractor provide documentation that all construction crews that will work on the project have undergone a training session to inform them of the presence and nature of federal or state-eligible cultural resources and the potential for previously undiscovered archaeological resources and human remains within the project area, of the laws protecting these resources and associated penalties, and of the procedures to follow should they discover cultural resources during project-related work.

**Significance after Mitigation:** The implementation of **Mitigation Measures V-3** and **V-4**, should human remains of Native American origin be discovered, would reduce impacts to a less-than-significant level.

## VI. Geology and Soils

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

The Alquist-Priolo Earthquake Fault Zoning Act was passed in 1972 to mitigate the hazard of surface faulting for human occupancy. The Act's main purpose is to prevent the construction of structures used for human occupancy on the surface trace of active faults.

There are numerous near-parallel active faults located within the San Francisco Bay Area. The project area is located in the City of Fairfield, along the eastern edge of the seismically active Coast Ranges of California. Most large earthquakes in the Bay Area have occurred along the major faults, including the San Andreas, Hayward, and Calaveras faults, which are located 20 to 45 miles from the City of Fairfield.

The Green Valley fault is located approximately 1 mile west of the project site. Rupture of the Green Valley fault would generate a maximum credible earthquake (MCE)<sup>19</sup> of approximately 6.8 moment magnitude.<sup>20</sup> The Cordelia fault is located less than 300 feet east of the project site and would generate a MCE of approximately 6.5 moment magnitude if ruptured.<sup>21</sup> The project site is located within the Alquist-Priolo Earthquake Fault Zone (EFZ) for the Cordelia fault.<sup>22</sup>

**a.i) Expose people or structures to potential substantial adverse effects including the risk of loss, injury or death involving rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault?**

**No Impact.** Fault ruptures have the potential to compromise the structural integrity of facilities and cause injury to people on site. The project site is located within the Earthquake Fault Zone EFZ for the Cordelia fault. The Cordelia fault could generate a MCE of approximately 6.5 moment magnitude. Although the project site is located in an EFZ, the project would not create facilities that people would reside or work in on the project site. Implementation of the project would not expose people or structures to potential geological impacts involving fault ruptures.

Further, gas transmission pipelines are generally resistant to earthquake damage. In locations where there is believed to be a greater risk of pipeline failure from an earthquake, PG&E designs and installs pipelines that are earthquake resistant. The project pipelines are designed to account for and are resistant to earthquake-related failures.

---

<sup>19</sup> Maximum credible earthquakes (MCEs) refers to the largest earthquake that can reasonably be expected to be generated by a fault.

<sup>20</sup> University of California. *U.C. Berkeley Seismic Guidelines, Appendix I*. May 2003.

<sup>21</sup> Ibid.

<sup>22</sup> California Department of Conservation, Geological Survey. Alquist-Priolo Earthquake Fault Zone Maps, Cordelia Quadrangle. July 1993.

**a.ii) Expose people or structures to potential substantial adverse effects including the risk of loss, injury or death involving strong seismic ground shaking?**

**No Impact.** Earthquake along several nearby active faults could cause moderate to strong ground shaking at the project site. The intensity of the earthquake ground motions and the damage done would depend on the characteristics of the generating fault, distance to the fault and rupture zone, earthquake magnitude, earthquake duration, and site-specific geological conditions.

The project would not create facilities on the project site that people would reside or work in; the project would relocate an existing utility valve lot. Implementation of the project would not expose people or structures to potential adverse effect involving strong seismic ground shaking. No mitigation is required.

**a.iii) Expose people or structures to potential substantial adverse effects including the risk of loss, injury or death involving seismic-related ground failure, including liquefaction?**

**No Impact.** Liquefaction is a phenomenon in which saturated soils lose their strength and stiffness as a result of seismic-related ground shaking.<sup>23</sup> When liquefaction occurs, the ground behaves like a liquid, instead of a solid, causing the ground to sink or even pull apart. The project area is located in an area of moderate liquefaction susceptibility as designated by the Association of Bay Area Governments (ABAG).<sup>24</sup>

Implementation of the project would not pose potential risks from seismically-induced liquefaction. The project would not involve constructing facilities on the project site that people would reside or work in. Thus, the project would not expose people or structures to potential adverse effects involving liquefaction. No mitigation is required.

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

**No Impact.** Landslides are usually related to instabilities in slopes and can be either induced by earthquakes or heavy amounts of rainfall. Implementation of the project would not pose risks from landslides on- or off-site. The project site is relatively flat with slopes between 0 to 5 percent.<sup>25</sup> There are no steep slopes or hillsides on the project site that would be susceptible to landslides. Further, the project would not involve constructing facilities on the project site that people would reside or work in. Therefore, the project would not expose people or structures to potential adverse effects involving landslides. No mitigation is required.

**b) Would the project result in substantial soil erosion or the loss of topsoil?**

**Less-than-Significant Impact.** Construction to install pipelines under roadways, including I-680, I-80, and Central Way would utilize trenchless installation methods such as the guided boring method and the horizontal directional drilling method. These subsurface construction methods would limit the amount of

---

<sup>23</sup> Saturated soils are soils in which the pore space between the individual soil particles are completely filled with water.

<sup>24</sup> Association of Bay Area Governments (ABAG). Liquefaction Susceptibility Hazard Map. <<http://quake.abag.ca.gov/liquefaction/>>. Accessed June 9, 2011.

<sup>25</sup> City of Fairfield. City of Fairfield General Plan, Figure 7-3 Geological Hazards. June 2002.

surface ground disturbances to the pipeline tie-in areas where excavation would be necessary. Trenching and open-cut methods would be used to install the pipelines on the project parcel. Ground-disturbing activities along the pipeline alignment, on the project site, and at tie-in locations may subject disturbed soils to erosion if exposed to significant wind or rainfall. The project would prepare a Stormwater Pollution Prevention Plan (SWPPP) as required by the State Water Resources Control Board's (SWRCB) Construction General Permit to prevent erosion and control sedimentation during project construction. Please refer to **Section IX, Hydrology and Water Quality**, for discussion regarding compliance with the SWRCB Construction General Permit.

Excavated soils off-site would be returned to the excavation site and the original condition of the location would be restored. On the project site, once constructed, the original condition of the project site would be restored. As the project would comply with a SWPPP and would restore all disturbed areas to its original condition, project impacts related to soil erosion or the loss of topsoil are less than significant. No mitigation is required.

**c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?**

***Less-than-Significant Impact.*** As discussed under item (a), implementation of the project would not pose potential risks from seismically-induced liquefaction and would not pose potential risks from landslides on- or off-site. Thus, impacts related to soil stability as a result of the project would be less-than-significant. No mitigation is required.

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

***Less-than-Significant Impact.*** Pescadero clay is the predominant soil on the project site, present on approximately 96 percent of the project site, whereas Clear Lake clay is present on approximately 4 percent of the project site.<sup>26</sup> The presence of Clear Lake clay is limited to a strip of land on the eastern edge of the project site. Expansive (shrink-swell) soils generally consist of clay materials that are capable of absorbing water. A change in the moisture content of an expansive soil can cause clay minerals to swell like a sponge or to lose cohesion and collapse. The associated change in soil volume (expansion) has the potential to result in structural damage to buildings or other structures, including cracks in building foundations.

Soils that have high or very high shrink-swell potential (expansive soil properties) would have liquid limits greater than 50 percent and plasticity indices greater than 30 percent. Soils with moderate shrink-swell potential have liquid limits ranging from 25 to 50 percent and plasticity indices between 15 and 30 percent.

---

<sup>26</sup> U.S. Department of Agriculture, Natural Resources Conservation Service. Web Soil Survey. <<http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx>>. Accessed June 8, 2011.

Low shrink-swell potentials are indicated by liquid limits less than 25 percent and plasticity indices less than 15 percent.<sup>27</sup>

Pescadero clay's liquid limit rating is 48.6 percent with a plastic index rating of 28.7 percent.<sup>28</sup> The liquid limit and plasticity index properties of Pescadero clay would rank the soil as possessing a moderate shrink-swell potential. Pescadero clay—the predominant soil underlying the project site—is not an expansive soil. Clear Lake clay's liquid limit rating of 55 percent and plastic index rating of 30 percent would rank the soil as possessing a moderate to slightly high shrink-swell potential.<sup>29</sup> Clear Lake clay possesses the properties of an expansive soil. The project would not involve constructing facilities on the project site that people would reside or work in. Thus, the project would not expose people or structures to potential adverse effects involving expansive soils. No mitigation is required.

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

**No Impact.** The project would not install or use septic tanks or alternative wastewater disposal systems. The project would not create structures onsite that would sustain a population and thus, the project would not generate wastewater. No mitigation is necessary.

---

<sup>27</sup> Thomas, Pamela Jo. *Quantifying Properties and Variability of Expansive Soils in Selected Map Units, Appendix B*. April 1998.

<sup>28</sup> U.S. Department of Agriculture, Natural Resources Conservation Service. Web Soil Survey. <<http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx>>. Accessed June 8, 2011.

<sup>29</sup> Ibid.

## VII. Greenhouse Gas Emissions

	Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
--	--------------------	--	------------------------------	-----------

**Would the project:**

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

**Regulatory Setting**

Global climate change, the warming of the earth’s temperature, is caused by the emission of greenhouse gases (GHGs) into the atmosphere. Naturally occurring GHGs include the following:

- carbon dioxide (CO<sub>2</sub>), commonly emitted through the burning of fossil fuel;
- methane (CH<sub>4</sub>), typically emitted through agriculture (animal waste) and the out-gassing of landfills; and
- nitrous oxide (N<sub>2</sub>O), emitted through the burning of fossil fuel and agricultural soil management.<sup>30</sup>
- Several classes of halogenated substances that contain fluorine, chlorine, or bromine are also GHGs, but they are primarily products of specialized industrial activities.

Chlorofluorocarbons (CFCs) and hydrochlorofluorocarbons (HCFCs), and halons are stratospheric ozone depleting substances. Other fluorine containing substances, including hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF<sub>6</sub>), do not deplete stratospheric ozone, but are considered powerful GHGs. When these gases are released into the atmosphere, they block heat and energy from being radiated back into space, and deflect this energy back to the earth’s surface in what is known as the greenhouse effect.

Although the greenhouse effect is a naturally occurring process, the release of GHGs due to human activities is increasing the amount of heat and energy deflected back to the earth, and therefore increasing the earth’s overall temperature to abnormally high levels.

<sup>30</sup> California Health and Safety Code, Section 38505. (January 2009); California Assembly Bill 32, California Global Warming Solutions Act of 2006. (2006); CEQA Guidelines, Section 15364.5.

According to the California Air Resources Board (CARB), California is the 15<sup>th</sup> largest emitter of GHGs in the world, producing 478 million gross metric tons of CO<sub>2</sub> equivalent (CO<sub>2</sub>e) in 2008. The transportation sector in California is the greatest contributor to GHG emissions, representing 36 percent of average emissions in 2008. Following the transportation sector, the energy sector represents 24 percent, the industrial sector represents 19 percent, and the commercial and residential sector represents 9 percent of GHG emissions during this same time period.

Assembly Bill 32 (AB 32) codified California's goal of reducing statewide emissions of greenhouse gases to 1990 levels by 2020. This reduction is proposed to be accomplished through an enforceable statewide cap on global warming emissions that will be phased in starting in 2012 to achieve maximum technologically feasible and cost-effective GHG emissions reductions. Pursuant to AB 32, CEQA now requires quantitative assessment of GHG emissions directly or indirectly caused by a project.

### ***Solano County Climate Action Plan***

Solano County adopted a Climate Action Plan and Sea Level Rise Strategic Program in June 2011.<sup>31</sup> The intent of the Solano County CAP is to (1) determine the quantity of emission to be reduced by creating an emissions inventory and projections, and (2) develop reduction measures for different emission sectors help reduce GHG emissions in accordance with AB 32 and other applicable state regulations. The Solano County CAP recommends 31 measures and 94 implementing actions including include energy efficiency improvements, increasing renewable energy use, and water efficiency techniques to reduce GHG emissions. The County set a GHG emission reduction goal of 20 percent below year 2005 levels by year 2020.

Although the City of Fairfield does not have a CAP, the City is currently participating in a county-wide GHG inventory which may become a component of a future CAP.

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

***Less-than-Significant Impact.*** The project would not generate GHG emissions that would have a significant impact on the environment. Project construction is slated to occur over a six-month period. Construction-related GHG emissions would be temporary as construction would last only six months..

Long-term, operational GHG emissions associated with the project would be limited to pipeline maintenance operations occurring once a year and in-line pipeline inspection activities taking place once every seven to ten years. As these maintenance activities already occur on the existing valve lot, there would be no incremental increase in greenhouse gas emission related to the valve lot. Since the project would not create structures that would support a population on site, there would be no project GHG emissions associated with electricity, natural gas, and other utility uses. Thus, operational GHG emissions are negligible given the limited operational activities required from the project.

---

<sup>31</sup> Walsh, Mathew, Principal Planner. Solano County Department of Resource Management, Planning Services Division. Personal communication, June 9, 2011.

The project would not generate substantial amounts of GHG emissions during construction or operation that would in turn have a significant impact on the environment. This impact is less than significant. No mitigation is required.

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

***Less-than-Significant Impact.*** As discussed above, the project's operational GHG emissions would be negligible considering the limited maintenance activities required on the project site. Project operation would include maintenance activities once every year and in-line inspection activities occurring once every seven to ten years. The project would not conflict with the BAAQMD-adopted GHG emissions threshold of significance. Further, the project would involve relocating and replacing an existing utility valve lot, and thus no new GHG emission would be generated as a result of the project.

As previously stated, the intent of the Solano County CAP is to reduce County-wide GHG emissions. Specifically, the County set a reduction target of 20 percent below year 2005 levels by year 2020. The CAP specifically targets and implements reduction measures and action for the agricultural, transportation and land use, energy use and efficiency, and water use and efficiency sectors to reduce GHG emissions. The project would not conflict with the GHG emission reduction measures and actions identified in the Solano County CAP. Thus, the project would not conflict with applicable plans and policies adopted to reduce GHG emissions and impact would be less-than-significant. No mitigation is required.

## VIII. Hazards and Hazardous Materials

	Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
--	--------------------	--	------------------------------	-----------

**Would the project:**

a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and as a result, would it create a significant hazard to the public or the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

	Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
--	--------------------	--	------------------------------	-----------

h) Expose people or structures to the risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
--	--------------------------	--------------------------	--------------------------	-------------------------------------

Information in this section is drawn from the Environmental Data Review (EDR) Radius Map Report with GeoCheck, which is included in its entirety as **Appendix D** to this initial study.

The project site is not identified as a hazardous materials release site in state and federal databases. The closest site identified as having an unauthorized release of hazardous materials to the project site is located at 4731 Central Way (listed as Campbell’s Carpet), approximately 0.1 mile north of the project site. This site is listed in both the Leaking Underground Storage Tank (LUST) database and the Underground Storage Tank (UST) database. However, hazardous materials remediation on the site has been completed and the case is closed.

**Regulations Related to Hazardous Materials**

The Solano County Department of Resource Management (Environmental Health Services Division) enforces laws and regulations regarding hazardous waste in all cities and unincorporated areas in County. The Department regulates the storage, use, treatment, and disposal of hazardous materials and wastes generated by industries within the County. As a Certified Unified Program Agency (CUPA), the Department requires businesses within the County that handle specific quantities of hazardous materials to submit a Hazardous Materials Business Plan.

**Hazardous Materials Business Plan.** All businesses, including farms, federal agencies, state agencies, and local agencies that handle quantities of hazardous materials or hazardous waste in excess of 55 gallons for liquids, 500 pounds for solids, or 200 cubic feet for gases, must submit a Hazardous Materials Business Plan (HMBP).

The HMBP must provide the following information:

1. A listing or inventory of hazardous materials and wastes present;
2. Amounts handled;
3. Where hazardous materials are handled and stored (including a site and facility map);
4. Emergency response procedures in case of a release; and
5. Employee training for hazardous materials.

In the event of a hazardous materials incident on site, the HMBP provides emergency responders with the necessary information to prepare adequate emergency response plans.

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

**Less-than-Significant Impact.** Project construction will occur for an approximately six month period. During construction, the project would involve the use of potentially hazardous materials such as fuel, diesel/gasoline, acetylene and oxygen,<sup>32</sup> motor oils, and hydraulic oils. Hazardous materials used during project operation, specifically during pipeline maintenance activities once a year, would include aerosol cleaners. Hazardous pipeline liquids could be generated during in-line inspection operations every seven to ten years. Given the temporary use of hazardous materials during project construction and limited use and generation of hazardous materials during project operation, the project would not create a significant hazard to the public or environmental in regards to the routine transport, use, or disposal of hazardous materials. No mitigation is required.

**b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?**

**Less-than-Significant Impact.** Project construction, particularly excavation activities, would not create a significant hazard to the public or environment through the release of hazardous materials. Thus, impacts involving the release of hazardous materials are less than significant.

In regards to hazards related to natural gas pipelines, prior to maintenance operations and in-line inspection activities, PG&E will determine clearance requirements associated with the utility valve lot and transmission lines. The clearance requirements will determine PG&E operation requirements and safety protocols during any maintenance or inspection work. Further, the project site would allow for better emergency vehicle access to the valve lot than the existing valve lot location. The existing valve lot is located within the Caltran's right-of-way along the I-80 eastbound off-ramp. The project site was selected in part because it would enable better emergency vehicle access. Thus, this impact is considered less than significant. No mitigation is required.

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

**No Impact.** Nelda Mundy Elementary School, located at 570 Vintage Valley Drive, is the most proximate school to the project area, approximately 0.5 mile northwest of the project site. As Nelda Mundy Elementary School is located across the I-80 from the project site, construction and operational activities associated with relocating the existing PG&E valve lot would not impact the school. The project would not emit hazardous emission or handle hazardous or acutely hazardous materials, substances, or waste within a one-quarter mile of an existing or proposed school. No mitigation is required.

---

<sup>32</sup> Acetylene, when combined with oxygen, can create flames used for cutting and welding metals.

**d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and as a result, would it create a significant hazard to the public or the environment?**

***Less-than-Significant Impact.*** The project site is not located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5. A search of the regulatory database identified the closest site having an unauthorized release of hazardous materials to the project site is at 4731 Central Way, located approximately 0.1 mile north of the project site. Since remediation on the site has been completed and the case has since been closed, contamination of soil and groundwater underlying the project site from this case is unlikely. Therefore, the project would not create a significant hazard to the public or the environment. No mitigation is required.

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

**and**

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

***No Impact.*** The project area is not located within an airport land use plan or within the vicinity of a public use airport or private airstrip. Travis Air Force Base, the closest airstrip to the project area, is located approximately 10 miles east of the project area. Due to the distance from the most proximate airstrip to the project area, aircraft over-flights would not pose a safety hazard to people residing or working in the project area. No mitigation is required.

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

***No Impact.*** The City of Fairfield adopted a Multi-Hazard Disaster Plan to guide emergency relief efforts in the event of a disaster. The plan includes provisions for City services during anticipated disasters and outlines evacuation plans, emergency response guidelines, and other operating procedures. The project proposes to relocate an existing utility valve lot to a location with improved emergency vehicle access and would not change the access of local streets or highways within the project vicinity. Further, the project would not create structures that would impede or obstruct an emergency response plan or evacuation plan. No mitigation is required.

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

***No Impact.*** The project is located in an urban environment surrounded by commercial development, roads and highways and therefore has no potential for risk of wildland fires. No mitigation is required.

## IX. Hydrology and Water Quality

	Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
<b>Would the project:</b>				
a) Violate any water quality standards or waste discharge requirements?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Substantially alter the existing drainage patterns of the site or area including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on or off-site?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on-or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted run-off?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f) Otherwise substantially degrade water quality?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g) Place housing within a 100-year flood hazard area as mapped on a Federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

	Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
j) Inundation by seiche, tsunami, or mudflow?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Regulations Related to Hydrology and Water Quality**

A State Water Resources Control Board’s (SWRCB) Construction General Permit is required for a project disturbing at least 1 acre of soil during the construction process. The Construction General Permit requires preparation of a Stormwater Pollution Prevention Plan (SWPPP) to describe how a project would prevent pollution runoff during the construction process. The SWPPP would document how erosion would be prevented and how sediment and other construction-related pollutants would be controlled, and how fluids from construction equipment or dust from concrete would be prevented.

Provision C.3 of the National Pollutant Discharge Elimination System (NPDES) permit program requires that all projects creating and or replacing 10,000 square feet or more of impervious surface (unless a development permit application was “deemed complete” by August 15, 2006) incorporate stormwater management facilities. In accordance with Provision C.3, a Stormwater Control Plan (SWCP) would be prepared to detail the permanent stormwater management facilities that will be incorporated into the project to treat stormwater runoff and to control runoff rates and volumes after the construction process is complete.

The City of Fairfield Grading and Erosion Control Ordinance (Municipal Code, Chapter 25, Article VI) regulates the excavation, grading, and earthwork construction activities in the City. The Ordinance requires the preparation of a grading plan showing the property; elevations and contours; drainage areas; and an erosion, sediment, and runoff control plan to minimize soil erosion, sedimentation, and rate of water runoff. The application for a grading permit must also include a soil engineering report and an engineering geology report.

**a) Violate any water quality standards or waste discharge requirements?**

**and**

**f) Otherwise substantially degrade water quality?**

***Less than Significant with Mitigation Incorporated.*** Construction of the project may result in impacts to water quality. Excavation and ground disturbing activities associated with installing pipelines may have the potential to affect water quality through soil erosion and stormwater discharge of pollutants and sedimentation.

The amount of impervious surfaces created on the project site would be limited to the aboveground pipeline extension with valve/hand wheels and areas where pipeline maintenance equipment would be placed. As impervious surface created by the project would be limited and not surpass 10,000 square feet, the project would be in compliance with Provision C.3 and would not be required to incorporate permanent stormwater management facilities. Further, existing gravel on the project site would remain permeable.

Approximately 15.5 acres of soil would be disturbed during project construction. As more than 1 acre of soil would be disturbed during construction, the project would be subject to the SWRCB Construction General Permit. Compliance with the SWRCB's Construction General Permit would require the preparation of a Storm Water Pollution Prevention Plan (SWPPP). The SWPPP which would include information regarding the construction site perimeter, existing and proposed buildings, lots, roadways, storm water collection and discharge points, general topography both before and after construction, and drainage patterns across the project site. Best Management Practices (BMPs) to retain construction debris, dirt, or other pollutants on the project site from entering the City's drainage system will also be included. The BMPs would include:

- Erosion controls at the project site;
- Run-on and run-off controls to and from the project site;
- Control of sediments and fines on the project site;
- Active treatment systems (as necessary);
- Good site management; and
- Non-stormwater management.

Additionally, the project would be required to comply with the City's Grading and Erosion Control Ordinance (Municipal Code, Article VI) which regulates the excavation, grading, and earthwork construction activities in the City. Under the Ordinance, a grading plan, soil engineering plan, and runoff control plan would be prepared and submitted to the City prior to approval of a grading permit. The project would prepare a grading plan to show the property; elevations and contours; drainage areas; and an erosion, sediment, and runoff control plan to minimize soil erosion, sedimentation, and rate of water runoff.

**Mitigation Measure IX-1:** Prior to project construction, a Stormwater Pollution Prevention Program (SWPPP), with Best Management Practices (BMPs) incorporated, shall be prepared to ensure that impacts to water quality are minimized and are in compliance with SWRCB regulations.

**Mitigation Measure IX-2:** Prior to the issuance of grading permits, a project-specific grading plan and erosion, sediment, and runoff control plan shall be prepared for City review and approval.

**Significance after Mitigation:** Implementation of **Mitigation Measures IX-1** and **IX-2** would ensure that construction-related impacts to water quality would be minimized. Impacts would be less than significant following mitigation.

**b) Deplete groundwater?**

**No Impact.** The project does not include any plans to withdraw groundwater. No mitigation is required.

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

**Less than Significant with Mitigation Incorporated.** Project construction would involve ground disturbing activities such as excavations to install pipelines. However these activities would not substantially alter the existing topography of the project site (which is flat). The project would be required to comply with the City's Grading and Erosion Control Ordinance and SWRCB's General Construction Permit for erosion and sedimentation control during the construction period. As such, with implementation of **Mitigation Measure IX-1** and **IX-2**, the project is not likely to contribute substantial amounts of erosion or siltation on- or off-site due to construction. Impacts with mitigation would be mitigated to a less than significant level.

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

**Less-than-Significant Impact.** Implementation of the project would not substantially alter the existing drainage pattern of the project site. The project site is flat, mainly covered in pervious surfaces and contains no streams or rivers. Project construction would require excavations to install aboveground pipeline extensions with valve/hand wheels and pipeline maintenance equipment on the project site. Disturbed soil would be returned to the excavation sites and the finished valve lot would be restored to approximately 1 foot above grade with an aggregate base. Impervious surfaces created on the project site as a result of the aboveground pipeline equipment would be limited. Project site modifications would not change the rate or amount of surface runoff in a manner that would result in on- or off-site flooding. Thus, this impact is considered less than significant. No mitigation is required.

**e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted run-off?**

**Less-than-Significant Impact.** The project site is mainly covered in pervious surfaces and contains no existing stormwater drainage facilities. Permanent structures on the project site as would include above ground pipeline extensions with valve/hand wheels and pipeline maintenance equipment. Impervious surfaces created on the project site as a result of the aboveground pipeline equipment would be limited. Further, the original condition of the project site would be restored following construction activities. Thus, the volume of runoff generated by the project is not expected to increase beyond existing stormwater runoff conditions and impacts are considered less than significant. No mitigation is required.

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

**and**

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

**No Impact.** The project does not propose to build housing structures on the project site; the project site is not located within a 100-year flood hazard area. No mitigation is required.

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

**No Impact.** Green Valley Creek is located approximately 0.1 mile northeast of the project site; overflow associated with the creek would not flood the project site due to the distance from the creek bank and structures in between. Similarly, the project site would not be susceptible to flooding as a result of dam failure.<sup>33</sup> The project would not expose people or structures on the project site to risks associated with flooding. No mitigation is required.

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

**No Impact.** The project site is located over 35 miles from the Pacific Ocean and approximately 14 miles from San Pablo Bay. Due to this distance, the project site is not susceptible to impacts resulting from tsunamis or seiche (waves generated within enclosed surface water bodies). Risk of mudflows inundating the project site is remote given the relatively flat topography of the project site and the distance from exposed hillside areas. No mitigation is required.

---

<sup>33</sup> Association of Bay Area Governments. Dam Failure Inundation Hazard Map for the Entire Bay Area. <<http://www.abag.ca.gov/cgi-bin/pickdamx.pl>>. Accessed June 13, 2011.

## X. Land Use and Planning

	Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
--	--------------------	--	------------------------------	-----------

**Would the project:**

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

The project area is characterized by a mixture of commercial/industrial services, businesses, and offices. I-680 and I-80 are located to the west and north of the project area, respectively. Industrial businesses (such as metal refurbishing, wastewater treatment and equipment, and automotive businesses) immediate border the project site to the north and east. The area to the south of the project site remains vacant.

The location for the relocated valve lot is designated and zoned for public facilities use. The public facilities zoning is applied to lands owned and operated by the city, county, state, or federal governments, or school district, where governmental, education, recreational, or other institutional facilities are the principal use of the site.<sup>34</sup> A public facilities zoning district may accommodate public or privately constructed uses and facilities intended for a purpose found by the City to be in the public's interest. Minor public and quasi-public utility uses are permitted under the public facilities zoning district. Major public and quasi-public utility uses are conditionally permitted under the public facilities zoning district and are subject to the approval of the City.

<sup>34</sup> City of Fairfield. Zoning Ordinance. <<http://www.fairfield.ca.gov/gov/depts/cd/planning/zoning/default.asp>>. Accessed May 3, 2011.

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

**No Impact.** Implementation of the project would relocate an existing valve lot to a site that is predominately vacant. The project site is located within a developed urban setting surrounded predominately by industrial and commercial land uses. The project would not introduce any changes to access for any adjacent properties. Relocation of the valve lot would not physically divide the existing industrial and commercial fabric of the community. No mitigation is required.

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

**No Impact.** The land use and zoning designation of the parcel for the relocated valve lot is public facility uses. Minor public and quasi-public utility uses are permitted under the public facilities zoning designation. Thus, the project would be in accordance with the applicable Fairfield General Plan and zoning ordinance. No mitigation is required.

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

**No Impact.** A multi-species habitat conservation plan (HCP) is being prepared for Solano County by the Solano County Water Agency. The final administrative draft HCP was prepared in May 2009 but has not been formally adopted. The Agency plans to adopt the HCP in the fall of 2012.<sup>35</sup>

The project area would be within the jurisdiction of the Solano County Multispecies HCP if adopted. Relocation of the valve lot and off-site construction activities would not conflict with the HCP as the project is located in a developed and urbanized area. The project area borders the I-80 and I-680 in a highly disturbed area and would not impact the species protected under the HCP. Thus, the project would not impact or conflict with a habitat conservation plan or natural community conservation plan. No mitigation is required.

---

<sup>35</sup> Lee, Chris, Supervising Environmental Scientist, Solano County Water Agency. Personal communication, May 3, 2011.

## XI. Mineral Resources

	Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
--	--------------------	--	------------------------------	-----------

**Would the project:**

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





b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?





Solano County is rich in nonfuel mineral resources, such as mercury, sand and gravel, clay, stone products, calcium, and sulfur. Within the City of Fairfield, two mineral quarries located at Nelson Hill and Cement Hill had been used for construction aggregates in the past.<sup>36</sup> Both quarries are currently inactive and are no longer in use.

**a) Result in the loss of availability of a known mineral resource?**

**and**

**b) Result in the loss of availability of a locally important mineral resource recovery site?**

**No Impact.** There are no significant mineral resources located in the project area. The closest mineral quarry to the project area is located at Nelson Hill, approximately 1 mile northwest of the project area. The project would not impact or result in the loss of significant mineral resources. No mitigation is required.

<sup>36</sup> City of Fairfield. City of Fairfield General Plan, Open Space, Conservation, and Recreation Element. June 2002.

## XII. Noise

	Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
--	--------------------	--	------------------------------	-----------

**Would the project:**

a) Result in exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of the other agencies?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Result in exposure of persons to or generation of excessive ground borne vibration or ground borne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) For a project located within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

***Fundamentals of Noise***

Noise can be described as any unwanted or objectionable sound. Noise is typically generated by transportation, specific land uses, and on-going human activity. The effect of noise on individuals and communities varies with the duration of the noise source, its intensity and frequency, and the tolerance level of those exposed to the sound. The standard unit of measurement of the loudness of sound is the decibel (dB). Because the human ear is not equally sensitive to sound at all frequencies, the A-weighted decibel scale (dBA) was devised to relate noise to human sensitivity since it gives greater weight to the frequencies of

sound to which the human ear is most sensitive. The human ear can detect changes in sound levels of approximately 3 dBA under normal, controlled conditions. A change of 5 dBA is noticeable to most people in an exterior environment.

Because of the time-varying nature of environmental sound, there are various descriptors used to quantify the decibel level of sound experienced. Although dBA is used to measure sound frequencies that the human ear is most sensitive to, this is not an effective way to measure noise levels within a community, since community noise is always fluctuating and changing. Several noise rating units exist to analyze adverse effects of noise on a community. These metrics include the community noise equivalent level (CNEL) and the day-night noise level ( $L_{dn}$ ). CNEL is an average of all noise levels recorded over a 24-hour period.  $L_{dn}$  is an average that is similar to CNEL, but it also includes a 10 dBA penalty for nighttime noise that occurs between 10 PM and 7 AM.

**Regulations Related to Noise**

The City of Fairfield’s exterior noise-level standards for non-transportation noise sources are specified in the General Plan. Exterior noise-level standard levels for non-transportation noise sources are set for only residential uses and outdoor park/playground uses. The City does not set exterior noise-level standards for land uses, such as commercial or public service land uses, surrounding the project site.

The State Office of Planning and Research (OPR) provides guidance for the acceptability of specific noise exposure levels for different land use types. **Table 5** provides the normally acceptable, conditionally acceptable, and unacceptable noise-level standards set for receiving land uses applicable to the project and adjacent land uses.

Table 5: State Office of Planning and Research Land Use Noise Compatibility Guidelines

Land Use Category	Community Noise Exposure ( $L_{dn}$ or CNEL, dBA)		
	Normally Acceptable	Conditionally Acceptable	Normally Unacceptable
Office Building, Business Commercial and Professional	<70	67-78	75+
Industrial, Manufacturing, Utilities, Agriculture	<75	70-80	75+

Source: State of California Governor’s Office of Planning and Research, 2003.

Although temporary and intermittent, noise generated from construction activities can be intrusive because of its high output and repetitive nature. Construction noise would occur due to the use of construction equipment, including heavy trucks, backhoes, cranes, side booms, excavators, and air compressors. **Table 6** lists the typical noise generated from some of these construction equipments. Construction would be temporary and last approximately six months.

Table 6: Construction Equipment Noise

Equipment	Typical Noise Level (dBA) 50 feet from source
Air Compressor	81 dBA
Backhoe	80 dBA
Crane (mobile)	83 dBA
Trucks	88 dBA

Source: Federal Transit Administration, 2006.

Construction scheduling requirements are established by the City to ensure that such noise is limited in duration and occurs only during weekday daytime hours. Project construction will comply with the City of Fairfield’s construction noise regulation. Chapter 25, Article X of the City of Fairfield Code of Ordinances prohibits construction activities, including the operation of tools or equipment used in construction, grading or demolitions works, between the hours of 10 PM and 7 AM, Monday through Sunday, except by written permission of the Director of Public Works.

**Operational Project Noise**

The project would relocate an existing utility valve lot to the project site. Operation of the valve lot would not generate noise. Noise would be generated during pipeline maintenance activities and in-lines inspection activities on the project site. Maintenance activities would occur once a year, whereas in-line inspection activities would occur once every seven to ten years. Noise generated by these activities would be temporary.

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

**Less-than-Significant Impact.** Noise from construction of the project may surpass the normally acceptable noise levels, as detailed in noise levels generated by construction equipment above. The project would comply with the City’s construction scheduling requirements to ensure that such noise is limited in duration and would be prohibited between the hours of 10 PM and 7AM, Monday through Sunday. Operational activities on the project site would occur at most several times a year due to pipeline maintenance and in-line inspections. In-line inspections may surpass the normally acceptable noise levels in the project area but would also be limited in duration and prohibited between the hours of 10 PM and 7AM. Thus, project impacts related to exposing persons to or generating noise levels in excess of applicable standards are less than significant. No mitigation is required.

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

**Less-than-Significant Impact.** Construction of the project would require excavation and trenchless methods, including horizontal directional drilling and the guided boring method, to install pipelines that may generate minor ground borne noise or ground borne vibration. Both methods of trenchless pipeline installation would not generate excessive vibrations through the ground. Operation of the valve lot would be limited to pipeline maintenance and in-line inspection activities, which would be limited to at most several times a year. Pipeline maintenance and in-line inspection activities may also generate minor ground borne noise or ground borne vibration. However, construction activities would be temporary and operation activities would be

limited to several times a year. The project would not expose persons to excessive ground borne vibration or ground borne noise level given the temporary nature of construction and operational activities and impacts would be less than significant.

**c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?**

**Less-than-Significant Impact.** Operation of the valve lot, itself, would not generate noise. Noise would be generated during pipeline maintenance activities and in-lines inspection activities on the project site. Maintenance activities would occur once a year, whereas in-line inspection activities would occur once every seven to ten years. Noise generated by these activities would be temporary. This is considered to be a less-than-significant impact. No mitigation is required.

**d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?**

**Less-than-Significant Impact.** Project construction would result in a temporary increase in ambient noise levels during construction, which is expected to last six months. In-line inspection activities during operation may also result in a temporary increase in ambient noise levels. The project would comply with the City of Fairfield Code of Ordinances which prohibits construction activities, including the operation of tools or equipment used in construction, grading or demolitions works, between the hours of 10 PM and 7 AM, Monday through Sunday.

The closest sensitive noise receptors to the project area are the single-family residences of the Village of Cordelia located approximately 0.16 mile south of the project site. The existing noise environment in the project area is dominated by elevated traffic noise levels generated by the I-680, I-80, and associated interchange. Due to the distance of the closest sensitive noise receptors and conditions of the existing noise environment, the project would not substantially increase the ambient noise levels in the project vicinity. Further, the project would comply with the City's noise regulations for construction activities. Thus, this impact is considered less than significant. No mitigation is required.

**e) Located within an airport land use plan?**

**and**

**f) Located within the vicinity of a private airstrip?**

**No Impact.** The project area is not located with an airport land use plan or within the vicinity of a public use airport or private airstrip. Travis Air Force Base, the closest airstrip to the project area, is located approximately 10 miles to the east of the project area. The project site is not located within the noise impact area of the Travis Air Force Base. Therefore, the project would not expose the community to excessive aircraft noise created by aircraft operations and no impact would occur. No mitigation is required.

### XIII. Population and Housing

	Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
--	--------------------	--	------------------------------	-----------

**Would the project:**

a) Induce substantial population growth in an area, either directly, (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The City of Fairfield’s population is comprised of approximately 105,300 residents, many of whom reside in single-family homes.<sup>37</sup> Approximately 93 percent of the housing units in Fairfield are currently occupied. The Association of Bay Area Government’s (ABAG) Projections 2009 forecasts that the City of Fairfield will add over 2,800 new households between 2010 and 2025.<sup>38</sup>

**a) Induce substantial population growth?**

**No Impact.** Implementation of the project would not construct any new homes or businesses. The project proposes to relocate an existing utility valve lot. As the project would not create structures to support a population, the project would not induce substantial population growth. The project would not directly or indirectly contribute to population growth in the project area. No mitigation is required.

**b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?**

**and**

<sup>37</sup> U.S. Census Bureau. 2010 Census. QT-PL: Race, Hispanic or Latino, Age, and Housing Occupancy; H030: Units in Structure.

<sup>38</sup> Association of Bay Area Governments. Projections 2009.

**c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?**

**No Impact.** There are no residential units located on the project site as the project site is currently vacant. No structures currently exist on the project site. The project proposes to relocate an existing utility valve lot. As there are no residential structures located in or adjacent to the project area, implementation of the project would not displace existing housing or people. Thus, project would not necessitate the construction of replacement housing elsewhere. No mitigation is required.

## XIV. Public Services

	Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
--	--------------------	--	------------------------------	-----------

**Would the project:**

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

i) Fire protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
ii) Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
iii) Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
iv) Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
v) Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Fairfield Fire Department**

Fire protection and paramedic services to the project area are provided by the City of Fairfield Fire Department. The service area of the Department encompasses the entire city. The Department participates in an automatic response agreement with neighboring fire agencies, and adjacent fire jurisdictions likewise respond simultaneously to Fairfield calls in close proximity to their fire stations.<sup>39</sup>

<sup>39</sup> Solano Local Area Formation Commission. *City of Fairfield 2008 Municipal Service Review*. Available: <<http://www.solanolafco.com/Studies/MSR/Cities/Fairfield/FairfieldMunicipalServiceReviewDocument2008.pdf>>. Accessed May 31, 2011.

In 2008, 68 career personnel and 30 volunteer firefighters were employed by the Department.<sup>40</sup> The Department serves the City from six fire stations (Station #35 and Stations #37 through #41). Fire Station #35, located at 473 #A Edison Court, approximately 0.75 mile southwest of the project site, is the closest Department facility to the project area. Station #35 also provides fire and rescue services for the I-680 and I-80 corridor.

The Department has a response time goal of five minutes for 80 percent of all service calls made from residential dwelling units.

### ***Fairfield Police Department***

The City of Fairfield Police Department provides police services to the project area. Currently, the Department employs 114 sworn positions and 68 civilian positions (support and administrative).<sup>41</sup> The Department is headquartered at 1000 Webster Street, approximately 5.5 miles to the northeast of the project site, at the Fairfield Civic Center.

Fairfield is divided into five public service areas for police functions. The project area is located in the Cordelia service area which generally encompasses the western portion of the City, including areas proximate to State Route 12, I-680, I-80, and the associated interchanges. Similar to the Fairfield Fire Department, the Fairfield Police Department also participates in an automatic response agreement with neighboring and other police jurisdictions.<sup>42</sup>

The Department has an average response time goal of under five minutes for emergency calls and under 20 minutes for non-emergency calls. Currently, the Department meets this goal 100 percent of the time.<sup>43</sup>

### ***Schools***

The project area is located within the Fairfield-Suisun Unified School District. The District operates 20 elementary schools, five middle schools, five high schools, and an adult school within Suisun City, portions of Solano and Napa Counties, and most of Fairfield.<sup>44</sup> Nelda Mundy Elementary School, located at 570 Vintage Valley Drive, is situated across I-80 approximately 0.5 mile northwest of the project area. The project site is identified as surplus property by the Fairfield-Suisun Unified School District. School facilities no longer occupy the site.

---

<sup>40</sup> Ibid.

<sup>41</sup> Shepherd, Dawn, Dispatch and Records Manager. Fairfield Police Department. Personal communication, June 9, 2011.

<sup>42</sup> Solano Local Area Formation Commission. *City of Fairfield 2008 Municipal Service Review*. Available: <<http://www.solanolafco.com/Studies/MSR/Cities/Fairfield/FairfieldMunicipalServiceReviewDocument2008.pdf>>. Accessed May 31, 2011.

<sup>43</sup> Shepherd, Dawn, Dispatch and Records Manager. Fairfield Police Department. Personal communication, June 9, 2011.

<sup>44</sup> Fairfield-Suisun Unified School District. About Fairfield-Suisun Unified School District Website. <[http://www.fsusd.k12.ca.us/about\\_fsusd/](http://www.fsusd.k12.ca.us/about_fsusd/)>. Accessed May 4, 2011.

## ***Parks***

Please refer to **Section XV, Recreation**, for a discussion regarding parks and recreational facilities in the project area.

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

### **i) Fire protection impacts?**

**No Impact.** The project would not adversely affect the Department's response times or ability to provide fire protection services to the project area. Implementation of the project would not develop any permanent structures that would generate a residential population requiring additional emergency or fire protection services. The project would relocate an existing utility valve lot. Thus, the project would not impact fire protection services in the project area. No mitigation is required.

### **ii) Police protection impacts?**

**No Impact.** Police service levels would not diminish as a result of the project. The project would relocate an existing utility valve lot. As the project would not develop any permanent structures that would create a residential population to be serviced by the Fairfield Police Department, the project would not generate the need for new or additional police services. Thus, the project would not impact police protection services in the project area. No mitigation is required.

### **iii) School impacts?**

**No Impact.** The project would relocate an existing utility valve lot. Because the project would not develop any permanent structures that would generate a residential population, the project would not introduce additional students into the Fairfield-Suisun Unified School District. No mitigation is required.

### **iv) and v) Park and other public facilities impacts?**

**No Impact.** Parks and other public facilities are typically provided to serve a residential population. The project would relocate an existing utility valve lot. As the project would not develop any permanent structures that would generate a residential population, the project would not create additional demand for parks and public facilities in the project area. Therefore, parks and public facilities would not be impacted by the project. No mitigation is required.

## XV. Recreation

	Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
--	--------------------	--	------------------------------	-----------

**Would the project:**

a) Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

There are over 20 recreational facilities, including community parks, neighborhood parks, linear parks, and trails, in the City of Fairfield.<sup>45</sup> There are no parks or recreational facilities in or adjacent to the project site. Rockville Hills Regional Park is located approximately 2.5 miles to the north of the project area across I-80. The closest recreational facility to the project area is Vintage Green Valley Neighborhood Park located at 600 Vintage Valley Drive, approximately 0.5 mile from the project area across I-80.

**a) Increase use of existing facilities?**

**No Impact.** Parks and recreational facilities are typically intended to serve a daytime and weekend residential population. The project would not create any residential units to support a population as it would relocate an existing utility valve lot. Implementation of the project would not contribute to the residential population of the City. Thus, the project would not increase the use of existing park and recreational facilities in the project area. No mitigation is required.

**b) Include/require construction of new facilities?**

**No Impact.** The project does not include the construction or expansion of any recreational facilities. The relocation of the utility valve lot and off-site construction activities would not generate a residential population. As the project would not sustain a residential population, the project would not create a demand for additional parks and recreational facilities in the project area. Thus, the project would not require the construction or expansion of such recreational facilities. No mitigation is required.

<sup>45</sup> City of Fairfield. Public Works Department, Parks & Trails Webpage. <<http://www.fairfield.ca.gov/gov/depts/pw/parks/default.asp>>. Accessed May 4, 2011.

## XVI. Transportation and Traffic

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

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

and

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

**Less-than-Significant Impact.** STA is the Congestion Management Agency (CMA) and is responsible for ensuring local government conformance with the countywide congestion management program. According to the City of Fairfield, a traffic analysis is not required for development projects generating less than 100 peak-hour trips. Given that the project would not develop structures that would support a population and would generate minimal vehicle trips during construction, and in the future on a limited basis during periodic maintenance activities and inspections, a traffic analysis is not required for this project.

The number of vehicle trips associated with the project would be limited. During construction, the project would generate at least 15 trucks per day. These trucks would not generate more than 100 PM peak-hour trips a day during construction. Operational activities on the valve lot would include pipeline maintenance activities and in-line pipeline inspections. Maintenance activities on the project site would take place once every year and require one work truck. In-line pipeline inspections would take place once every seven to ten years and require 15 crew trucks and one water truck. The amount of vehicle trips associated with the project is minimal and would not deteriorate levels of service along the roadways. The project would not conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system or an applicable congestion management program and project impacts would be less than significant. No mitigation is required.

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

**No Impact.** The project area is not located within an airport land use plan or within the vicinity of a public use airport or private airstrip. Travis Air Force Base, the closest airstrip to the project area, is located approximately 10 miles to the east of the project area. Due to the distance from the most proximate airport to the project area, the project would not impact air traffic patterns. No mitigation is required.

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

**No Impact.** Construction and operation of the project would not change the design of any local streets or intersections in the City of Fairfield. Thus, the project would not increase hazards due to a design feature or incompatible uses. No mitigation is required.

e) Result in inadequate emergency access?

**Less than Significant with Mitigation Incorporated.** Existing roadways in the project area would provide emergency access to the project site. Currently, there is no direct road leading to the project site. The project would create a permanent private-access road, beginning at the project parcel's intersection with Central Way running northeasterly along the northern boundary of the property, providing access to the project site.

In the event that local streets would be temporarily closed as a result of project construction, the project may impact emergency access to areas surrounding the project site. **Mitigation Measures XVI-2** would require the preparation of a Traffic Control Plan to mitigate for road closure impacts on emergency access in the project vicinity.

**Mitigation Measure XVI-1:** Prior to beginning work, a Traffic Control Plan (TCP) and construction schedule shall be prepared and submitted to the City of Fairfield Traffic Engineer for approval. The Traffic Control Plan shall include the following measures:

- The TMP shall identify locations of temporary detours and signage to facilitate local traffic patterns and through-traffic requirements.
- Construction activities will be coordinated to avoid blocking or limiting access to homes and businesses to the extent possible. Residents and businesses will be notified in advance about potential access or parking effects before construction activities begin.
- The TMP will be prepared to address short-term disruptions in existing circulation patterns during construction. For example, the TMP will identify the locations of temporary detours or temporary roads to facilitate local traffic circulation and through-traffic requirements.

**Significance after Mitigation:** Implementation of **Mitigation Measure XVI-2** would reduce impacts to emergency access in the project area during construction to a less-than-significant level.

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

**No Impact.** The project would not conflict with any policies, plans, or programs adopted in support of bicycle and pedestrian facilities or public transit services in the project area. Pedestrian and bicycle facilities within the vicinity of the project area are limited. The project would not introduce changes to these facilities and thus, the project would not decrease the performance or safety of such facilities. As construction would not occur on roadways, the project would not interrupt public transit services in the project area. No mitigation is necessary.

## XVII. Utilities and Service Systems

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

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

**and**

**e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?**

**No Impact.** The project would relocate an existing utility valve lot. The project would not develop any permanent structures that would create a population requesting wastewater disposal and treatment services. Thus, the project would not exceed wastewater treatment requirements or create a service demand above the provider's existing commitments. No mitigation is required.

**b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?**

**No Impact.** Implementation of the project would not result in any permanent structures that would generate a residential population. The project would relocate an existing utility valve lot. Thus, the project would not create a population requesting domestic water and wastewater disposal services. The project would not require the expansion or construction of new water or wastewater treatment facilities. No mitigation is required.

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

**No Impact.** As discussed in **Section IX, Hydrology and Water Quality**, the project site is currently vacant and covered in impervious surfaces and limited vegetation. There are no stormwater drainage facilities on the project site. Implementation of the project would not develop any permanent above-ground structures that would require the construction of stormwater drainage facilities. The project proposes to relocate an existing utility valve lot. As the project would not substantially alter the rate or volume of stormwater runoff discharged from the project site, no new or expanded storm water drainage facilities would need to be constructed. No mitigation is required.

**d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?**

**No Impact.** The project would not create any permanent structures that would require water services as it would only relocate an existing utility valve lot. As no population would be created by this project, there would be no demand for domestic water services generated by the project. Thus, no new or expanded water entitlements are needed for the project. No mitigation is required.

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

**No Impact.** The project would not build any permanent structures that would generate solid waste on a regular basis. Debris generated by the project's construction activities would be limited to soil excess and removal of the portable classroom unit onsite. Excess soil debris and waste would be taken to an approved off-site location. Thus, the project would not exceed the sufficient permitted capacity of a landfill. No mitigation is required.

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

***Less than Significant with Mitigation Incorporated.*** The project would be required to comply with the City of Fairfield's construction and demolition waste diversion requirements. This requires the projects to recycle or divert at least 50 percent of all project-related construction and demolition waste. Debris generated by the project's construction activities would be limited to soil excess and removal of the portable classroom unit onsite. Implementation of **Mitigation Measure XVII-1** would ensure that the project would comply with the City's construction and demolition waste diversion requirement.

**Mitigation Measure XVII-1:** Prior to project construction, a project-specific Debris Management Plan shall be prepared. The debris management plan shall include information regarding the estimated total volume or weight of waste generated by the project and means for diverting the waste, including the solid waste facilities to be used.

**Significance after Mitigation:** Adherence to **Mitigation Measure XVII-1** would ensure the project would be in compliance with federal, state, and local regulations related to solid waste, including AB 939, SB 1016, and the City of Fairfield's construction and demolition waste diversion requirements.

## XVIII. Mandatory Findings of Significance

	Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
--	--------------------	--	------------------------------	-----------

**Would the project:**

a) Have the potential to degrade quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?

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

b) Have impacts that are individually limited, but cumulatively considerable? (“Cumulatively considerable” means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?

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

c) Have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?

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

**a) Have the potential to degrade quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?**

**Less-than-Significant Impact.** The project would not substantially degrade the quality of the environment and would not impact special-status plant species. **Section IV, Biological Resources**, of this initial study includes mitigation measures to reduce potential impacts to special-status wildlife species and federally protected wetlands. Implementation of these mitigation measures would reduce potential impacts to the California red-legged frog, Swainson’s hawk, tricolored blackbird, white-tailed kite, loggerhead shrike, and special-status bat species to a less-than-significant level during project construction. Mitigation measures are also incorporated into the project to avoid, minimize and mitigate potential impacts to jurisdictional wetlands and other waters to a less-than-significant level.

**Section V, Cultural Resources**, of this initial study includes mitigation measures to reduce potential impacts on known and undiscovered cultural resources, including prehistoric Native American remains. Implementation of these mitigation measures would reduce potential impacts on Native American remains and other important relics from the major periods of California and prehistory to a less-than-significant-level if uncovered during construction activities. No additional mitigation is required.

**b) Have impacts that are individually limited, but cumulatively considerable? (“Cumulatively considerable” means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?**

***Less-than-Significant Impact.*** The project is located in the area of potential impact for the I-80/I-680/SR 12 Interchange project. Displacement and relocation of the PG&E valve lot was considered as part of the environmental effects of the Interchange project which was studied and published in a Draft Environmental Impact Statement (EIS) prepared by Caltrans in August 2010. The Draft EIS for the Interchange project identified potential cumulative project impacts to farmlands; traffic and transportation/pedestrian and bicycle facilities; natural communities; wetlands and other waters; and eight threatened and endangered species, including the California red-legged frog and the Swainson’s hawk.

PG&E and STA developed a more preferable alternative site for relocating the PG&E valve lot as described in this environmental document. While the PG&E Valve Lot Relocation project and the interchange project are located in the same geographical area, they are separate projects and the PG&E Valve Lot Relocation project would precede the Interchange project. This PG&E Valve Lot Relocation project is expected to be completed by fall 2012 whereas the Interchange project is currently still undergoing environmental review and is not expected to be constructed for several years. Additionally, the PG&E Valve Lot Relocation would not contribute to cumulatively considerable impacts due to the fact that all of the impacts associated with the project are less than significant and/or have been fully offset by the project mitigation. No further analysis is required.

**c) Have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?**

***Less-than-Significant Impact.*** As described throughout this environmental checklist, the project would not result in substantial environmental effects on human beings. Mitigation measures are identified in this initial study to reduce potential significant impacts related to biological resources, cultural resources, hydrology and water quality, potential road closures, and solid waste diversion. Implementation of these mitigation measures would ensure that the project would not result in impacts that would cause substantial adverse effects on human beings, either directly or indirectly. No additional mitigation is required.

## List of Appendices

The following studies and reports were prepared specifically for the project and are included as appendices to this initial study.

- Appendix A**     BAAQMD URBEMIS 2007 Calculations, September 2011.
- Appendix B**     Biological Evaluation Report, August 2011.
- Appendix C**     California Historical Resources Information System Report, June 2011.
- Appendix D**     EDR Radius Map Report with GeoCheck, July 2011.

## All Sources Consulted

- Association of Bay Area Governments. Dam Failure Inundation Hazard Map for the Entire Bay Area. <<http://www.abag.ca.gov/cgi-bin/pickdamx.pl>>. Accessed June 13, 2011.
- Association of Bay Area Governments (ABAG). Liquefaction Susceptibility Hazard Map. <<http://quake.abag.ca.gov/liquefaction/>>. Accessed June 9, 2011.
- Association of Bay Area Governments. Projections 2009.
- Bay Area Air Quality Management District. *Bay Area 2010 Clean Air Plan*. September 2010.
- Bay Area Air Quality Management District. *CEQA Air Quality Guidelines*. June 2010.
- California Department of Conservation. Farmland Mapping and Monitoring Program, Solano County Important Farmlands, 2008. <<ftp://ftp.consrv.ca.gov/pub/dlrp/FMMP/pdf/2008/sol08.pdf>>. Accessed May 3, 2011.
- California Department of Conservation, Geological Survey. Alquist-Priolo Earthquake Fault Zone Maps, Cordelia Quadrangle. July 1993.
- California Department of Forestry and Fire Protection. *Draft Fire Hazard Severity Zone Map in Local Responsibility Areas (LRA), Solano County*. September 2007.
- California Department of Resources Recycling and Recovery (CalRecycle). *Jurisdictional Diversion and Disposal Profile – City of Fairfield*. <<http://www.calrecycle.ca.gov/lgcentral/tools/mars/DrmcMain.asp?VW=Disposal>>. Accessed June 2, 2011.
- California Department of Resources Recycling and Recovery (CalRecycle). *Solid Waste Facility Listing – Potrero Hills Landfill (48-AA-0075)*. <<http://www.calrecycle.ca.gov/Profiles/Facility/Landfill/LFProfile1.asp?COID=48&FACID=48-AA-0075>>. Accessed June 2, 2011.
- California Department of Toxic Substances Control. EnviroStor Database. <<http://www.envirostor.dtsc.ca.gov/public/>>. Accessed June 7, 2011.
- California Department of Transportation (Caltrans). California Scenic Highway Mapping System. <[http://www.dot.ca.gov/hq/LandArch/scenic\\_highways/index.htm](http://www.dot.ca.gov/hq/LandArch/scenic_highways/index.htm)>. Accessed May 24, 2011.
- California Department of Transportation (Caltrans). *Draft Interstate 80/Interstate 680/State Route 12 Interchange Project Environmental Impact Report/Environmental Impact Statement*. August 2010.
- California Department of Transportation (Caltrans). *Historical Resources Evaluation Report for the I-80/I-680/SR 12 Interchange Project*. September 2009.
- California Regional Water Quality Control Board, San Francisco Bay Region. Order No. R2-2009-0039. April 2009.
- California State Water Resource Control Board. GeoTracker Database. <<http://geotracker.swrcb.ca.gov/>>. Accessed June 7, 2011.
- California State Water Resource Control Board. Storm Water Program. <[http://www.swrcb.ca.gov/water\\_issues/programs/stormwater/construction.shtml](http://www.swrcb.ca.gov/water_issues/programs/stormwater/construction.shtml)>. Accessed June 10, 2011.
- City of Fairfield. City of Fairfield General Plan. June 2002.

City of Fairfield. City Manager's Office, Utilities Webpage. <[http://www.fairfield.ca.gov/gov/depts/manager/ed/site\\_selection\\_and\\_incentives/community\\_data/utilities.asp](http://www.fairfield.ca.gov/gov/depts/manager/ed/site_selection_and_incentives/community_data/utilities.asp)>. Accessed June 2, 2011.

City of Fairfield. City Manager's Office, Waste and Recycling Webpage. <[http://www.fairfield.ca.gov/gov/depts/manager/administration/waste\\_and\\_recycling/default.asp](http://www.fairfield.ca.gov/gov/depts/manager/administration/waste_and_recycling/default.asp)>. Accessed June 2, 2011.

City of Fairfield. Fire Department, Fire Station Locations Webpage. <<http://www.fairfield.ca.gov/gov/depts/fire/stations/default.asp>>. Accessed May 31, 2011.

City of Fairfield. Ordinance No. 2004-14, *Solid Waste and Recyclables Collection Services Ordinance*. October 2009.

City of Fairfield. Police Department, Public Service Area Map Webpage. <[http://www.fairfield.ca.gov/gov/depts/police/public\\_service\\_area\\_map/default.asp](http://www.fairfield.ca.gov/gov/depts/police/public_service_area_map/default.asp)>. Accessed June 1, 2011.

City of Fairfield. Public Works Department, Flood Hazard Information Webpage. <[http://www.fairfield.ca.gov/gov/depts/pw/flood/flood\\_hazard\\_information.asp](http://www.fairfield.ca.gov/gov/depts/pw/flood/flood_hazard_information.asp)>. Accessed June 2, 2011.

City of Fairfield. Public Works Department, Parks & Trails Webpage. <<http://www.fairfield.ca.gov/gov/depts/pw/parks/default.asp>>. Accessed May 4, 2011.

City of Fairfield. *Scenic Vistas and Roadways Plan*. June 1999.

City of Fairfield. Zoning Map. <<http://www.fairfield.ca.gov/gov/depts/cd/planning/zoning/map.asp>>. Accessed May 3, 2011.

City of Fairfield. Zoning Ordinance. <<http://www.fairfield.ca.gov/gov/depts/cd/planning/zoning/default.asp>>. Accessed May 3, 2011.

Fairfield and Suisun Area Transit (FAST). Schedules and Maps. <<http://www.fasttransit.org/>>. Accessed June 13, 2011.

Fairfield-Suisun Sewer District. Wastewater FAQs Website. <<http://www.fssd.com/WastewaterFAQ.html>>. Accessed May 5, 2011.

Fairfield-Suisun Unified School District. About Fairfield-Suisun Unified School District Website. <[http://www.fsusd.k12.ca.us/about\\_fsusd/](http://www.fsusd.k12.ca.us/about_fsusd/)>. Accessed May 4, 2011.

Lee, Chris, Supervising Environmental Scientist, Solano County Water Agency. Personal communication, May 3, 2011.

Shepherd, Dawn, Dispatch and Records Manager. Fairfield Police Department. Personal communication, June 9, 2011.

Solano County. *Solano County General Plan*. November 2008.

Solano County Airport Land Use Commission. *Travis Air Force Base Land Use Compatibility Plan*. June 13, 2002.

Solano County Water Agency. *Solano Multispecies Habitat Conservation Plan, Final Administrative Draft*. May 2009.

Solano Local Area Formation Commission. *City of Fairfield 2008 Municipal Service Review*. Available: <<http://www.solanolafo.com/Studies/MSR/Cities/Fairfield/FairfieldMunicipalServiceReviewDocument2008.pdf>>. Accessed May 31, 2011.

- State Office of Planning and Research. *Guidelines for Noise-Compatible Land Use*. 2003.
- Thomas, Pamela Jo. *Quantifying Properties and Variability of Expansive Soils in Selected Map Units, Appendix B*. April 1998.
- U.S. Census Bureau. American FactFinder, 2010 Census.
- U.S. Department of Agriculture, Natural Resources Conservation Service. Web Soil Survey. <<http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx>>. Accessed June 8, 2011.
- U.S. Department of Homeland Security, Federal Emergency Management Agency. Definitions of FEMA Flood Zone Designations. <<http://www.msc.fema.gov/webapp/wcs/stores/servlet/info?storeId=10001&catalogId=10001&langId=-1&content=floodZones&title=FEMA%20Flood%20Zone%20Designations>>. Accessed June 13, 2011.
- U.S. Department of Homeland Security, Federal Emergency Management Agency. FEMA Map Service Center, Flood Insurance Rate Maps. <<http://www.msc.fema.gov/webapp/wcs/stores/servlet/FemaWelcomeView?storeId=10001&catalogId=10001&langId=-1>>. Accessed June 13, 2011.
- U.S. Department of Transportation, Federal Transit Administration. Transit Noise and Vibration Impact Assessment. May 2006.
- U.S. Geological Survey. EHP Quaternary Faults Map – Interactive. <<http://geohazards.usgs.gov/qfaults/map.php>>. Accessed June 7, 2011.
- University of California. *U.C. Berkeley Seismic Guidelines, Appendix I*. May 2003.
- University of California Museum of Paleontology. Miocene Mammal Mapping Project (MioMap). <<http://www.ucmp.berkeley.edu/miomap/>>. Accessed June 10, 2011.
- Vallejo Transit. Vallejo Transit Routes. <<http://www.vallejotransit.com/routes.html>>. Accessed June 13, 2011.

## Lead Agency and Report Preparers

Lead Agency	Role	Contact
Solano Transportation Authority	Review of Initial Study/ Mitigated Negative Declaration	Janet Adams

Preparers	Role	Contact
Circlepoint	Preparation of Initial Study/ Mitigated Negative Declaration	Scott Steinwert Audrey Darnell
Pacific Biology	Biological Resources	Joshua Phillips