# WRIGLEY CREEK IMPROVEMENT PROJECT
## FINAL INITIAL STUDY / MITIGATED NEGATIVE DECLARATION

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1.0 EXECUTIVE SUMMARY

This Final Initial Study / Mitigated Negative Declaration describes potential environmental effects that could result from implementation of the proposed Wrigley Creek Improvement Project. As required by the State CEQA Guidelines (Code of Regulations, Title 14, Section 15000 et seq.), the lead agency, the Santa Clara Valley Transportation Authority (VTA), is charged with the responsibility of avoiding or minimizing environmental impacts of proposed projects and balancing public objectives, including economic, social, and environmental issues. This document is intended to inform decision makers, relevant public agencies, and the general public what significant environmental effects might result from the proposed project.

The approximately 8.8-acre Wrigley Creek Improvement Project site is located along a portion of Wrigley Creek within the City of Milpitas, adjacent to Calaveras Boulevard / State Route 237 between Interstates 880 and 680. The project sponsor, VTA, proposes to restore and enhance a section of Wrigley Creek within a portion of the project site area including:

- Realign and create a more natural channel (e.g., add meanders);
- Maintain the presence of Congdon’s tarplant, a special-status plant species;
- Improve hydrologic and geomorphic functions of the creek such as sediment transport and deposition, fish and wildlife habitats, natural water quality improvement, and flood storage.

The project would mitigate for impacts identified in the environmental review of VTA’s Freight Railroad Relocation / Lower Berryessa Creek Project. In addition, VTA proposes to complete requested maintenance activities requested by the City of Milpitas within another portion of Wrigley Creek within the project site boundaries. Chapter 2.0 Description of the Proposed Project describes project components in detail.

A preliminary environmental review of the proposed project (see Chapter 3.0 Environmental Checklist) identified several topical areas that could be adversely affected and warranted additional analyses:

- Water Quality and Hydrology
- Biological Resources
- Air Quality and Climate Change
- Noise
- Aesthetics
- Cultural Resources
- Hazards and Hazardous Materials

For each topical area, environmental planners and technical specialists examined the existing conditions of these resources, evaluated potential significant environmental impacts that would result from project implementation, and identified appropriate mitigation measures for such impacts. These analyses are contained in Chapter 4.0 Environmental Setting, Impacts, and Mitigation Measures. The analyses determined that all potentially significant impacts of the proposed project could be avoided or mitigated to less-than-significant levels (see Exhibit 1.0-1). Therefore, the appropriate CEQA document for environmental review of this project is a Mitigated Negative Declaration (MND).

In addition, the analyses determined that the project would result in a number of beneficial effects to Water Quality and Hydrology, Biological Resources, and Aesthetics.

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1 Exhibit 1.0-1 provides a summary of recommended mitigation measures. Please see the appropriate topical area of Chapter 4.0 Environmental Setting, Impacts, and Mitigation Measures for the complete text.
Agency and Public Review of the Draft Environmental Document

The Initial Study / Proposed Mitigated Negative Declaration was circulated for agency and public review for 34 days beginning on November 25, 2009, and ending on December 28, 2009. A Notice of Availability (NOA) was distributed through the Office of Planning and Research / State Clearinghouse and filed with the Santa Clara County Clerk on November 25. The NOA was also published in the Milpitas Post on November 26 and mailed to approximately 4,900 residences and businesses along the Freight Railroad Relocation / Lower Berryessa Creek Project corridor on November 30.

VTA received comments from the California Department of Transportation (Caltrans) and the City of Milpitas on the document during the public comment period. This document includes responses to those comments in Chapter 5.0 Comments and Responses. Revisions to the draft document circulated for public review are shown in this final document in strikeout where text was deleted or underlined where added.
**Exhibit 2.0-1**  
*Summary of Less-than-Significant Impacts with Mitigation Incorporation*

<table>
<thead>
<tr>
<th>Environmental Checklist Item and Impact Summary</th>
<th>Mitigation Measure Summary</th>
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<tr>
<td><strong>Biological Resources</strong></td>
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<tr>
<td><strong>Biology</strong> a) Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or the U.S. Fish and Wildlife Service?</td>
<td><strong>Mitigation Measure Biology-1 (Nesting Birds)</strong> To ensure that no bird nests will be disturbed during construction, a qualified biologist shall conduct preconstruction surveys for nesting birds, including raptors and songbirds, in and immediately adjacent to the impact areas (within 200 feet). Non-disturbance buffer zone(s) shall be established around identified active nests in consultation with the California Department of Fish and Game (CDFG).</td>
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Implementation of the proposed project could result in a substantial adverse effect to special-status wildlife species: nesting birds, burrowing owl, and roosting bats. This would be a less-than-significant impact with mitigation incorporation.

**Mitigation Measure Biology-2 (Burrowing Owl)** Within two weeks prior to any ground-disturbing project-related construction activity, the project sponsor shall have a qualified biologist conduct preconstruction surveys for burrowing owls in suitable habitat within 250 feet of the project footprint in accordance with CDFG protocol.

If occupied burrows are found, impacts to them shall be avoided by establishing a buffer or through the use of passive relocation techniques. The size of the buffer area and types of construction permitted may be adjusted through consultation with CDFG.

**Mitigation Measure Biology-3 (Roosting Bats)** A pre-construction survey for roosting bats shall be performed by a qualified biologist within 30 days prior to removal of trees on the site, and prior to construction activities within 200 feet of the Calaveras Road overpass structure. If either a maternity roost or hibernation structure is present, one or more of the following mitigation measures shall be implemented:

- Project redesign to avoid tree removal;
- Revision of project schedule to commence tree removal before maternity colonies form (i.e., prior to March 1) or after (i.e., after July 31) young are volant (i.e., flying);
- Observance of disturbance-free buffer zones as determined by a qualified
<table>
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<th>Environmental Checklist Item and Impact Summary</th>
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<tr>
<td>Biology a) (continued)</td>
<td>biologist in consultation with CDFG during the maternity roost season (March 1 - July 31).</td>
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<td>• Safe eviction of individuals found in non-breeding hibernation structures under the direction of a qualified biologist in consultation with CDFG.</td>
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<tr>
<td>• Creation of replacement roosts at a suitable location on site or off site in coordination with a qualified biologist, and CDFG.</td>
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<tr>
<td>Biology c) Would the project have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?</td>
<td>Mitigation Measure Biology-4 (Waters of the State) VTA and / or the City of Milpitas shall mitigate for temporary impacts to 1,900 linear feet of Wrigley Creek during sediment removal and other proposed activities by restoring the impact area at a 1:1 replacement. Disturbed areas will be revegetated using a native, erosion control seed mix to stabilize disturbed soils and reduce the input of sediment to the channel. VTA and / or the City of Milpitas shall quantify the amount of wetland vegetation to be removed because of the City of Milpitas project maintenance activities and coordinate with the Regional Water Quality Control Board (RWQCB). Mitigation may include removal of nonnative vegetation and replanting with native vegetation.</td>
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<td>While project construction would result in a permanent modification of waters of the State, project implementation would result in a beneficial net increase of this resource. City of Milpitas project activities (e.g., sediment removal) would adversely affect waters of State. This would be a less-than-significant impact with mitigation incorporation.</td>
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### Environmental Checklist Item and Impact Summary

<table>
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<td>(Checklist items a) through c) are considered together in Section 4.3 Air Quality and Climate Change)</td>
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**Air Quality a)** Would the project conflict with or obstruct implementation of the applicable air quality plan?

**Air Quality b)** Would the project violate any air quality standard or contribute substantially to an existing or projected air quality violation?

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

Short-term construction emissions would result in emissions of pollutants that could conflict with or obstruct implementation of the applicable air quality plan, violate or contribute substantially to an existing or projected air quality violation and/or expose sensitive receptors to substantial pollutant concentrations. This would be a less-than-significant impact with mitigation incorporation.

Project implementation would result in construction-related greenhouse gas (GHG) emissions. This would be a less-than-significant impact with mitigation incorporation.

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| **Mitigation Measure Air Quality-1 (Construction Impacts)** VTA shall implement BAAQMD-recommended mitigation measures to reduce emissions of fugitive dust (PM$_{10}$ and PM$_{2.5}$) during construction activities. In addition, VTA Community Outreach staff shall be responsible for receiving, documenting, and responding to general construction and air quality concerns (i.e., dust) from neighboring properties and ensuring identified problems are corrected.

**Mitigation Measure Air Quality-2 (GHG Emissions)** VTA shall implement the following BAAQMD-recommended exhaust emissions mitigation measures during project construction:

- Alternative-fueled (e.g., biodiesel, electric) construction vehicles/equipment of at least 15 percent of the fleet;
- Utilize local building materials and sources (within 100 miles) for at least 10 percent of necessary supplies;
- Recycle at least 50 percent of construction waste or demolition materials (e.g., sackcrete). VTA and all hired contractors shall divert as much organic or inorganic waste away from landfills, as feasible, up to or exceeding 50 percent of total material removed.
### Environmental Checklist Item and Impact Summary

**Noise**

- **Noise a) Would the project 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 in other applicable local, State, or federal standards?**

  Short-term construction activities could result in annoyance and/or sleep disruption to occupants of the nearby existing noise-sensitive land uses and/or create a substantial temporary increase in ambient noise levels in the project vicinity. This would be a less-than-significant impact with mitigation incorporation.

- **Noise d) Would the project result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?**

  Short-term construction activities could result in annoyance and/or sleep disruption to occupants of the nearby existing noise-sensitive land uses and/or create a substantial temporary increase in ambient noise levels in the project vicinity. This would be a less-than-significant impact with mitigation incorporation.

### Mitigation Measure Summary

**Mitigation Measure Noise-1 (Construction Impacts)**  
In addition to adherence of provisions set forth in the City of Milpitas Municipal Code, VTA shall mitigate construction noise impacts by implementing measures including proper maintenance of construction equipment, locating temporary stationary noise generating equipment as far as possible from identified sensitive receptors, and utilization of “quiet” equipment. In addition, VTA Community Outreach staff shall be responsible for receiving, documenting, and responding to general construction and noise complaints from neighboring properties and correcting identified problems.

Same as **Mitigation Measure Noise-1 (Construction Impacts)**
### Environmental Checklist Item and Impact Summary

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<th>Cultural Resources</th>
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<td>(Checklist items a) through d) are considered together in Section 4.5 Cultural Resources)</td>
<td>Mitigation Measure Cultural Resources-1 (Disturbance of Subsurface Cultural Resources during Project Construction.) If subsurface cultural resources deposits are encountered during construction, work in the immediate vicinity shall be halted until a qualified archaeologist can assess the significance of the finds. The construction contract will include the following specifications regarding archaeological resources: Sub-surface construction activities, including clearing and grubbing, excavation, grading, and other earthmoving or land surface alteration activities, shall be monitored by a VTA archaeologist and/or Native American monitor, as determined by VTA. Should any archaeological or historical artifacts or skeletal material be discovered or unearthed during construction activities, all work within ten meters (~33 feet) of the find shall be halted. The contractor (subcontractor or Resident Inspector, as appropriate) shall immediately notify VTA Environmental Programs and Resources Management Department staff at (408) 321-5789, who will initiate procedures in accordance with 36 CFR 800.11 and State Law (California Public Resources Code, Section 5097.98 and Health and Safety Code, Section 7050.5 and Santa Clara County Ordinance Code Section B6-16 through B6-23). Construction activities within ten meters (~33 feet) of the find shall remain halted until authorization is obtained from the archaeologist or VTA Environmental Programs and Resources Management Department staff that construction in the vicinity of the find may recommence.</td>
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<tr>
<td>Cultural Resources a) Would the project cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?</td>
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<tr>
<td>Cultural Resources b) Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?</td>
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<td>Cultural Resources c) Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?</td>
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<td>Cultural Resources d) Would the project disturb any human remains, including those interred outside of formal cemeteries?</td>
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While no discernible impacts to cultural resources, including historical, archeological, and paleontological resources and / or human remains, are anticipated, the possibility cannot be precluded that such resources are present below the ground surface and could be damaged during proposed grading and construction activities. This would be a less-than-significant impact with mitigation incorporation.
Environmental Checklist Item and Impact Summary

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<th>Hazards and Hazardous Materials</th>
<th>Mitigation Measure Summary *</th>
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| **Hazards and Hazardous Materials**  
| a) Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials? | Same as Mitigation Measure Air Quality-1 for checklist items a), b), and c). |
| b) Would the project create a significant hazard to the public or the environment through reasonably foreseeable upset and/or accident conditions involving the release of hazardous materials into the environment? | |
| *Construction and grading activities including the re-use and transport of on-site soils could result in a health risk to site workers or the public. This would be a less-than-significant impact with mitigation incorporation.* | |
| c) Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school? | |
| *Proposed construction and future maintenance activities would result in a less-than-significant impact with mitigation incorporation to an identified school within one-quarter mile of the project site.* | |

*a* This text represents a summary of recommended mitigation measures. Please see the appropriate topical area of Chapter 4.0 Environmental Setting, Impacts, and Mitigation Measures for the complete text.
2.0 DESCRIPTION OF THE PROPOSED PROJECT

This chapter describes the location of the Wrigley Creek Improvement Project (the proposed project), discusses existing land uses, land use designations of the project site and its environs, and summarizes all aspects of the project as proposed, including required approvals by local, State, and federal agencies.

2.1 PROJECT LOCATION AND ENVIRONS

The project site is located along a portion of Wrigley Creek within the City of Milpitas just south of the Calaveras Boulevard / State Route 237 overcrossing (Exhibit 2.0-1). The project site is bound to the north by Industrial Way, to the east by a commercial and industrial park, to the west by the Union Pacific Railroad and Santa Clara Valley Transportation Authority (VTA) railroad right-of-way, and to the south by additional industrial development (Exhibit 2.0-2).

The approximately 8.8-acre project site is comprised of several parcels and narrows from north to south. Parcel ownership, easements, and right-of-way issues as they relate to the project site are discussed later in this chapter. The existing Wrigley Creek channel runs approximately 3,480 linear feet in distance over the project site. Other than the creek channel (approximately five feet deep on average) the project site is relatively level, sloping slightly from south to north with elevations ranging between 20 and 23 feet above mean sea level (MSL).

Wrigley Creek, within the project site boundaries is a linear, trapezoidal channel with gravel bars and rip rap or sackcrete armoring at several locations. The creek is narrow and shallow, and when waters levels are low, the water is not deep enough for fish. The creek has no floodplain. Chapter 4.0 Environmental Setting, Impacts, and Mitigation Measures provides additional detail about various characteristics of the project site (e.g., on-site vegetation) in the environmental setting for various topical areas.

2.2 PROJECT OVERVIEW AND OBJECTIVES

The project sponsor, VTA, proposes to restore and enhance a section of Wrigley Creek within a portion of the project site area by realigning the existing channel and creating a more natural channel. This restoration would enhance the hydrologic and geomorphic functions of the creek such as sediment transport and deposition, fish and wildlife habitats, natural water quality improvement, and flood storage. This component of the project would fulfill mitigation requirements applicable to VTA’s Freight Railroad Relocation / Lower Berryessa Creek Project (FRR / LBC Project). In addition to the restoration component, VTA proposes to perform requested maintenance activities by the City of Milpitas for sediment removal, vegetation management, and outfall repair along a section of Wrigley Creek south of the proposed restoration area. Section 2.3 Project Description describes both project components in detail.

1 Please see Section 2.3 Project Description for clarification on the size of the project site as this includes the total area for all project components.
Exhibit 2.0-1
Regional Location

Sources: HNTB Corporation and EDAW | AECOM, 2009.
Exhibit 2.0-2
Wrigley Creek Improvement Project Site

Sources: TerraServer and EDAW | AECOM, 2009.
FREIGHT RAILROAD / LOWER BERYESSA CREEK PROJECT OVERVIEW

The FRR / LBC Project relocates the existing Union Pacific Railroad freight railroad tracks within VTA’s right-of-way from north of the Union Pacific Railroad Warm Springs Yard in Fremont to south of their Milpitas Yard in Milpitas. The project also constructs drainage improvements on Calera Creek, and upgrades and enlarges box culverts on Toroges, Scott, Berryessa, Wrigley creeks, and two other unnamed creeks to accommodate design flow and water surface elevations from a 100-year flood event.

The FRR / LBC Project, which previously underwent environmental review and is currently under construction (as of 2009), will result in environmental impacts due to the replacement and / or extension of culverts and the loss of earthen drainage ditches. These impacts include:

- Permanent and temporary degradation or loss of federal and State waters and wetlands; and
- Permanent removal of approximately 100 individuals of Congdon’s tarplant (*Hemizonia [Centromadia] parryi ssp. Congdonii*). 3

Mitigation measures included in the FRR / LBC Project that would be implemented in the Wrigley Creek Improvement Project include replacement of wetlands and waters of the United States / State. The FRR / LBC Project mitigation requirements are also included in resource agency permits for this project (see Appendix C).

- Army Corps of Engineers (ACOE) permit issued pursuant to Section 404 of the federal Clean Water Act (33 U.S.C. Section 1344) requires mitigation for 0.002 acres of permanent fill to waters of the United States;
- California Department of Fish and Game (CDFG) Lake and Streambed Alteration Agreement requires mitigation for the permanent loss of Congdon's tarplants and the permanent loss of wetlands; and
- Regional Water Quality Control Board (RWQCB) Water Quality Certification issued pursuant to Section 401 of the federal Clean Water Act (33 U.S.C. Section 1341) requires mitigation for impacts to waters of the State.

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3 While environmental review of the FRR / LBC project anticipated the loss of 100 Congdon’s tarplants at the existing Wrigley Creek Improvement Project site, from implementation of the FRR / LBC project, these plants have not been impacted to date due to project revisions. However, VTA collected Congdon’s tarplant seed and fulfilled required mitigation for that project. This issue is discussed further in Section 2.3 Project Description and 4.2 Biological Resources.

4 File Number 26644S, March 17, 2008.

5 Notification No. 1600-2008-0266-3, August 1, 2008.

6 Site No. 02-43-C0589, June 26, 2009.
Exhibit 2.0-3 includes the most comprehensive impact calculations and mitigation requirements for impacts to waters of the State associated with the Section 401 Water Quality Certification by the RWQCB.

**Exhibit 2.0-3**

*Mitigation Requirements for Waters of the State due to the Freight Railroad Relocation / Lower Berryessa Creek Project*

<table>
<thead>
<tr>
<th>Creek</th>
<th>Permanent Impact (Linear Feet [lf] or Acres)</th>
<th>Mitigation Ratio (Mitigation : Impacts)</th>
<th>Mitigation Required (Linear Feet [lf] or Acres)</th>
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<tr>
<td>Unnamed Creek (Line B)</td>
<td>- 14 lf</td>
<td>1:1</td>
<td>- 14 lf</td>
</tr>
<tr>
<td>Scott Creek (Line A)</td>
<td>128 lf</td>
<td>1:1</td>
<td>128 lf</td>
</tr>
<tr>
<td>Calera Creek</td>
<td>Not applicable</td>
<td>1:1</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Berryessa Creek</td>
<td>80 lf</td>
<td>1:1</td>
<td>80 lf</td>
</tr>
<tr>
<td>Wrigley Creek</td>
<td>94 lf</td>
<td>1:1</td>
<td>94 lf</td>
</tr>
<tr>
<td>Drainage Ditch Wetlands</td>
<td>0.48 acres</td>
<td>2:1</td>
<td>0.96 acres (=1.0 acre)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>288 lf / 0.48 acres</td>
<td>--</td>
<td>288 lf / 1.0 acre</td>
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As Exhibit 2.0-3 shows, the FRR / LBC Project will permanently impact 0.48 acres of wetlands and 288 linear feet for the drainage improvements at several creeks.

Requirements for mitigation as originally described in the RWQCB’s Water Quality Certification include:

- Realignment, restoration, and enhancement of 1,642 linear feet of Wrigley Creek;
- Creation of an additional 339 linear feet of Wrigley Creek by incorporating meanders in the design of the realigned creek (for a total length of 1,981 linear feet); and
- Creation of 1.0 acres of seasonal floodplain wetlands.

It should be noted that at the time VTA submitted the application for a Section 401 Water Quality Certification, the design included the realignment of 1,642 feet of existing creek. A revised design, which was approved by the RWQCB subsequent to receipt of the Water Quality Certification, provides for the realignment of 1,580 linear feet of Wrigley Creek.

It should also be noted that while the Mitigation and Monitoring Plan written for the FRR / LBC Project shows 288 linear feet of impacts to the creeks, negotiations with the RWQCB resulted in the creation of 339 linear feet of Wrigley Creek by incorporating meanders in the design of the realigned creek.

7 It should be noted that while the minimum requirement for creation is 288 linear feet, the design available at the time the Water Quality Certification application was completed by VTA showed a minimum creation of 339 linear feet.
incorporation of the entire length of the meanders added to the realigned channel as sufficient mitigation. The revised design, which was approved by the RWQCB, includes 345 linear feet of added meanders.

The realignment of 1,580 linear feet of Wrigley Creek with the creation of 345 linear feet of meanders would result in a new creek length of 1,925 feet in this portion of the project site area.

The Wrigley Creek Improvement Project would fulfill mitigation requirements described in the environmental documents and permits for the FRR / LBC Project. In addition, a five-year monitoring period is required following construction to document the progress of the site and ensure the success of the mitigation project. Monitoring requirements are described in detail in the Wrigley Creek Improvement Project Mitigation and Monitoring Plan. 8

2.3 PROJECT DESCRIPTION

INTRODUCTION

As part of the Wrigley Creek Improvement Project, the project sponsor, VTA, proposes the following:

(1) Restore, enhance, and realign a portion of Wrigley Creek to fulfill mitigation requirements applicable to the FRR / LBC Project; and

(2) Perform requested maintenance activities by the City of Milpitas for sediment removal, vegetation management, and outfall repair.

The restoration and enhancement activities for the FRR / LBC project are referred throughout this document as the mitigation project and the area where this would occur is referred to as the mitigation site. The requested improvements by the City of Milpitas are referred to as the City of Milpitas project and the area where this would occur is referred to as the City of Milpitas site.

The mitigation site includes 1,580 linear feet of Wrigley Creek and adjacent VTA right-of-way immediately south of Industrial Way; totaling 5.6 acres (see Exhibit 2.0-4). The City of Milpitas site includes a 1,900-linear foot section of Wrigley Creek immediately south of the mitigation site, plus 360 feet of box culvert extending under Industrial Way and the Calaveras Boulevard / SR 237 overpass, immediately north of the mitigation site (see Exhibit 2.0-4). The City of Milpitas site totals 2.6 acres. The northern portion of the City of Milpitas site totals 0.6 acres. 9 Total acreage of the Wrigley Creek Improvement Project site would be approximately 8.8 acres.

8 Wrigley Creek Improvement Project Mitigation and Monitoring Plan, ICF Jones & Stokes, June 2009. Available from VTA on request.

9 Additional description and exhibits can be found in Section 4.2 Biological Resources.
Exhibit 2.0-4
Wrigley Creek Improvement Project - Proposed Site Plan

City of Milpitas Project Site
Mitigation Project Site
City of Milpitas Project Site

Sources: HNTB Corporation and Santa Clara Valley Transportation Authority, July 24, 2009.
FRR / LBC MITIGATION PROJECT

In order to restore natural creek functions within the realignment and restoration area for required FRR / LBC Project mitigation, VTA proposes to add meanders to provide floodplain storage, remove nonnative vegetation, and plant native wetland and riparian vegetation.

Subsequent to the receipt of the resource agency permits for the FRR / LBC Project, the design of the mitigation project was refined, which decreased the length of the realignment but increased the length of meanders. The acreage of wetland habitat has remained the same. As a result, the mitigation project includes the following features:

- An existing 1,580-foot long creek section would be realigned to the west and 345 linear feet would be added by incorporating meanders in the design of the realigned creek (for a total length of 1,925 linear feet); 10

- Bio-engineered bank treatment structures would be installed to secure the new creek configuration in place;

- 1.01 acres of seasonal wetlands would be created in the new floodplain;

- Existing outfalls on the east bank of the existing creek would be extended to the newly realigned eastern creek bank and degraded outfalls would be repaired. No new outfalls would be constructed;

- Nonnative vegetation would be removed from the mitigation site, and the new streamside, floodplain, and existing upland areas will be replanted with native trees, shrubs, and grasses. The native grass seed mix would include Congdon’s tarplant in a designated area; and

- New irrigation lines would be constructed to bring in potable water to ensure plant establishment. These lines would originate from Curtis Avenue to the south of the project site.

As previously described, anticipated impacts to 100 individuals of Congdon’s tarplant from implementation of the FRR / LBC project have not occurred to date. VTA collected seed to satisfy mitigation requirements for that anticipated loss. While the proposed mitigation project would remove the existing Congdon’s tarplants present onsite, it would use collected seed to maintain the existing population of Congdon’s tarplant within the mitigation site.

At the completion of construction, the mitigation site would be protected from vandalism and public dumping with a combination of chain link and split rail fence that discourage entry but would not preclude animal passage or maintenance access. In addition, sign(s) would be posted along the fencing that inform(s) the public that the area is an environmentally sensitive restoration area, no trespassing is allowed, and that dumping is prohibited.

10 These measurements are based on the preliminary engineering design at 65 percent complete. As design progresses to 100 percent complete, the actual creek relocation and restoration measurements may be further refined. However, the work would continue to meet the requirements included in the RWQCB 401 Water Quality Certification issued for the FRR / LBC Project.
The mitigation project includes maintenance activities as described in the Mitigation Monitoring and Reporting Plan to ensure that plantings would become established and the natural vegetative character of the creek corridor would be maintained: plant watering, herbicide treatment (approved for aquatic environments), and plant replacement as necessary. The mitigation site is anticipated to be self-maintaining once established; however, litter and debris may need to be removed periodically. Maintenance access would include the installation of gates near Industrial Way.

CITY OF MILPITAS REQUESTED PROJECT COMPONENTS

In addition to the features incorporated into the mitigation project that would address mitigation and permit requirements of the FRR / LBC Project, the City of Milpitas has requested that the Wrigley Creek Improvement Project include one-time maintenance activities for sediment removal, vegetation management, and outfall repair. The City of Milpitas project activities would include work within the box culvert and the linear creek channel north and south of the mitigation site, respectively (see Exhibit 2.0-4). Proposed additional work includes the following activities:

- Removal of sediment build-up from culverts that run under Industrial Way and outfall north of the Calaveras Boulevard / State Route 237 overcrossing. This would enable the culverts to convey all of the stormwater flowing in the creek;

- Removal of sediment build-up from approximately 1,900 linear feet of the creek channel from the southern limits of the project site south of the Gibraltar Pump Station to restore stormwater carrying capacity of the creek;

- Repair of existing outfalls as necessary in this southern portion of the creek; and

- Mowing vegetation and cutting trees to ground level on creek banks in this southern portion.

CREEK DIVERSION

Implementation of the project features would require that Wrigley Creek be diverted around the work area during construction. Diversion would be accomplished with pumps and pipes, gravity flow, cofferdams, and / or other approved method.

PARCEL OWNERSHIP, EASEMENTS, AND RIGHT-OF-WAY

VTA owns most of the property within the project site. Wrigley Creek, which flows from south (i.e., upstream) to north towards South San Francisco Bay (i.e., downstream) enters the project site from a culvert at its southernmost end, flows north along private parcel easements to the east of VTA’s property, enters VTA property, and eventually crosses under Industrial Way and Calaveras Boulevard / State Route 237 overcrossing in a culvert, leaving the project site. The City of Milpitas has easements on these private parcels to access, operate, and maintain the creek for flood control.

Implementation of the mitigation project would require access to the creek in order to realign a portion of the creek off some adjacent properties and onto VTA’s property as well as for maintaining the mitigation site (e.g., success of mitigation required for the FRR / LBC project), and conducting long-term monitoring. The City would grant rights of access through a Memorandum of Understanding and an encroachment agreement with VTA within the easement area used for Wrigley Creek. No new
property acquisition or new temporary construction easements would therefore be required. **Exhibit 2.0-5** describes parcels for which the City of Milpitas has easements on that would be affected by project implementation, while **Exhibits 2.0-6(a) and (b)** illustrate their locations.

**Exhibit 2.0-5**  
**Properties Associated with City of Milpitas Rights or Project Area**

<table>
<thead>
<tr>
<th>APN</th>
<th>Property Owner</th>
<th>Location</th>
<th>Acquisition Required?</th>
</tr>
</thead>
<tbody>
<tr>
<td>086-28-035</td>
<td>Hoffman Investment Company</td>
<td>1 South Milpitas Boulevard, Milpitas, 95035</td>
<td>No</td>
</tr>
<tr>
<td>086-28-040</td>
<td>Union Bank</td>
<td>11 South Milpitas Boulevard, Milpitas, 95035</td>
<td>No</td>
</tr>
<tr>
<td>086-28-041</td>
<td>Limar Realty Corp #2</td>
<td>31 South Milpitas Boulevard, Milpitas, 95035</td>
<td>No</td>
</tr>
<tr>
<td>086-39-003</td>
<td>Trinet Milpitas Associates LLC</td>
<td>345 Los Coches Street, Milpitas 95035</td>
<td>No</td>
</tr>
<tr>
<td>086-39-026</td>
<td>Harvest SCR LLC</td>
<td>157 Topaz Street, Milpitas, 95035</td>
<td>No</td>
</tr>
<tr>
<td>086-39-006</td>
<td>Clarkson California</td>
<td>193 Topaz Street, Milpitas, 93035</td>
<td>No</td>
</tr>
<tr>
<td>086-39-024</td>
<td>Santa Clara Christian Assembly</td>
<td>211 Topaz Street, Milpitas, 95035</td>
<td>No</td>
</tr>
<tr>
<td>086-39-009</td>
<td>Peripheral Storage, Inc.</td>
<td>304 Turquoise Street, Milpitas, 95035</td>
<td>No</td>
</tr>
<tr>
<td>086-42-031</td>
<td>City / County of San Francisco</td>
<td>1155 Market Street, 5th Floor, San Francisco, 94103</td>
<td>No</td>
</tr>
<tr>
<td>086-28-006</td>
<td>City / County of San Francisco</td>
<td>1155 Market Street, 5th Floor, San Francisco, 94103</td>
<td>No</td>
</tr>
<tr>
<td>086-42-016</td>
<td>Orinda Equity Partners, LLC</td>
<td>461 South Milpitas Boulevard, Milpitas, 95035</td>
<td>No</td>
</tr>
<tr>
<td>086-42-023</td>
<td>City of Milpitas</td>
<td>Gibraltar Drive, Milpitas, 95035</td>
<td>No</td>
</tr>
<tr>
<td>086-42-035</td>
<td>Westcore Milpitas, LLC</td>
<td>847 Gibraltar Drive, Milpitas, 95035</td>
<td>No</td>
</tr>
</tbody>
</table>

Source: Santa Clara Valley Transportation Authority, August 2009.
Exhibit 2.0-6(a)
Properties Associated with City of Milpitas Rights or Project Area

Source: Santa Clara Valley Transportation Authority, 2009.
Exhibit 2.0-6(b)
Properties Associated with City of Milpitas Rights or Project Area

Source: Santa Clara Valley Transportation Authority, 2009.
UTILITIES

Existing utilities to the west of the project site include an MCI telecom fiber optic line and a Chevron petroleum pipeline. These utilities would remain in place. On-site irrigation for the mitigation project would be provided to include running a water line from Curtis Avenue to Calaveras Boulevard / State Route 237 and between the existing MCI telecom fiber optic line and the Chevron pipeline.

CONSTRUCTION ACTIVITIES AND SCHEDULE

Schedule and Activities

Project construction would occur between April 15 and October 31, 2010, which is the time frame authorized by the relevant regulatory agencies to work within a creek channel. Construction hours are expected to occur from 7:00 AM to 7:00 PM, Monday through Friday except holidays, consistent with the City of Milpitas Municipal Code requirements. 11

Replanting of native species would occur in the fall of 2010 when the rainy season has or is about to begin in order to help plants establish during the first year’s growing season.

Depending on the construction start date, project components requested by the City of Milpitas (i.e., sediment removal, outfall repair, and vegetation management) may not be completed in 2010; therefore, maintenance activities of these features would occur between April 15 and October 31, 2011. Exhibit 2.0-7 describes the activities, estimated number of weeks to complete, and a basic description of the activity and type of equipment that would be utilized for the project.

Staging and Access

Construction staging would be within the VTA right-of-way. Construction access would be from Industrial Way near South Milpitas Boulevard.

Project implementation would require 12 to 16 weeks of concentrated trucking. Trucking routes to and from the site would be as follows.

From project site:

• To Interstate 880: Follow Industrial Way proceeding through parking lot to northernmost exit from Mercado Real Shopping Center to South Milpitas Boulevard, turn right onto South Milpitas Boulevard, turn right on Topaz Street, turn left onto Turquoise Street, left onto South Milpitas Boulevard, turn left onto westbound SR 237 / Calaveras Boulevard, proceed to Interstate 880.

• To Interstate 680: Follow Industrial Way proceeding through parking lot to northernmost exit from Mercado Real Shopping Center to South Milpitas Boulevard, turn right on South Milpitas Boulevard, turn right on Topaz Street, turn left onto Turquoise Street, left onto South Milpitas Boulevard, turn right onto eastbound SR 237 / Calaveras Boulevard, proceed to Interstate 680.

Exhibit 2.0-7
Description of Project Construction Activities

<table>
<thead>
<tr>
<th>Activity</th>
<th>Estimated Duration (Weeks)</th>
<th>Description / Equipment Used</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clearing and Grubbing</td>
<td>1</td>
<td>Contractor may use bulldozers, loaders, and excavators for clearing and grubbing, and trucks for offhaul of material.</td>
</tr>
<tr>
<td>Divert Creek</td>
<td>&lt; 1</td>
<td>Contractor may use loaders to deliver diversion pipe, pumps, and cofferdam materials to their locations. Energy dissipating material/device would be trucked in and constructed/placed downstream using an excavator or loader.</td>
</tr>
<tr>
<td>Clean Culvert at Industrial way</td>
<td>&lt; 1</td>
<td>Contractor may clean the culverts by hand and remove material from channel using an excavator and loading into trucks for offhaul.</td>
</tr>
<tr>
<td>Creek Realignment and Dewatering</td>
<td>4-5</td>
<td>Contractor may use excavators for excavation of channel and loading offhaul materials into trucks. Dewatering sumps would be dug using the excavator, and pumps and piping placed using excavator. Baker tank (if required) would be delivered and dewatering system would be connected to it and then outfall to downstream diversion outfall location with energy dissipating material/devices.</td>
</tr>
<tr>
<td>Desilting Upper Reach and Repair Outfalls,</td>
<td>3-4</td>
<td>Contractor may use excavators to remove material from the channel and load into trucks for offhaul.</td>
</tr>
<tr>
<td>Install Creek Bank Protection</td>
<td>3</td>
<td>Contractor may have materials delivered via trucks and use excavators to place creek bank protection.</td>
</tr>
<tr>
<td>Extend Outfalls</td>
<td>3</td>
<td>Contractor may truck materials to the site and place them using excavators.</td>
</tr>
<tr>
<td>Remove Creek Diversion</td>
<td>&lt; 1</td>
<td>Dewatering system would be removed, sumps backfilled using excavator, and piping and Baker tank removed. Diversion system would be removed using loaders to pull pumps and sections of piping. Handwork conducted while in the live channel. Heavy equipment that is still on site may be removed at this point.</td>
</tr>
<tr>
<td>Install Irrigation System</td>
<td>3</td>
<td>Contractor may trench by hand or by using a “ditch witch” or similar trenching equipment. Mini excavator may be used for connections to existing water lines, handwork when near utilities.</td>
</tr>
<tr>
<td>Install Permanent Stormwater Pollution Prevention Program Best Management Practices</td>
<td>&lt; 1</td>
<td>Hydroseed may be sprayed from truck, fiber rolls and erosion control blanket, etc. placed by hand</td>
</tr>
<tr>
<td>Native Planting / Congdon’s tarplant</td>
<td>3</td>
<td>Contractor may use a skidder with an auger attachment or one or two man augers to drill planting holes, or planting holes dug by hand.</td>
</tr>
</tbody>
</table>

Source: Santa Clara Valley Transportation Authority, October 2009.

2.4 REQUIRED APPROVALS / PERMITS

For the Wrigley Creek Improvement Project features related directly to the FRR / LBC mitigation project, VTA would obtain an ACOE Section 404 Permit and a CDFG Lake and Streambed Alteration Agreement. The existing RWQCB Section 401 Water Quality Certification would cover project
features associated with the FRR / LBC mitigation requirements. VTA would also obtain a Memorandum of Understanding and an encroachment agreement with the City of Milpitas for the construction, maintenance, and long-term monitoring of the project site.

For proposed features related to the City of Milpitas maintenance activities along other portions of Wrigley Creek, it is possible that an amendment to the existing RWQCB Section 401 Water Quality Certification would be required to cover some or all of the work. An ACOE Section 404 Permit may be required for the outfall work depending on the extent of repair; however, so long as the build-up of sediment removed from the culvert under Industrial Way or from the portion of the creek south of the project site and is not used as “fill material” in waters of the United States, a permit would not be required for this work. A CDFG Lake and Streambed Alteration Agreement may also be necessary for the outfall work and sediment removal. VTA would consult with these agencies as design progresses to determine the activities to be permitted, if necessary.

2.5 CUMULATIVE PROJECTS

The projects discussed in this section are planned or proposed projects that are within or close to the right-of-way of the Wrigley Creek Improvement Project (see Exhibit 2.0-8). VTA has coordinated and will continue to coordinate the design of the project with the development of these related projects. This section includes transit projects, water resource related projects, and development projects with an environmental document completed or currently underway.

**Silicon Valley Rapid Transit Project (BART Extension)**

Currently, Federal Transit Administration and VTA are proposing the Silicon Valley Rapid Transit Project (SVRT Project), which is described and analyzed in an Environmental Impact Statement (EIS) that was circulated for public review from March 20, 2009 to May 8, 2009 (Exhibit 2.0-8, #1). VTA previously prepared an Environmental Impact Report (EIR) for the BART Extension Project to Milpitas, San Jose, and Santa Clara, which was approved by the VTA Board of Directors in December 2004.

The EIS includes two alternatives: the SVRT Project Alternative would begin at the approved BART Warm Springs Station in Fremont and proceed on the former Union Pacific Railroad right-of-way through Milpitas to south of Mabury Road in San Jose. The alignment would then descend into a subway tunnel, continue through downtown San Jose, and terminate at grade in Santa Clara near the Caltrain Station. The total length of the alignment would be 16.1 miles. Six stations are proposed including one in Milpitas.

A Berryessa Extension Project (BEP) Alternative is also included in the EIS to address the New Starts Candidate Project for federal funding purposes. The BEP Project would begin at the approved BART Warm Springs Station in Fremont and proceed on the former Union Pacific Railroad right-of-way through Milpitas to near Las Plumas Avenue in San Jose. The total length of the alignment would be 9.3 miles. One station is proposed in Milpitas and one in San Jose.
Exhibit 2.0-8
Location of Cumulative Projects

Legend:
- Related Projects
- Existing & Future Key VTA Light Rail Transit (LRT) Stations
- Caltrain Station
- County Border

Source: Santa Clara Valley Transportation Authority, November 2009.
Berryessa Creek Flood Protection Project

The Santa Clara Valley Water District is planning the Berryessa Creek Flood Protection Project within the project area to increase the conveyance capacity of the creek to convey the 100-year design flow and to remove areas in Milpitas and San Jose from the 100-year floodplain (Exhibit 2.0-8, #2). The project is divided into the joint Santa Clara Valley Water District / ACOE Berryessa Creek Project and the Lower Berryessa Creek Project (AKA Berryessa Creek Levees Project). The joint Santa Clara Valley Water District / ACOE Berryessa Creek Project begins at Calaveras Boulevard in Milpitas and ends at Old Piedmont Road in San Jose. The Lower Berryessa Creek Project begins at the confluence with Lower Penitencia Creek in Milpitas and ends at Calaveras Boulevard. This project includes improvements on Calera Creek to prevent flooding upstream of the railroad corridor. The Lower Berryessa Creek Project includes construction of a multi-cell box culvert along Berryessa Creek, which is included in the FRR / LBC Project. Upon completion of these projects, flooding from overflow of Berryessa Creek within the project area would be eliminated. VTA is coordinating with the Santa Clara Valley Water District regarding the construction of these drainage facilities.

Calaveras Boulevard Widening Project

VTA is currently evaluating this project as one option in an I-680/I-880 cross-connector study (Exhibit 2.0-8, #3). This project includes widening the bridge at SR 237 over the alignment of the BEP and SVRTP alternatives. Because the widening project would pass over the proposed BART extension on an aerial structure, there is no direct impact, but the design and construction of the widening project would need to be coordinated with either alternative to avoid construction impacts and maintain required vertical clearances.

Milpitas Mid-Town Specific Plan

The Midtown Specific Plan (Exhibit 2.0-8, #4) includes the City’s original commercial and industrial core that is traversed by an extension of San Jose’s Tasman East light-rail line and the approved BART extension to San Jose from Fremont. The project provides for higher-density mixed-use “transit villages” organized around the transit stations. Residential development would be organized within a system of trails and ‘green’ streets. The concept for the Montague Avenue Station includes a higher-density mixed-use village with a transit green and pedestrian promenade to connect the light rail and BART station. Plans for the Main Street area include the introduction of neighborhood commercial uses, high-density housing, improved streetscape, and a town square.

Milpitas Transit Area Specific Plan

The Milpitas Transit Area Specific Plan EIR was approved in June 2008 by the Milpitas City Council and in April 2009 was amended to include parking standards (Exhibit 2.0-8, #5). The Milpitas Transit Area is centered on the area surrounding the existing Great Mall and Montague Light Rail Transit stations and the future BART station proposed near the intersection of Montague Expressway and Capitol Avenue. Located at the southern edge of the city, it is immediately adjacent to San Jose. The Transit Area is 437 acres in size, of which 146 acres are in the Great Mall Redevelopment Area and 245 acres are in other redevelopment areas. The maximum amount of development analyzed in this project’s EIR includes 7,109 housing units, 993,843 square feet of office space, 287,075 square feet of retail and 350 hotel rooms. The Transit Area Specific Plan is a component of the City’s General Plan and has binding legal authority to guide land use, circulation, and infrastructure in the Planning Area. As of July 2009, no specific projects have been approved by the City of Milpitas. The City of Milpitas has entitled two major projects within the Transit Area Specific Plan: “Milpitas Station”, a 318-unit residential project, and “Citation”, a 638-unit residential project.
3.0 ENVIRONMENTAL CHECKLIST

This following checklist utilizes significance criteria in Appendix G of the State CEQA Guidelines and evaluates potential environmental impacts that would occur with implementation of the proposed Wrigley Creek Improvement Project. Checklist items determined to result in a Less-than-Significant Impact with Mitigation Incorporation or a Less-than-Significant Impact are discussed in detail in Chapter 4.0 Environmental Setting, Impacts, and Mitigation Measures. Checklist items determined to result in No Impact are discussed briefly but excluded from further analysis, except where proposed restoration activities would result in a beneficial impact. Beneficial impacts are discussed in Chapter 4.0. No checklist items were determined to be Potentially Significant.

1. Project title: Wrigley Creek Improvement Project

2. Lead agency name and address:
   Santa Clara Valley Transportation Authority
   3331 North First Street
   San Jose, CA 95134

3. Contact person and phone number: Ann Calnan, Senior Environmental Planner, (408) 321-5789

4. Project location: City of Milpitas, CA

5. Project sponsor's name and address: Same as #2

6. General Plan Designation: Manufacturing and Warehousing (City of Milpitas General Plan)

7. Zoning: Heavy Industrial - M2 (City of Milpitas Zoning Ordinance)

8. Description of project: (Describe the whole action involved, including but not limited to later phases of the project, and any secondary, support, or off-site features necessary for its implementation. Attach additional sheets if necessary.)
   See Chapter 2.0 Project Description for a complete description of the whole action involved.

9. Surrounding land uses and setting: Briefly describe the project's surroundings:
   See Chapter 2.0 Project Description for a description of surrounding land uses.

10. Other public agencies whose approval is required (e.g., permits, financing approval, or participation agreement.)
    Regional Water Quality Control Board, U.S. Army Corps of Engineers, California Department of Fish and Game, City of Milpitas.
Environmental Factors Potentially Affected:

The environmental factors checked below would be potentially affected by this project or require additional discussion (see Chapter 4.0 Environmental Setting, Impacts, and Mitigation Measures), involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages:

- Aesthetics
- Biological Resources
- Hazards & Hazardous Materials
- Cultural Resources
- Water Quality and Hydrology
- Mineral Resources
- Noise
- Public Services
- Recreation
- Utilities / Service Systems
- Mandatory Findings of Significance

DETERMINATION: (To be completed by the Lead Agency)

On the basis of this initial evaluation:

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

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

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

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

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

1) A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).

2) All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.

3) Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.

4) "Negative Declaration: Less Than Significant With Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less-than-significant level (mitigation measures from Section XVII, "Earlier Analyses," may be cross-referenced).

5) Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration (Section 15063(c)(3)(D)). In this case, a brief discussion should identify the following:
   a) Earlier Analysis Used. Identify and state where they are available for review.
   b) Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.
   c) Mitigation Measures. For effects that are "Less than Significant with Mitigation Measures Incorporated," describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.
6) Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.

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

8) This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whatever format is selected.

9) The explanation of each issue should identify:

   a) The significance criteria or threshold, if any, used to evaluate each question; and

   b) The mitigation measure identified, if any, to reduce the impact to less than significant.
ENVIRONMENTAL ISSUE: AESTHETICS

<table>
<thead>
<tr>
<th>ENVIRONMENTAL ISSUE: AESTHETICS</th>
<th>Potentially Significant Impact</th>
<th>Less Than Significant With Mitigation Incorporated</th>
<th>Less Than Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Would the project have a substantial adverse effect on a scenic vista?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
</tr>
<tr>
<td>b) Would the project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
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</tr>
<tr>
<td>c) Would the project substantially degrade the existing visual character or quality of the site and its surroundings?</td>
<td>☐</td>
<td>☐</td>
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</tr>
<tr>
<td>d) Would the project create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?</td>
<td>☐</td>
<td>☐</td>
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</tr>
</tbody>
</table>

DISCUSSION

a) **Would the project have a substantial adverse effect on a scenic vista?**

The proposed project would result in no impact as there are no designated scenic vistas (either by the City of Milpitas or another agency) in the vicinity of the project site.

b) **Would the project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State scenic highway?**

The proposed project would result in no impact as the project site is not located within or adjacent to a State scenic highway.

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

The project site is located in a highly urbanized area in the City of Milpitas. While Calaveras Boulevard / State Route 237 (SR 237) is a designated scenic connector under the *City of Milpitas General Plan*, the visual quality of the project site, located in between commercial and industrial uses and the Santa Clara Valley Transportation Authority (VTA) / Union Pacific Railroad right-of-way, is substantially degraded.

The proposed restoration of Wrigley Creek would substantially improve the visual character of the project site as viewed from Calaveras Boulevard / SR 237. Therefore, project implementation would result in a ‘no’ or a ‘beneficial impact’. **Section 4.5 Aesthetics** describes applicable plans and policies relevant to visual resources, and illustrates existing and proposed conditions through the use of a visual simulation.

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

No lighting or other features that would result in glare are proposed as part of the project. Therefore, the project would have no impact.
### ENVIRONMENTAL ISSUE: AGRICULTURAL RESOURCES

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<tr>
<th>Potentially Significant Impact</th>
<th>Less Than Significant With Mitigation Incorporated</th>
<th>Less Than Significant Impact</th>
<th>No Impact</th>
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</table>

In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997, as updated) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland.

**a)** Would the project convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?

- [ ] Potentially Significant
- [ ] Less Than Significant With Mitigation Incorporated
- [x] Less Than Significant
- [ ] No Impact

**b)** Would the project conflict with existing zoning for agricultural use or a Williamson Act contract?

- [ ] Potentially Significant
- [ ] Less Than Significant With Mitigation Incorporated
- [ ] Less Than Significant
- [x] No Impact

**c)** Would the project involve other changes in the existing environment, which, due to their location or nature, could result in conversion of Farmland to non-agricultural use?

- [ ] Potentially Significant
- [ ] Less Than Significant With Mitigation Incorporated
- [ ] Less Than Significant
- [x] No Impact

### DISCUSSION

**a)** Would the project convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?

Project implementation would result in no impact as the project site is designated *Urban and Built Up Land* by the State’s Farmland Mapping and Monitoring Program. ¹

**b)** Would the project conflict with existing zoning for agricultural use or a Williamson Act contract?

No impact would occur as the project site is zoned for a non-agricultural use (i.e., Heavy Industrial) in the City of Milpitas Zoning Ordinance and no Williamson Act contract applies to the project site.

**c)** Would the project involve other changes in the existing environment, which, due to their location or nature, could result in conversion of Farmland to non-agricultural use?

The project site is located in a heavily urbanized area and no agricultural uses exist in the vicinity. Therefore, project implementation would result in no impact.

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### ENVIRONMENTAL ISSUE: AIR QUALITY

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<thead>
<tr>
<th>Potential Impact</th>
<th>Less Than Significant Impact</th>
<th>Less Than Significant Impact With Mitigation Incorporated</th>
<th>No Impact</th>
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<tbody>
<tr>
<td>a) Would the project conflict with or obstruct implementation of the applicable air quality plan?</td>
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<tr>
<td>Short-Term Emissions</td>
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<tr>
<td>Long-Term Emissions</td>
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<tr>
<td>b) Would the project violate any air quality standard or contribute substantially to an existing or projected air quality violation?</td>
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<tr>
<td>Short-Term Emissions</td>
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<tr>
<td>Long-Term Emissions</td>
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<tr>
<td>c) Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?</td>
<td>☐</td>
<td>☒</td>
<td>☐</td>
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<tr>
<td>Short-Term Emissions</td>
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<td>Long-Term Emissions</td>
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<tr>
<td>d) Would the project expose sensitive receptors to substantial pollutant concentrations?</td>
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<tr>
<td>Short-Term Emissions</td>
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<tr>
<td>Long-Term Emissions</td>
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<tr>
<td>e) Would the project create objectionable odors affecting a substantial number of people?</td>
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<tr>
<td>Short-Term Emissions</td>
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<td>Long-Term Emissions</td>
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### DISCUSSION

For checklist items a-c, short-term and long-term project-related activities would result in adverse changes relevant to all three checklist items. Therefore, checklist items a-c are grouped together and discussed after item c below.

a) **Would the project conflict with or obstruct implementation of the applicable air quality plan?**

b) **Would the project violate any air quality standard or contribute substantially to an existing or projected air quality violation?**

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

Short-term construction emissions would result in emissions of pollutants that could conflict with or obstruct implementation of the applicable air quality plan, violate or contribute substantially to an existing or projected air quality violation and/or expose sensitive receptors to substantial pollutant concentrations. This would be a less-than-significant impact with mitigation incorporation.

Long-term operational activities include maintenance of the mitigation project and one-time maintenance activities (e.g., sediment removal) for the City of Milpitas project would generate emissions of pollutants. However, as they would not violate standards or contribute substantially to an existing or projected air quality violation and/or expose sensitive receptors to substantial pollutant concentrations, this would be a less-than-significant impact.

Project implementation would result in construction-related greenhouse gas (GHG) emissions. This would be a less-than significant impact with mitigation incorporation. All three checklist items are discussed in detail in Section 4.3 Air Quality and Climate Change.

d) Would the project expose sensitive receptors to substantial pollutant concentrations?

Short-term construction and long-term operational activities would result in particulate exhaust emissions from diesel equipment. However, due to the distance of existing sensitive receptors from proposed activities and the dispersive qualities of diesel particulate exhaust, this would be a less-than-significant impact (see Section 4.3 Air Quality and Climate Change).

e) Would the project create objectionable odors affecting a substantial number of people?

While project implementation would result in diesel exhaust emissions, it would not create or expose a substantial number of people to objectionable odors. This would be a less-than-significant impact (see Section 4.3 Air Quality and Climate Change).
ENVIRONMENTAL ISSUE: BIOLOGICAL RESOURCES

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<thead>
<tr>
<th>Potentially Significant Impact</th>
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<th>Less Than Significant Impact</th>
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</table>

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

Implementation of the proposed project could result in a substantial adverse effect to special-status plant and animal species: Congdon’s tarplant, nesting birds, burrowing owl, and roosting bats.
However, restoration activities identified in the project description would replace the existing population of Congdon’s tarplant. In addition, incorporation of identified mitigation measures would reduce impacts to nesting birds, burrowing owl, and roosting bats to a less-than-significant level. See Section 4.2 Biological Resources for additional information.

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

Project implementation would result in temporary impacts to riparian habitat. This would be a less-than-significant impact. In addition, the project sponsor has agreed to replace an existing native plant species (creeping wild rye) during restoration planting activities following channel construction. See Section 4.2 Biological Resources for additional information.

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

While project implementation would result in a permanent modification of federally protected waters and wetlands it would result in a beneficial net increase of these resources. City of Milpitas project features would result in a less-than-significant impact to waters of the State with mitigation incorporation. See Section 4.2 Biological Resources for additional information.

d) Would the project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

Project implementation could interfere with movements of native, resident, or migratory fish or wildlife species, or with established native resident or migratory wildlife corridors. However, based on the highly disturbed nature of the habitat on site, and the proposed construction schedule, this would be a less-than-significant impact. See Section 4.2 Biological Resources for additional information.

e) Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

The project would result in no impact as implementation would not result in the removal of historic or heritage trees or conflict with any local tree preservation policy or ordinance. Since the project would restore and improve biological and hydrological functions of Wrigley Creek, it would not conflict with local policies or ordinances protecting biological resources.

f) Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

There is no Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or State habitat conservation plan adopted for the project area. Therefore, no impact would occur.
ENVIRONMENTAL ISSUE: CULTURAL RESOURCES

<table>
<thead>
<tr>
<th>ENVIRONMENTAL ISSUE: CULTURAL RESOURCES</th>
<th>Potentially Significant Impact</th>
<th>Less Than Significant Impact With Mitigation Incorporated</th>
<th>Less Than Significant Impact</th>
<th>No Impact</th>
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</thead>
<tbody>
<tr>
<td>a) Would the project cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
<td>☐</td>
</tr>
<tr>
<td>b) Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?</td>
<td>☐</td>
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<td>☐</td>
</tr>
<tr>
<td>c) Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?</td>
<td>☐</td>
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<tr>
<td>d) Would the project disturb any human remains, including those interred outside of formal cemeteries?</td>
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</table>

DISCUSSION

Checklist items a) through d) are considered together.

a) **Would the project cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?**

b) **Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?**

c) **Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?**

d) **Would the project disturb any human remains, including those interred outside of formal cemeteries?**

While no discernible impacts to cultural resources, including historical, archeological, and paleontological resources and / or human remains, are anticipated, the possibility cannot be precluded that such resources are present below the ground surface and could be damaged during proposed grading and construction activities. This would be a less-than-significant impact with mitigation incorporation. See **Section 4.6 Cultural Resources** for additional analysis.
## ENVIRONMENTAL ISSUE:
### GEOLOGY AND SOILS

<table>
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</thead>
<tbody>
<tr>
<td>a) Would the project expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? (Refer to California Geological Survey Special Publication 42.)</td>
<td>☑️</td>
<td>☑️</td>
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<tr>
<td>ii) Strong seismic ground shaking?</td>
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<tr>
<td>iii) Seismic-related ground failure, including liquefaction?</td>
<td>☑️</td>
<td>☑️</td>
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<tr>
<td>iv) Landslides?</td>
<td>☑️</td>
<td>☑️</td>
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</tr>
<tr>
<td>b) Would the project result in substantial soil erosion or the loss of topsoil?</td>
<td>☑️</td>
<td>☑️</td>
<td>☑️</td>
</tr>
<tr>
<td>c) Would the project 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?</td>
<td>☑️</td>
<td>☑️</td>
<td>☑️</td>
</tr>
<tr>
<td>d) Would the project be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994, as updated), creating substantial risks to life or property?</td>
<td>☑️</td>
<td>☑️</td>
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<tr>
<td>e) Would the project have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?</td>
<td>☑️</td>
<td>☑️</td>
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</tbody>
</table>

## DISCUSSION

a) Would the project expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:

i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? (Refer to California Geological Survey Special Publication 42.)

ii) Strong seismic ground shaking?
iii) Seismic-related ground failure, including liquefaction?

iv) Landslides?

For geologic hazards described in items i-iv, the proposed project would not result in the development of any structures or human uses (other than periodic maintenance activities) that would expose people or structures to substantial adverse effects, including the risk of loss, injury, or death. No impact would occur.

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

Grading activities could result in soil erosion and degradation of water quality in Wrigley Creek and downstream waters. This would be a less-than-significant impact with implementation of a required Stormwater Pollution Prevention Program as discussed in Section 4.1 Water Quality and Hydrology.

c) Would the project 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?

The proposed project would not result in the construction of any structures that would be subject to these geological hazards nor cause the project site to become unstable. No impact would occur.

d) Would the project be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994, as updated), creating substantial risks to life or property?

The project would not expose property or people to substantial risks associated with expansive soils. No impact would occur.

e) Would the project have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?

Project implementation would not result in the use of septic tanks or alternative waste water disposal systems. No impact would occur.
ENVIRONMENTAL ISSUE: HAZARDS AND HAZARDOUS MATERIALS

a) Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?  

<table>
<thead>
<tr>
<th>Potentially Significant Impact</th>
<th>Less Than Significant with Mitigation Incorporated</th>
<th>Less Than Significant Impact</th>
<th>No Impact</th>
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</table>

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

<table>
<thead>
<tr>
<th>Potentially Significant Impact</th>
<th>Less Than Significant with Mitigation Incorporated</th>
<th>Less Than Significant Impact</th>
<th>No Impact</th>
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</table>

c) Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

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<tr>
<th>Potentially Significant Impact</th>
<th>Less Than Significant with Mitigation Incorporated</th>
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</table>

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

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<tr>
<th>Potentially Significant Impact</th>
<th>Less Than Significant with Mitigation Incorporated</th>
<th>Less Than Significant Impact</th>
<th>No Impact</th>
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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?

<table>
<thead>
<tr>
<th>Potentially Significant Impact</th>
<th>Less Than Significant with Mitigation Incorporated</th>
<th>Less Than Significant Impact</th>
<th>No Impact</th>
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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?

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<tr>
<th>Potentially Significant Impact</th>
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g) Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

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<th>Potentially Significant Impact</th>
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h) Would the project expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?

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<tr>
<th>Potentially Significant Impact</th>
<th>Less Than Significant with Mitigation Incorporated</th>
<th>Less Than Significant Impact</th>
<th>No Impact</th>
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</table>
DISCUSSION

a) Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

Hazardous materials typically associated with construction and maintenance operations include petroleum products such as diesel fuel, gasoline, brake fluid, hydraulic oil, and herbicides. Release of construction-related hazardous materials could affect Wrigley Creek and downstream waters. This impact would be less than significant with implementation of a required Stormwater Pollution Prevention Program discussed in Section 4.1 Water Quality and Hydrology. Release of hazardous chemicals (e.g., herbicides) from future maintenance activities would not pose a substantial risk to persons in the project vicinity and therefore would be a less-than-significant impact (see Section 4.1 Water Quality and Hydrology).

Construction and grading activities including the re-use and transport of on-site soils could result in a health risk to site workers or the public. This would be a less-than-significant impact with mitigation incorporation. See Section 4.7 Hazards and Hazardous Materials for additional information.

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

Identified subsurface utilities on or adjacent to the Wrigley Creek project site include a Chevron pipeline, which carries highly-flammable liquid fuel. While there is a remote potential for accident (i.e., rupture and fire / explosion) during grading activities, the pipeline is well delineated and all required precautions have been incorporated into the proposed design and would be observed during project construction. Future leaks of the pipeline would not expose people to hazardous materials as no occupied structures are proposed as part of the project. Existing railroad operations would not pose any additional risk to humans as site access would be restricted to maintenance, biologists, or other workers with appropriate training to perform their duties adjacent to the Union Pacific Railroad right-of-way.

See Checklist item b) above regarding the reuse of existing soils.

c) Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

The Elan Esprit preschool is located just under one-quarter mile from the project site to the west of the site’s northern boundary. As described in Section 4.3 Air Quality and Climate Change, diesel emissions, a toxic air contaminant, would be generated during short-term construction activities and would not pose a substantial hazard to this school or the multifamily residences located closer to the site (approximately 324 feet) due to the dispersive nature of diesel exhaust and recommended mitigation measures. This impact would be a less than significant with mitigation incorporation.

Long-term operation and maintenance activities such as the application of herbicides would result in a less-than-significant impact to sensitive receptors given the relatively small amounts and frequency that they would be applied. See Section 4.7 Hazards and Hazardous Materials for additional information.
d) Would the project be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code §65962.5 and, as a result, would it create a significant hazard to the public or the environment?

The project area is not located on a site pursuant to Government Code Section 65962.5 (e.g., State Department of Toxic Substance Control ‘Cortese List’) and, as a result, would not create a substantial hazard to the public or the environment. 2 Identified sites in the vicinity of the project would not be disturbed by proposed construction activities. No impact would occur.

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?

The project area is not located within two miles of an airport land use plan or a public airport, or in the vicinity of private airport. Mineta San Jose International Airport is located approximately five miles southwest of the project site. Given the distance from this airport and that the project would not result in any new occupied structures, no impact would occur.

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?

See response to item e). No impact would occur.

g) Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

The proposed project would have no effect on any adopted emergency response or evacuation plans and proposes no new uses for which emergency services would be required. No impact would occur.

h) Would the project expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?

The project site is in a highly urbanized area relatively far from wildlands with high potential for fires. There are no residences immediately adjacent to the project site and no new structures would be placed onsite. Restoration activities would likely improve on-site conditions and lower the potential for fire by removing weeds and trash consistent with the City’s weed abatement program. 3

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3 Section 5.3 Fire Safety, Seismic and Safety Element, City of Milpitas General Plan, City of Milpitas, Updated 2002.
**ENVIRONMENTAL ISSUE:**
**WATER QUALITY AND HYDROLOGY**

<table>
<thead>
<tr>
<th>Potential Impact</th>
<th>Less Than Significant Impact With Mitigation Incorporated</th>
<th>Less Than Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Would the project violate any water quality standards or waste discharge requirements?</td>
<td>☐</td>
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</tr>
<tr>
<td>b) Would the project 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 that would not support existing land uses or planned uses for which permits have been granted)?</td>
<td>☐</td>
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</tr>
<tr>
<td>c) Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial on- or off-site erosion or siltation?</td>
<td>☐</td>
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</tr>
<tr>
<td>d) Would the project 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 on- or off-site flooding?</td>
<td>☐</td>
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<tr>
<td>e) Would the project create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?</td>
<td>☐</td>
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<tr>
<td>f) Would the project otherwise substantially degrade water quality?</td>
<td>☐</td>
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</tr>
<tr>
<td>g) Would the project 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?</td>
<td>☐</td>
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<tr>
<td>h) Would the project place within a 100-year flood hazard area structures that would impede or redirect flood flows?</td>
<td>☐</td>
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</tr>
<tr>
<td>i) Would the project 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?</td>
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</tr>
<tr>
<td>j) Would the project result in inundation by seiche, tsunami, or mudflow?</td>
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</tr>
</tbody>
</table>
DISCUSSION

a) Would the project violate any water quality standards or waste discharge requirements?

Construction activities would generate pollutants that could degrade water quality in Wrigley Creek and receiving waters. This would be a less-than-significant impact with implementation of a required Stormwater Pollution Prevention Program. See Section 4.1 Water Quality and Hydrology for additional information.

b) Would the project 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 that would not support existing land uses or planned uses for which permits have been granted)?

Project implementation would create additional creek length by incorporating meanders. This would provide opportunities for shallow groundwater recharge, resulting in a potential increase in local groundwater recharge. Therefore, the proposed project would result in no or beneficial impacts related to groundwater recharge (see Section 4.1 Water Quality and Hydrology).

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

While project implementation would increase the sediment transport capacity of the channel, no substantial increase in sediment load over existing conditions is anticipated. This would be a less-than-significant impact (see Section 4.1 Water Quality and Hydrology).

d) Would the project 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 on- or off-site flooding?

While the proposed project would alter the course of Wrigley Creek, it would improve its hydrologic and geomorphic functions. Project implementation would therefore result in no or beneficial impacts related to flooding (see Section 4.1 Water Quality and Hydrology).

e) Would the project create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?

Similar to item d), the proposed project would improve hydrologic and geomorphic functions of Wrigley Creek. Project implementation would therefore result in no or beneficial impacts related to flooding and water quality (see Section 4.1 Water Quality and Hydrology).

f) Would the project otherwise substantially degrade water quality?

Once constructed, the proposed project would not result in any discharges that might violate water quality standards or require the RWQCB to establish waste discharge requirements. Thus, no impacts are anticipated. The proposed project elements are expected to benefit water quality,
including increased channel length by incorporating meanders, establishment of floodplain areas, and installation of bioengineered storm drain outfalls.

g) Would the project 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?

The proposed project would not place housing within a 100-year flood hazard area, as the proposed project does not include construction of any structures. Please also refer to response h.

h) Would the project place within a 100-year flood hazard area structures that would impede or redirect flood flows?

The proposed project would not result in the placement of structures within a 100-year flood hazard area that would impede or redirect flood flows. In addition it would not increase or worsen flooding, even from the 100-year storm event, and may be beneficial and slightly improve floodwater conveyance (see Section 4.1 Water Quality and Hydrology).

i) Would the project 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?

The project would not expose people or structures to a significant risk of loss, injury, or death involving flooding. As described in response h), the proposed project includes improvements that would either improve flooding conditions or maintain existing conditions. In addition, the reach of the stream channel does not include any dams or levees which could expose people or structures to a significant risk of loss, injury, or death due to failure. The Association of Bay Area Governments (ABAG) dam failure inundation hazard map for Milpitas indicates that the project area is not located within a dam failure inundation area. The Santa Clara County Geologic Hazard Zones mapping also indicates that the project area is not located within a dike failure hazard zone. No impact would occur.

j) Would the project result in inundation by seiche, tsunami, or mudflow?

Seiches are standing waves created by seismically induced ground shaking or volcanic eruptions or explosions that occur in large, freestanding bodies of water. A tsunami is a series of waves that are caused by earthquakes that occur on the seafloor or in coastal areas. The project site is not located near the open ocean or any sizeable water body which could generate a seiche or tsunami. As the project area is located on relatively level terrain and is surrounded primarily by urban development, there is no potential for the project site to be inundated by a mudflow. The Santa Clara County Geologic Hazard Zones map also indicates that the project area is not located within a landslide hazard zone. No impact would occur.

4 Dam Failure Inundation Hazard Map for NW San Jose/Milpitas/Santa Clara, Association of Bay Area Governments, 1995.

5 Santa Clara County Geologic Hazard Zones, County of Santa Clara, 2002.

6 Ibid.
ENVIRONMENTAL ISSUE:
LAND USE AND PLANNING

<table>
<thead>
<tr>
<th>ENVIRONMENTAL ISSUE</th>
<th>Potentially Significant Impact</th>
<th>Less Than Significant With Mitigation Incorporated</th>
<th>Less Than Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Would the project physically divide an established community?</td>
<td>☐</td>
<td>☐</td>
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<td>☒</td>
</tr>
<tr>
<td>b) Would the project conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to, a general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?</td>
<td>☐</td>
<td>☐</td>
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</tr>
<tr>
<td>c) Would the project conflict with any applicable habitat conservation plan or natural community conservation plan?</td>
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<td>☐</td>
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</tr>
</tbody>
</table>

DISCUSSION

a) Would the project physically divide an established community?

Project implementation would not divide an established community as it is a restoration of an existing creek. No impact would occur.

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

As the project would restore and enhance the biologic, hydrologic, geomorphic, and aesthetic conditions of Wrigley Creek, it would not conflict with the goals and policies of applicable plans (e.g., City of Milpitas General Plan) adopted for the purpose of avoiding or mitigating an environmental effect. Inconsistencies with such plans would only result in a significant impact if a substantial adverse physical effect would occur. While the project could result in short-term construction-related impacts, such impacts would be less-than-significant with incorporation of mitigation or required regulatory controls as discussed primarily in Sections 4.1 Water Quality and Hydrology, 4.2 Biological Resources, 4.3 Air Quality and Climate Change, and 4.4 Noise. Therefore, no impact would occur related to conflicts with adopted plans.

c) Would the project conflict with any applicable habitat conservation plan or natural community conservation plan?

There is no Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or State habitat conservation plan adopted for the project area. Therefore, no impact would occur.
## DISCUSSION

### a) Would the project 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?

The proposed project would not 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 as no known mineral resources exist at the site. The project site is an existing creek in a highly urbanized area and not suitable for mineral resource extraction. No impact would occur.

### b) Would the project 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?

The project site is an existing creek in a highly urbanized area and is not delineated as a mineral resource recovery site on a local general plan, specific plan, or other land use plan. No impact would occur.
ENVIRONMENTAL ISSUE: NOISE

<table>
<thead>
<tr>
<th>Potentially Significant Impact</th>
<th>Less Than Significant With Mitigation Incorporated</th>
<th>Less Than Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Would the project result in the exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or in other applicable local, State, or federal standards? Short-Term Noise Sources</td>
<td>☒</td>
<td>☒</td>
<td>☐</td>
</tr>
<tr>
<td>Long-Term Noise Sources</td>
<td>☐</td>
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</tr>
<tr>
<td>b) Would the project result in the exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
</tr>
<tr>
<td>c) Would the project result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
</tr>
<tr>
<td>d) Would the project result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?</td>
<td>☐</td>
<td>☒</td>
<td>☐</td>
</tr>
<tr>
<td>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?</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
</tr>
<tr>
<td>f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?</td>
<td>☐</td>
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</tr>
</tbody>
</table>

DISCUSSION

a) Would the project result in the exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or in other applicable local, State, or federal standards?

Short-term construction activities could result in annoyance and/or sleep disruption to occupants of the nearby existing noise-sensitive land uses and/or create a substantial temporary increase in ambient noise levels in the project vicinity. This would be a less-than-significant impact with mitigation incorporation. Long-term operational activities include minimal maintenance of the mitigation project and one-time maintenance activities (e.g., sediment removal) for the City of Milpitas project and would result in noise levels that would not exceed the City of Milpitas’ noise...
standard of 65 dBA CNEL for multi-family residential areas. This would be a less-than-significant impact. See Section 4.4 Noise for additional analysis.

b) Would the project result in the exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?

Construction activities would result in groundborne vibration that would not exceed State or federal recommended standards. This would be a less-than-significant impact (see Section 4.4 Noise).

c) Would the project result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?

While project implementation would result in periodic maintenance activities, it would not result in any new permanent stationary or mobile noise sources. This would be a less-than-significant impact (see Section 4.4 Noise).

d) Would the project result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?

Short-term construction activities could result in annoyance and/or sleep disruption to occupants of the nearby existing noise-sensitive land uses and/or create a substantial temporary increase in ambient noise levels in the project vicinity. This would be a less-than-significant impact with mitigation incorporation (see Section 4.4 Noise).

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?

See Item f) below.

f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?

For items e) and f), the project area is not located within two miles of an airport land use plan or a public airport, or in the vicinity of private airport. Mineta San Jose International Airport is located approximately five miles southwest of the project site. Given the distance from this airport and the fact that the project would not include the development of any noise-sensitive receptors, the project would not expose people residing or working on the project site to excessive noise levels. No impact would occur.
### ENVIRONMENTAL ISSUE: POPULATION AND HOUSING

<table>
<thead>
<tr>
<th>ENVIRONMENTAL ISSUE</th>
<th>Potentially Significant Impact</th>
<th>Less Than Significant With Mitigation Incorporated</th>
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<th>No Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Would the project 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)?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
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</tr>
<tr>
<td>b) Would the project displace substantial numbers of existing homes, necessitating the construction of replacement housing elsewhere?</td>
<td>☐</td>
<td>☐</td>
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<td>☒</td>
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<tr>
<td>c) Would the project displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?</td>
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</tbody>
</table>

### DISCUSSION

a) Would the project 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)?

The proposed project would not result in the construction of new homes or businesses. Improved infrastructure (i.e., floodwater conveyance and culverts) would not reasonably be expected to induce population growth. No impact would occur.

b) Would the project displace substantial numbers of existing homes, necessitating the construction of replacement housing elsewhere?

The proposed project would not displace any existing homes. No impact would occur.

c) Would the project displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?

The proposed project would not displace persons or necessitate the construction of replacement housing. No impact would occur.
## ENVIRONMENTAL ISSUE: PUBLIC SERVICES

<table>
<thead>
<tr>
<th>Environmental Impact</th>
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<th>Less Than Significant With Mitigation Incorporated</th>
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<th>No Impact</th>
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</thead>
</table>

a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the 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:

- **Fire protection?**
- **Police protection?**
- **Schools?**
- **Parks?**
- **Other public facilities?**

### DISCUSSION

a) **Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the 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:**

The proposed project would not create any new structures and uses or add additional population that would require schools, parks, or other public facilities. Restoration of the site and project features like new fencing and signs prohibiting trespassing and public dumping could reduce the need for police or fire protection at the site.
3.0 Environmental Checklist

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ENVIRONMENTAL ISSUE: RECREATION

<table>
<thead>
<tr>
<th>Potential Impact</th>
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<th>Less Than Significant Impact</th>
<th>No Impact</th>
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</table>

a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?

b) Would the project include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?

DISCUSSION

a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?

The proposed project would have no impact associated with increasing the use of existing parks.

b) Would the project include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?

The project does not include new recreational facilities. The restored creek would be an environmentally sensitive area with no public access.
### ENVIRONMENTAL ISSUE: TRANSPORTATION / TRAFFIC

<table>
<thead>
<tr>
<th>Potential Impact</th>
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<th>No Impact</th>
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</thead>
<tbody>
<tr>
<td>a) Would the project cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)?</td>
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<tr>
<td>b) Would the project exceed, individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?</td>
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<tr>
<td>c) Would the project 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?</td>
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<tr>
<td>d) Would the project substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?</td>
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<tr>
<td>e) Would the project result in inadequate emergency access?</td>
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<tr>
<td>f) Would the project result in inadequate parking capacity?</td>
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<tr>
<td>g) Would the project conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?</td>
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### DISCUSSION

a) **Would the project cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)?**

See Item b) below.

b) **Would the project exceed, individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?**

For items a) and b), short-term construction traffic and intermittent vehicle trips generated by long-term project maintenance activities would not result in a substantial increase in the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections nor exceed, either individually or cumulatively, a level of service standard established by the county...
congestion management agency for designated roads or highways. This would be a less-than significant impact.

c) **Would the project 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?**

Project implementation would not result in any changes to existing air traffic patterns or create a hazardous condition. No impact would occur.

d) **Would the project substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?**

Project implementation would not create hazardous conditions as no changes to the existing street network or incompatible uses are proposed. No impact would occur.

e) **Would the project result in inadequate emergency access?**

The proposed project would not affect emergency access (the Milpitas Fire and Police departments would be provided independent access to proposed gates) and proposes no new uses for which police or fire protection would be required. As a result, the project should not adversely affect emergency response times, performance objectives, or service ratios for the City of Milpitas Police and Fire Departments. No impact would occur.

f) **Would the project result in inadequate parking capacity?**

The proposed project would not generate any new demand for parking or reduce the exiting parking supply in the vicinity. No impact would occur.

g) **Would the project conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?**

Proposed construction and restoration activities would not result in any changes to the existing street network or conflict with adopted plans and policies supporting alternative transportation. No impact would occur.
3.0 Environmental Checklist

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3.0 - 29

ENVIRONMENTAL ISSUE:
UTILITIES AND SERVICE SYSTEMS

<table>
<thead>
<tr>
<th>ENVIRONMENTAL ISSUE</th>
<th>Potentially Significant Impact</th>
<th>Less Than Significant Impact</th>
<th>Less Than Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Would the project exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?</td>
<td>☒</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
</tr>
<tr>
<td>b) Would the project 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?</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
<td>☒</td>
</tr>
<tr>
<td>c) Would the project 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?</td>
<td>☐</td>
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<td>☒</td>
</tr>
<tr>
<td>d) Would the project have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
<td>☒</td>
</tr>
<tr>
<td>e) Would the project result in a determination by the wastewater treatment provider that serves or may serve the project that it has adequate capacity to serve the project’s projected demand, in addition to the provider’s existing commitments?</td>
<td>☐</td>
<td>☒</td>
<td>☒</td>
<td>☒</td>
</tr>
<tr>
<td>f) Would the project be served by a landfill with sufficient permitted capacity to accommodate the project’s solid waste disposal needs?</td>
<td>☐</td>
<td>☒</td>
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</tr>
<tr>
<td>g) Would the project comply with federal, State, and local statutes and regulations related to solid waste?</td>
<td>☐</td>
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</tr>
</tbody>
</table>

DISCUSSION

a) Would the project exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?

No impact would occur as the proposed project would not result in any structures or uses that generate wastewater.

b) Would the project 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?

As stated above, since the project would not generate wastewater it would not require or result in the construction of new water or wastewater treatment facilities. No impact would occur.
c) **Would the project 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?**

The project would result in the improvement and repair of existing culverts and outfalls. Construction related impacts to hydrology, water quality, and biological resources would be less than significant or less than significant with mitigation incorporation and are discussed in their respective sections in Chapter 4.0 Environmental Setting, Impacts, and Mitigation Measures.

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

Irrigation water for proposed maintenance activities would not require new or expanded entitlements to serve the project.

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

See items a) and b). No impact would occur.

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

Operation of the proposed project would not generate solid waste. No impact would occur to area landfills.

g) **Would the project comply with federal, State, and local statutes and regulations related to solid waste?**

The project would not conflict with local statutes and regulations related to solid waste. No impact would occur. VTA would comply with all federal, State, and local regulations related to off haul of nonnative vegetation and soils (if any).
Environmental Checklist

Wrigley Creek Improvement Project

Final Initial Study / Mitigated Negative Declaration

January 8, 2010

ENVIRONMENTAL ISSUE: MANDATORY
FINDINGS OF SIGNIFICANCE

<table>
<thead>
<tr>
<th>Environment Issue</th>
<th>Potentially Significant Impact</th>
<th>Less Than Significant With Mitigation Incorporated</th>
<th>Less Than Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of an endangered, rare, or threatened species, or eliminate important examples of the major periods of California history or prehistory?</td>
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<td>b) Does the project have impacts that are individually limited, but cumulatively considerable? (“Cumulatively considerable” means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)</td>
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<td>c) Does the project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?</td>
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Authority: Public Resources Code Sections 21083 and 21087.


DISCUSSION

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

As discussed in Section 4.2 Biological Resources, the project would not result in any of the effects listed in item a). The project intends to restore and enhance biological, hydrological, and geomorphic functions of Wrigley Creek, a degraded urban drainage. Restoration activities would remove and replace nonnative plant species with native species as well as preserve Congdon’s tarplant (a special-status species) and creeping wildrye (a native grass).
As no historic or subsurface cultural resources are known occur on site and the likelihood of discovering such resources is believed to be low, the project is not anticipated to eliminate important examples of the major periods of California history or prehistory. **Section 4.6 Cultural Resources** provides a detailed description of cultural resources surveys completed to date.

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

Chapter 4.0 **Environmental Setting, Impacts, and Mitigation Measures** discusses cumulative effects for topical areas for which adverse changes would occur, generally from short-term construction activities. Such impacts would be less than significant or less than significant with mitigation incorporation. The project’s contribution to cumulative impacts for topical areas discussed in Chapter 4.0 would be less-than-cumulatively considerable.

c) **Does the project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?**

All identified construction related-impacts (e.g., construction noise and diesel exhaust) were determined to be less-than-significant impacts or less than significant with mitigation incorporation.
4.0 ENVIRONMENTAL SETTING, IMPACTS, AND MITIGATION MEASURES

The CEQA Checklist presented in Chapter 3.0 Environmental Checklist identified several topical areas for which the proposed Wrigley Creek Improvement Project could result in significant impacts or for which further explanation was warranted. Accordingly, the following topical areas are analyzed in this chapter:

- 4.1 Water Quality and Hydrology
- 4.2 Biological Resources
- 4.3 Air Quality and Climate Change
- 4.4 Noise
- 4.5 Aesthetics
- 4.6 Cultural Resources
- 4.7 Hazards and Hazardous Materials

As discussed throughout this chapter, the analysis demonstrates that all potentially significant impacts that would result from the Wrigley Creek Improvement Project could be avoided or mitigated to a less-than-significant level.

FORMAT OF TOPICAL ANALYSES

Each of the topical impact analyses in this document are organized as follows:

Environmental Setting

Existing environmental and regulatory conditions are described that summarize information compiled during the study process to prepare the Initial Study. Background materials referenced in the footnotes are listed in Section 6.3 Bibliography.

Environmental Impacts and Mitigation Measures

The section identifies the type and level of impacts that would likely occur from implementation of the proposed Wrigley Creek Improvement Project. Each checklist item warranting further discussion as noted in Chapter 3.0 Environmental Checklist is presented. The checklist item is followed by a summary statement that briefly describes the potential impact and its level of significance: all impacts were found to be Less than Significant or Less than Significant with Mitigation Incorporation. Less-than-Significant with Mitigation Incorporation impacts are followed by feasible mitigation measures that are available to reduce the magnitude of impact as well as a discussion of the agency responsible for implementing the measure. No mitigation measures are required for less-than-significant impacts.
Environmental Setting

Wrigley Creek collects runoff from a 0.60-square mile urbanized watershed and discharges to Ford Creek. Runoff from both creeks is pumped via the Wrigley-Ford Pump Station, operated by the City of Milpitas, into Berryessa Creek, which flows into Lower Penitencia Creek, which subsequently flows into Coyote Creek before eventually discharging to the South San Francisco Bay. Both Wrigley and Ford Creeks are operated to minimize flooding downstream by delaying the peak flows from tributaries. Wrigley Creek is characterized by 0.98 miles of earthen channel and a tributary network of more than two miles of underground pipes and storm drains.

Wrigley Creek, within the project site, is an engineered channel constructed to convey stormwater flows quickly. The creek’s simple channel design (i.e., straight channel with trapezoidal geometry) reflects this function. The top-of-bank width is approximately 40 feet, with a bottom width of approximately 15 feet. Side-slopes are 2:1, and channel depths vary between four and five feet. The existing channel form supports few ecological or geomorphic functions such as sediment transport and deposition, fish and wildlife habitats, natural water quality improvement, or flood storage.

Wrigley Creek is an ephemeral stream \(^1\) dominated by an urban flow regime, meaning stream flows are primarily generated by runoff from impervious surfaces directly connected to the creek by a stormdrain network. The Wrigley Creek watershed is estimated to be 90 percent impervious with predominantly industrial and commercial land uses. As a result, stream flow is almost coincident with rainfall and ceases shortly after rains end. Wrigley Creek may also convey nuisance flows, such as runoff from vehicle washing, landscape irrigation and other anthropogenic activities, throughout the year. Nuisance flows are characterized as runoff from urban water uses during non-storm periods.

Historically, creeks such as Wrigley Creek, located close to the valley floor and near San Francisco Bay, were supported year-round by groundwater inflows. Over time, as local groundwater became the dominant water supply, groundwater extraction caused considerable lowering of the local water table and measurable ground subsidence, as emptied portions of the aquifer settled and became compacted. \(^2\)

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\(^1\) An ephemeral stream is defined as a stream that flows briefly during and immediately following storm events.

Both processes are known to reduce or eliminate groundwater contributions to creek baseflows. Up to 3.5 feet of subsidence has been measured in the area of the project site and a geotechnical study documented groundwater levels in April 2008 that were approximately four to five feet below the channel bed elevation of Wrigley Creek. While groundwater levels in the area fluctuate in response to multi-year weather patterns (i.e., successive wet or dry years), tides, and local and/or regional withdrawals, groundwater extraction likely contributed to a permanent shift in the hydrologic flow regime of local creeks, including Wrigley Creek, from a perennial to an ephemeral status.

No information is available on existing water quality in Wrigley Creek or Ford Creek. However, Wrigley Creek is an earthen ditch constructed to convey urban stormwater and, therefore, existing water quality is likely to reflect the urbanized character of the watershed, with storm runoff and nuisance flows contributing the typical suite of urban runoff pollutants (i.e., nutrients, trace metals, oil and grease, pesticides, and bacteria).

The Federal Emergency Management Agency (FEMA) mapped the 100-year flood elevations throughout the Wrigley Creek project site. The existing channel through the project site has been modeled in a feasibility study to completely contain the 100-year flood. The modeling assumed that the culvert inlets and outlets that serve to convey water downstream are not blocked and that water can therefore pass through unobstructed.

**REGULATORY SETTING**

The California State Water Resources Control Board (SWRCB) and the nine Regional Water Quality Control Boards (RWQCBs) have the authority in California to protect and enhance water quality, both through their designation as the lead agencies in implementing the Section 319 non-point source program of the federal Clean Water Act and from the State’s primary water pollution control legislation, the Porter-Cologne Act. Under Porter-Cologne, the RWQCBs regulate the discharge of waste to waters of the State. The terms “discharge of waste” and “waters of the State” are broadly defined in Porter-Cologne, such that discharges of waste include fill, any material resulting from human activity, or any other discharge that may directly or indirectly affect waters of the State. Waters of the State include any surface water or groundwater, including saline waters, within the boundaries of the State. All parties proposing to discharge waste that could affect waters of the State must file a report of waste discharge with the RWQCB, which will then respond to the report by issuing Waste Discharge Requirements (WDRs) in a public hearing, or by waiving WDRs (with or without conditions) for that proposed discharge. A WDR may also be issued in addition to a water quality certification under Clean Water Act Section 401.

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5 Perennial streams are those that exhibit flow year-round.

6 The 100-year flood elevation is the flood elevation that has a one percent chance of being equaled or exceeded each year.

The San Francisco Bay RWQCB Region 2 office guides and regulates water quality in streams and aquifers within portions of the nine counties surrounding San Francisco Bay through designation of beneficial uses, establishment of water quality objectives, administration of the National Pollution Discharge Elimination System (NPDES) permit program for stormwater and construction site runoff, and Clean Water Act Section 401 water quality certification where development results in fill of jurisdictional wetlands or waters of the U.S.

The 1987 amendments to the Clean Water Act [Section 402(p)] provided for U.S. Environmental Protection Agency (U.S. EPA) regulation of several new categories of non-point pollution sources within the existing NPDES program. Phase I of the stormwater runoff program relies on NPDES permit coverage to address construction activities that disturb an area of more than five acres. The U.S. EPA has delegated management of California’s NPDES permit program to the SWRCB and the RWQCB. The Phase II Final Rule, which took effect on March 10, 2003, extended permit coverage to certain construction sites that disturb an area of one or more acres, including smaller sites that are part of a larger common plan of development or sale. The applicants of projects that result in the disturbance of more than one acre of land during construction are required to apply for coverage under the NPDES Construction Activities general permit by submitting a Notice of Intent to the SWRCB.

**San Francisco Bay Water Quality Control Plan**

The RWQCB regulates water quality in the Bay Area in accordance with the Water Quality Control Plan (Basin Plan) which was last amended in 2007. The Basin Plan presents the beneficial uses that the RWQCB has designated for significant surface waters, aquifers, and wetlands, as well as the water quality objectives and criteria that must be met to protect these uses. As discussed below, the waters of Wrigley Creek eventually flow into South San Francisco Bay. The Basin Plan designates specific existing beneficial uses for the South San Francisco Bay, including: ocean, commercial, and sport fishing;

- Estuarine habitat;
- Industrial service supply;
- Fish migration;
- Navigation;
- Preservation of rare and endangered species;
- Water contact recreation,
- Non-contact water recreation;
- Shellfish harvesting;
- Fish spawning; and
- Wildlife habitat.
DISCUSSION OF INITIAL STUDY CHECKLIST ITEMS

Water Quality a) Would the project violate any water quality standards or waste discharge requirements?

Construction activities would generate pollutants that could degrade water quality in Wrigley Creek and receiving waters. This would be a less-than-significant impact with preparation and implementation of a required Stormwater Pollution Prevention Plan.

Although the project site is flat and consists of clayey soils with low risk of erosion, the proposed mitigation project could result in a temporary degradation of water quality in Wrigley Creek during project implementation. Sediment is the constituent of greatest concern due to potential erosion during grading, soil removal or replacement, and compaction of fill areas. Once project construction is completed, revegetation of disturbed areas and replanting of the stream corridor as proposed would minimize risks of erosion and sediment delivery to the channel.

Other pollutants that could affect surface-water quality during project construction include petroleum products (e.g., gasoline, diesel, kerosene, oil, and grease) from operating heavy machinery and equipment, paints and solvents, detergents, fertilizers, and pesticides. In addition to chemical contaminants, construction debris, trash, litter, and waste (e.g., packing material, plastic bags, paper, bottles, and cigarette butts) could also enter the water, diminishing water quality in Wrigley Creek and receiving waters.

As the proposed project would disturb more than one acre of land, VTA would be required to file a Notice of Intent with the SWRCB and apply for coverage under the NPDES General Construction No. CAS000002. The General Permit also requires the development and implementation of a Storm Water Pollution Prevention Plan (SWPPP). The contractor will be responsible for preparing and executing the SWPPP for those portions of the project.

The SWPPP would detail the treatment measures and site-specific construction-phase and post-construction best management practices (BMPs) that would be implemented to minimize discharges of pollutants in stormwater runoff to the maximum extent practicable. The erosion and sediment control plan, which forms a significant portion of the construction-phase controls required in a SWPPP, typically includes components such as: phasing of grading, limiting areas of disturbance, designation of restricted-entry zones, dewatering practices, diversion of runoff away from disturbed areas, protective measures for sensitive areas, outlet protection and provision for revegetation or mulching.

As described in Chapter 2.0 Description of the Proposed Project, construction would occur between April 15 and October 31 when the regulatory agencies authorize work within a creek channel. Wrigley Creek would also be diverted, using pumps and pipes, gravity flow, cofferdams, and/or another approved method, around the work area during construction. These measures would serve to minimize the potential for transport of sediment or pollutants into the creek.

Selection and design of the water quality BMPs would be reviewed and approved by VTA and City of Milpitas. Permittees are required to conduct annual monitoring and reporting to ensure that BMPs are correctly implemented and effective in controlling the discharge of stormwater-related pollutants. BMPs may include, but are not limited to, the following:
• Schedule and sequence construction activities to minimize the areal extent and duration of site disturbance at any time and to take local climate into consideration to reduce the amount and duration of soil exposed by wind, rain, runoff, and vehicle tracking.

• Schedule grading and soil removal and replacement operations during dry months and allow enough time before rainfall begins to stabilize the soil with vegetation or physical means or to install sediment trapping devices. Construction of the mitigation site would occur between April 15 and October 31, 2010.

• Install sediment control devices during construction which may include, but are not limited to, silt fences, fiber rolls, and geotextile mats.

• Implement wind erosion or dust control procedures consisting of applying water or other dust palliatives as necessary to prevent or alleviate dust nuisance generated by construction activities. This may include covering small stockpiles or areas as an alternative to applying water or other dust palliatives.

• Keep hazardous materials and other wastes at least 100 feet from any wetlands, creeks, and drainage channels whenever possible.

• Equipment should not be parked below the high water mark unless allowed by a permit.

• Maintain spill cleanup equipment in proper working condition.

• Maintain controlled construction staging and site entrance areas a minimum of 100 feet from stream channels or wetlands whenever possible to minimize accidental spills and runoff of contaminants in stormwater.

• Specify solid waste management practices to prevent the discharge of pollutants to stormwater from solid waste including designation of waste collection areas on site and regular waste collection.

• Prevent, reduce, or eliminate the discharge of pollutants from material delivery and storage to the stormwater system or watercourses by minimizing the storage of hazardous materials on site, storing materials in a designated area, installing secondary containment, conducting regular inspections, and training employees and subcontractors.

• Upon project completion, re-vegetate disturbed areas and ensure that appropriate plant cover becomes established in disturbed areas. As described as part of the project, bio-engineered bank treatment structures will be installed to secure the new creek configuration in place and native wetland and riparian vegetation will be planted.

VTA and the City of Milpitas would review the SWPPP to verify that the construction-phase BMPs are designed in compliance with the appropriate criteria, as set forth in recommended guidance such as the California Stormwater Best Management Practices Handbook. Once grading begins, the SWPPP would be required to be kept on site and updated as needed while construction progresses. VTA’s resident inspector and the contractor would enforce compliance with the regulatory requirements of the NPDES permits through periodic site inspections and review of project submittals. Thus, potential construction-phase impacts on water quality due to erosion would be avoided through preparation and implementation of a SWPPP. Other potential construction-phase pollutants would be controlled to meet water quality standards through project management and other ‘housekeeping’ measures required.
for inclusion in the SWPPP. The regulatory requirement for preparation of a SWPPP and subsequent enforcement of compliance would provide adequate protection of water quality and ensure that temporary constructed-related impacts related to this issue are less than significant.

**Water Quality b)** Would the project 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)?

Project implementation would create additional creek channel by incorporating meanders. These features would provide opportunities for shallow groundwater recharge, resulting in a potential increase in local groundwater recharge. Therefore, the proposed project would result in no or beneficial impacts related to groundwater recharge.

The proposed project would not add imperious surface to the project area. Wrigley Creek is currently a linear, trapezoidal channel with rip rap or sackcrete armoring at several bank locations. The mitigation project would enhance surface-groundwater connectivity through the introduction of a meandering channel design and floodplain construction. The proposed project would result in the creation of an additional 345 linear feet of Wrigley Creek by incorporating meanders. These features would provide opportunities for shallow groundwater recharge, resulting in a potential increase in local groundwater recharge, which would be a benefit. Therefore, the mitigation project would have no or a beneficial impact related to groundwater depletion.

In addition, the proposed mitigation project would include irrigation for one to three years following installation of revegetation plantings. Irrigation water would be applied by hand-watering or through the use of drip irrigation and would likely take place weekly during the dry season during the first year after planting, and then only bimonthly in years two and three after planting. Irrigation practices would only be temporary and would not have a net affect on groundwater levels.

**Water Quality c)** Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?

While the proposed project would alter the course of a section of Wrigley Creek, it would increase the sediment transport capacity of the channel; however, no substantial increase in sediment load over existing conditions is anticipated. This would be a less-than-significant impact.

The proposed project would not substantially change existing drainage patterns on the project site, nor would it result in substantial erosion or siltation on- or off-site. A meandering channel with lateral floodplains would be constructed within a defined reach of the existing channel and creek corridor to enhance and restore hydrologic and geomorphic functions such as sediment transport and deposition, fish and wildlife habitats, natural water quality improvement, or flood storage, which would be a benefit. The proposed project would maintain all existing storm drain outfalls on this reach of the channel and includes bioengineered enhancements to the storm drains that would help reduce the velocity of stormwater discharges and minimize scour around infrastructure. These bioengineering enhancements would provide additional benefits from the proposed project.

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8 Wrigley Creek Improvement Project Mitigation and Monitoring Plan, Santa Clara Valley Transportation Authority, 2009.
The channel design process included evaluation of a one-dimensional hydraulic model to quantify flow velocities and computation of potential changes to sediment transport or capacity using a recognized sediment transport formula. While the estimated sediment transport capacity of the proposed channel design would increase, no substantial increase in sediment transport over existing conditions is anticipated because sediment delivery is already limited by the urbanized condition of the watershed. Wrigley Creek collects stormwater runoff in a 0.60 square mile urbanized watershed. Therefore, the project would have a less-than-significant impact related to alteration of drainage patterns or increased erosion and siltation.

**Water Quality d)** Would the project 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 offsite?

While the proposed project would alter the course of a section of Wrigley Creek, it would improve its hydrologic and geomorphic functions. Project implementation would therefore result in no or beneficial impacts related to flooding.

Please refer to responses c) and e). While the proposed project would alter the course of a section of Wrigley Creek, it would not result in an increase in surface water runoff that would result in flooding. The proposed mitigation project would create 1.01 acres of seasonal wetlands in the floodplain which would provide floodplain storage. The project was designed to accommodate design flow and water surface elevations from a 100-year flood event. This would be beneficial.

**Water Quality e)** Would the project create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?

The proposed project would improve hydrologic and geomorphic functions such as sediment transport and deposition, fish and wildlife habitats, natural water quality improvement, or flood storage within the Wrigley Creek corridor. The project does not include any design elements, such as new impervious surfaces that would increase runoff and cause the capacity of existing drainage infrastructure downstream to be exceeded, nor would it increase risks of flooding.

The proposed project would also not contribute additional sources of polluted runoff, as it does not involve uses that would be likely to degrade water quality. Existing sources of creek flows consist of runoff from predominantly industrial and commercial uses. Wrigley Creek also conveys nuisance flows during non-storm periods, consisting of irrigation runoff, car-washing, street cleaning, and other types of uncontrolled discharges. Project elements, including increased channel length with meanders, establishment of floodplain areas, and installation of bioengineered storm drain outfalls are expected to benefit water quality. Maintenance activities or emergency access to the creek would not be likely to introduce oils or other contaminants into the creek, as no equipment would be operated in the wetted creek area.

The proposed project would maintain the existing storm drain infrastructure that conveys runoff to Wrigley Creek as well as the in-stream culverts located at Industrial Way. The storm drain outfalls in this reach would be reconstructed and enhanced to improve water quality and reduce maintenance, while maintaining existing sizes and capacity and adhering to local or regional design standards for stormwater infrastructure. These actions would be beneficial. As the project would not increase the
rate or amount of surface runoff, the project would not contribute runoff water that would exceed the capacity of the existing or planned stormwater drainage systems. The proposed project also would not contribute substantial additional sources of polluted runoff. Therefore, the proposed project would result in no or beneficial impacts related to flooding or additional sources of polluted runoff.

**Water Quality h) Would the project place within a 100-year flood hazard area structures which would impede or redirect flood flows?**

Project implementation could improve floodwater conveyance and reduce surface water levels experienced during a 100-year flood event. The project would result in no or a beneficial impact.

The proposed project would not place, within a 100-year flood hazard area, structures that would impede or redirect flood flows. The proposed channel design adequately meets the project goal of similar flow conveyance during 100-year flood conditions, as compared to existing conditions. Hydraulic modeling predicted maximum water surface elevations of 0.0 to 0.63 feet below existing conditions for the 100-year design flood event, even assuming full growth of new plantings planned for the entire length of the project reach in the mitigation site. Thus, the proposed project would result in no impact as it would not increase or worsen flooding, even from the 100-year storm event; rather it may be beneficial and slightly improve floodwater conveyance.

**CUMULATIVE IMPACTS**

As described above, the only potential impact from the proposed project would be a temporary, construction-phase impact to water quality, which would be avoidable through preparation and implementation of an erosion and sediment control plan and SWPPP, as required by VTA and the City of Milpitas for compliance with the NPDES Construction General permit. Cumulative impacts to water quality could be significant if major development projects or other stream reconstruction projects were planned in the Wrigley Creek watershed and scheduled for implementation coincident with the proposed project. To our knowledge, this is not the case and thus, no cumulative hydrologic impacts from the proposed project are anticipated and no mitigation measures would be required.
4.2 BIOLOGICAL RESOURCES

This section includes a description of biological resources present at the Wrigley Creek Improvement Project site, a summary of applicable regulations, and an analysis of potential short-term construction and long-term operational impacts of the proposed project. Mitigation measures are recommended as necessary to reduce potentially significant impacts to a less-than-significant level.

Environmental Setting

Exhibits 4.2-1(a), (b), (c) illustrate existing vegetation communities of the Wrigley Creek Improvement Project site. The mitigation site for the FRR/LBC Project (see Chapter 2.0 Description of the Proposed Project) includes 1,580 linear feet of Wrigley Creek and adjacent VTA right-of-way immediately south of Industrial Way, totaling 5.6 acres (see Exhibits 4.2-1(a) and (b)). The City of Milpitas site includes a 1,900-linear foot section of Wrigley Creek immediately south of the mitigation site (Exhibits 4.2-1(b) and (c)), plus 360 feet of box culvert extending under Industrial Way and the Calaveras Boulevard / SR 237 overpass, immediately north of the mitigation site (Exhibit 4.2-1(a)). The City of Milpitas site includes the southern portion totaling 2.6 acres and the northern portion totaling 0.6 acres. Total acreage of the Wrigley Creek Improvement Project site would be approximately 8.8 acres.

Within the Wrigley Creek Improvement Project area, the creek is a linear, trapezoidal channel with rip rap or sackcrete armoring at several bank locations. The creek is narrow and shallow, and when water levels are low, the water is not deep enough for fish. The creek has no floodplain. Several feet of water were present in the creek channel in August 2009, most of the surface of which was covered by emergent and floating wetland vegetation.

The creek banks and uplands are dominated by nonnative forbs and grasses as well as nonnative ornamental trees, including peppertree (Schinus spp.), fan palm (Washingtonia spp.), and Eucalyptus spp. The site is highly disturbed by human activity, including the dumping of trash and excess grading materials, and disturbances from homeless encampments. In spite of this disturbed state, there is a healthy stand of Congdon’s tarplant (Centromadia parryi ssp. congdonii), as well as scattered native trees and shrubs including willow (Salix spp.), live oak (Quercus agrifolia), and coyote brush (Baccharis pilularis).

The area immediately surrounding the project site is generally classified as urban with patches of disturbed or landscaped habitat predominately composed of ornamental trees and herbs and nonnative weedy species (i.e., ruderal habitat). Habitat for native species is highly fragmented in this portion of Santa Clara Valley, and because major portions of Wrigley Creek flow through underground culverts, wildlife habitat connectivity is poor.

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1 Description of the Wrigley Creek Improvement Project site is based on site visits conducted in 2005 and 2006 by ICF Jones and Stokes as described in Jones and Stokes (2009), and a reconnaissance level site visit conducted on August 27, 2009, by EDAW staff.

**Exhibit 4.2-1(a)**  
Wrigley Creek - Existing Vegetation Communities

(*Wrigley Creek flows from south to north in a culvert underneath Industrial Way and the Calaveras Blvd overpass.*)

- **City of Milpitas Project Site**
- **Mitigation Project Site**
- **Study Boundary**
- **Emergent Freshwater Marsh**
- **Congdon's Tarplant**
- **Perennial Grassland**
- **Nonnative Annual Grassland**
- **Coyote Brush Scrub**
- **Ruderal**
- **Urban**
- **Graded Areas**

Source: EDAW 2009; Balance 2009; ESRI 2009
Exhibit 4.2-1(b)
Wrigley Creek - Existing Vegetation Communities

Mitigation Project Site

City of Milpitas Project Site

Study Boundary
Emergent Freshwater Marsh
Perennial Grassland
Nonnative Annual Grassland
Coyote Brush Scrub
Ruderal
Urban
Graded Areas

Source: EDAW 2009; Balance 2009; ESRI 2009
Exhibit 4.2-1(c)
Wrigley Creek - Existing Vegetation Communities

Study Boundary
Emergent Freshwater Marsh
Congdon's Tarplant
Perennial Grassland
Nonnative Annual Grassland
Coyote Brush Scrub
Ruderal
Urban
Graded Areas

Source: EDAW 2009; Balance 2009; ESRI 2009
EXISTING VEGETATION COMMUNITIES

Existing vegetation communities within the project site can be classified as emergent freshwater marsh, nonnative annual grasslands, perennial grasslands / valley wildrye grasslands, ruderal vegetation, coyote brush scrub, and ornamental vegetation. In the uplands, nonnative annual grasslands and ruderal vegetation predominate, with smaller patches of creeping wildrye and coyote brush scrub (see Exhibits 4.2-1(a),(b),(c)). These communities are described in more detail below.

Emergent Freshwater Marsh

Emergent freshwater marsh, also referred to as coastal freshwater marsh, typically occurs in low-lying sites that are permanently flooded with freshwater and are lacking significant current. Coastal freshwater marsh is distributed along the coast and in coastal valleys near river mouths and around the margins of lakes, springs, and streams. This vegetation community characteristically forms a dense vegetative cover dominated by perennial, emergent monocots one to 15 feet high that reproduce by underground rhizomes. Within the project site vegetation typical of freshwater marsh is found in the channel and along its margins and is dominated by cattails (Typha latifolia and / or T. angustifolia) and smartweed (Polygonum spp.). Other co-dominant species are echinochloa (Echinochloa crus-galli), a nonnative annual grass, floating water-primrose (Ludwigia peploides), and sedge (Carex spp. and Cyperus spp.). The creek banks are dominated by nonnative species including rabbitfoot grass (Polypogon monspeliensis), willow herb (Epilobium brachycarpum), hyssop loosestrife (Lythrum hyssopifolium), and cocklebur (Xanthium strumarium). Native species on the creek banks include saltgrass (Distichlis spicata) and fat hen (Atriplex triangularis), which tend to be associated with saline or alkaline soils.

Nonnative Annual Grasslands

Nonnative annual grassland is generally found in open areas in valleys and foothills throughout coastal and interior California. It typically occurs on soils consisting of fine-textured loams or clays that are somewhat poorly drained. Nonnative annual grasses and weedy annual and perennial forbs, primarily of Mediterranean origin, dominate this vegetation type, probably as a result of human disturbance. Scattered native grass and wildflower species representing remnants of the original vegetation may also be common. Within the project site, nonnative annual grassland occurs throughout the upland and intergrades with areas that are dominated by nonnative forbs (ruderal) or areas with creeping wildrye (perennial grassland). The predominant nonnative annual grass found on site during the 2009 visit was wild oats (Avena spp.), but other species are likely. Common nonnative forbs include field bindweed (Convolvulus arvensis), dock (Rumex spp.), bristly ox-tongue (Picros echioideus), prickly lettuce (Lactuca serriola), fennel (Foeniculum vulgare), among others. Saltgrass and alkali weed (Cressa truxillensis) are also common.

3 Ornamental vegetation is not shown on Exhibits 4.2-1(a)-(c).

4 Preliminary Descriptions of the Terrestrial Natural Communities of California, Holland, R., prepared for California Department of Fish and Game, 1986.

5 Ibid.
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Perennial Grasslands / Valley Wildrye Grassland

Dense patches of the native perennial grass, creeping wildrye (*Leymus triticoides*) compose the valley wildrye grassland. This plant community typically occurs on moist sites at low elevations, often adjacent to riparian or freshwater marsh habitat. Soils are frequently sub-alkaline and are seasonally inundated. In the San Francisco Bay Area, it also commonly occurs on clayey or sandy slopes near seeps or where the soil remains moist through spring and into the summer months. Within the project site, there are extensive dense stands of creeping wildrye within ten feet of the creek bank, where the grass is often interspersed with saltgrass and alkali weed in a mosaic with nonnative annual grasslands.

Ruderal Vegetation

Ruderal vegetation is typical of disturbed lands on which the native vegetation has been completely removed by human activities such as grading, diskng, cultivation, or other surface disturbances. Disturbed areas, if left undeveloped, may become recolonized by exotic species as well as native species. Native vegetation may ultimately become at least partially restored if the soils are left intact and there is no further disturbance. Ruderal habitat onsite is dominated by nonnative forbs along with the annual grasses typically found in nonnative annual grassland. Plant species commonly found on site include nonnative species such as bristly ox-tongue (*Picris echioides*), prickly lettuce (*Lactuca serriola*), and fennel (*Foeniculum vulgare*). The Congdon’s tarplant onsite is in areas that would otherwise be classified as ruderal.

Coyote Brush Scrub

Scattered patches of coyote brush scrub are present in drier upland areas on the west side of the project area. Coyote brush (*Baccharis pilularis*), a relatively hardy, long-lived native shrub with dense perennial foliage up to six feet tall, is present in clumps surrounded by nonnative grassland and ruderal habitat. Coyote brush may provide nesting habitat for bird species tolerant of disturbed sites such Anna's hummingbird (*Calypte anna*) and western scrub jay (*Aphelocoma californica*), and cover for small mammals and reptiles such as western fence lizard (*Sceloporus occidentalis)*.

Ornamental Vegetation

Ornamental vegetation, primarily nonnative trees, is present along Wrigley Creek in the northern portion of the project area. Nonnative peppertree, fan palm, and *Eucalyptus* species predominate, with other nonnative invasive ornamentals such as English ivy (*Hedera helix*). This area has been highly disturbed and supports little native vegetation. The ornamental trees may serve as nesting habitat for bird species tolerant of disturbed urban areas such as Anna's hummingbird, western scrub jay, and American crow (*Corvus brachyrhynchos*). Red-shouldered hawk (*Buteo lineatus*) and white-tailed kite (*Elanus leucurus*) also have the potential to nest in nonnative trees such as those present, although they typically prefer taller trees with larger limbs and better opportunities for concealment.
REGULATORY SETTING

Federal Plans, Policies, Regulations, and Laws

The following federal laws and regulations related to biological resources are applicable to the proposed project:

- Federal Endangered Species Act
- Clean Water Act Section 404
- Clean Water Act Section 401
- Migratory Bird Treaty Act

State Plans, Policies, Regulations, and Laws

The following State laws and regulations related to biological resources are applicable to the proposed project:

- California Fish and Game Code Section 2050 (California Endangered Species Act)
- California Fish and Game Code Section 1913 (Native Plant Protection Act)
- California Fish and Game Code Section 1602 (Streambed Alteration Agreement)
- California Fish and Game Code Section 3503 (Non-Game Birds)
- California Fish and Game Code Section 3511 (Fully-Protected Species)
- Porter-Cologne Act
DISCUSSION OF INITIAL STUDY CHECKLIST ITEMS

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

Special Status Plant Species: Implementation of the proposed project would result in a substantial adverse effect to Congdon’s tarplant, a special-status plant species present onsite. However, planting of Congdon’s tarplant as described in the project description would create a Congdon’s tarplant mitigation area to replace existing plants at the site removed during project construction. This would be a less-than-significant impact.

Special Status Wildlife Species: Implementation of the proposed project could result in a substantial adverse effect to special-status wildlife species: nesting birds, burrowing owl, and roosting bats. This would be a less-than-significant impact with mitigation incorporation.

Special-status species lists were obtained from the California Native Plant Society (CNPS), United States Fish and Wildlife Service (USFWS), and the California Department of Fish and Game’s (CDFG) California Natural Diversity Database. 6 7 8 CNDDB occurrences within five miles of the project site are indicated in Exhibits 4.2-2(a) (b). Field surveys of the Wrigley Creek Improvement Project area were conducted in 2005 and 2006 for the FRR / LBC Project, and again in 2009 to confirm current conditions, determine the likelihood special-status species occurring onsite, and map vegetation communities.


8 California Natural Diversity Data Base (CNDDB), California Department of Fish and Game, 2009.
Study Boundary
Five Mile Radius

Exhibit 4.2-2(a)
Wrigley Creek – Special-Status Plant Occurrences

Source: EDAW 2009; Balance 2009; CNDDB 2009

CNDDB Accuracy Class 1: Reported occurrence is a point; location considered accurate to within the minimum mappable unit of 80 meters.
CNDDB Accuracy Class 2: Reported location is an area with defined boundaries.
CNDDB Accuracy Class 3: Reported location is a non-specific area; buffer added to represent degree of uncertainty in reported location.
CNDDB Accuracy Classes 4-9: Reported location considered accurate within the radius shown.
Exhibit 4.2-2(b)
Wrigley Creek – Special-Status Wildlife Occurrences

Source: EDAW 2009; Balance 2009; CNDDB 2009

CNDDB Accuracy Class 1: Reported occurrence is a point; location considered accurate to within the minimum mappable unit of 80 meters.
CNDDB Accuracy Class 2: Reported location is an area with defined boundaries.
CNDDB Accuracy Class 3: Reported location is a non-specific area; buffer added to represent degree of uncertainty in reported location.
CNDDB Accuracy Classes 4-9: Reported location considered accurate within the radius shown.
**Special-Status Plants**

Two special-status plant species were documented within five miles of the project site and were considered to have potential to occur on site: Congdon’s tarplant and alkali milk vetch (*Astragalus tener var. tener*),\(^9\) as shown in Exhibit 4.2-2(a). Alkali milk vetch was last documented in Milpitas in 1905 in the vicinity of the project area, but has not been found during site visits. It is presumed extirpated in the project area.\(^10\)

During field surveys conducted in 2005 and 2006, Congdon’s tarplant was documented east of the Union Pacific Railroad right-of-way and south of Calaveras Boulevard / SR 237 within the Wrigley Creek Improvement Project area (Exhibit 4.2-1(b)). In 2005, more than 100 flowering Congdon’s tarplants were observed. In 2006, fewer living Congdon’s tarplants were observed, and dead individuals were noted in the same area as seen in 2005. Approximately 150 Congdon’s tarplants (covering approximately 0.1 acre) were observed in the project area in 2009.

Mitigation for permanent impacts to Congdon’s tarplant associated with the FRR / LBC Project was addressed during the environmental review of that project.\(^11\) While the FRR / LBC Project accounts for the loss of these plants and VTA has fulfilled the mitigation requirements in the FRR document to collect seeds, to date, the plants have not been impacted by the FRR project. Given that, and given another year of collection was available in 2009, VTA collected additional seeds to be used at the project site or for other restoration opportunities, as authorized by the California Department of Fish and Game.

Although the present project would involve removal of Congdon’s tarplant, actions contained in the project description would replace these plants onsite. Therefore, the mitigation project would result in a less-than-significant impact to Congdon’s tarplant and no additional mitigation would be required.

**Special-Status Wildlife**

Exhibit 4.2-2(b) illustrates that at least 13 special-status animal species have been documented within five miles of the project site. The following describes the potential for various special-status species to occur on the project site.

**Red-Legged Frog**

There are no records of California red-legged frog (*Rana aurora draytonii*), a federally-listed threatened species and a California Species of Special Concern, in the CNDDB from the Wrigley Creek and Lower Berryessa Creek drainage, although there is a record within five miles within the upstream, less disturbed portions of the Coyote Creek watershed (which includes Wrigley Creek) near the Calaveras Reservoir.\(^12\) Additional occurrences are documented within five miles north of the project area in Alameda County. Based on a lack of known populations in the immediate project area,

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\(^9\) California Native Plant Society (CNPS) List 1B.2: Fairly Endangered in California.

\(^10\) California Natural Diversity Data Base (CNDDB), California Department of Fish and Game, 2009.

\(^11\) See Mitigation Measure 1 of the FRR / LBC Initial Study / Mitigated Negative Declaration.

\(^12\) California Natural Diversity Data Base (CNDDB), California Department of Fish and Game, 2009.
lack of connectivity with known populations, and poor habitat conditions, California red-legged frog would not be expected to occur onsite.

**California Tiger Salamander**

There are no records of California tiger salamander, (*Ambystoma californiense*), a federally-listed threatened species and a California Species of Special Concern, in the CNDDB from the Wrigley Creek and Lower Berryessa Creek drainage, although there are records within five miles, from the Fremont Warm Springs area. Based on a lack of known populations in the project vicinity, lack of connectivity with known populations, and poor habitat conditions present at the project site, California tiger salamander would not be expected to occur onsite.

**Nesting Birds and Burrowing Owl**

Several special-status and common bird species have the potential to nest in trees, shrubs, grassland, and ruderal vegetation within project area. All birds and their active nests, except nonnative European starlings, English house sparrows, rock doves (pigeons), and non-migratory game birds such as quail, pheasant, and grouse, are protected under the Migratory Bird Treaty Act (MBTA). However, non-migratory game birds are protected under California Fish and Game Code §3503. The nesting period for raptors generally occurs between January 1 and August 31. The nesting period for passerines (i.e., perching birds or songbirds) and non-passerine land birds occurs between February 1 and August 31.

Western burrowing owl (*Athene cunicularia hypugaea*), a California Species of Special Concern, is a ground nester that occurs in the vicinity and has potential to occur in the project area. Burrowing owls utilize ground squirrel burrows for nesting and are known to occur in Santa Clara County within five miles of the project site.

The project would require removal of all vegetation onsite, including trees, prior to grading. Any removal of structures, ruderal grassland, or other vegetation; grading or construction activities in the vicinity of active passerine or non-passerine land bird nests, or active raptor nests, could result in nest abandonment, nest failure, or premature fledging. In addition, the City of Milpitas project components would involve construction activities in the vicinity of the Calaveras Boulevard overpass. This area may be used as a substrate for cliff swallow nests during the nesting season. Destruction or disturbance of active nests would be in violation of the MBTA and CDFG regulations.

While such disturbance would be a potentially significant impact to nesting raptors, songbirds, and burrowing owl, incorporation of Mitigation Measures Biology-1 and Biology-2 would avoid the loss of nests, burrows, and young, thereby reducing potential impacts to a less-than-significant level.

**Mitigation Measure Biology-1 (Nesting Birds)** Due to timing requirements specified in project permits, VTA cannot schedule construction activities, including tree and shrub removal, between September and December to avoid the nesting season for most raptors and other bird species. Therefore, to ensure that no bird nests will be disturbed during construction, preconstruction surveys for nesting birds, including raptors and songbirds, shall be conducted by a qualified biologist. The surveys will be conducted no more than five days prior to the initiation of construction activities. During these surveys, a qualified biologist shall inspect all potential nesting habitat (e.g., trees, shrubs, grasslands, etc.) in and immediately adjacent to the impact areas (within 200 feet) for nests. A report of the survey findings shall be provided to VTA and CDFG.

13 California Natural Diversity Data Base (CNDDB), California Department of Fish and Game, 2009.
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All vegetation with active nests shall be flagged and an appropriate non-disturbance buffer zone shall be established around the nesting site. The size of the buffer zone will be determined by the project biologist in consultation with CDFG and will depend on the species involved, site conditions, and type of work to be conducted in the area.

If cliff swallows are found nesting under the Calaveras Boulevard overpass, a no-disturbance buffer shall be established by the project biologist in consultation with CDFG. Inactive swallow nests can be removed prior to the breeding season. Evidence suggests the swallows previously nested in cavities within the overpass structure, where the nests are inaccessible. Additional measures shall be developed to deter nesting in coordination with CDFG, and may include installation of netting across cavity openings prior to the onset of the breeding season.

A qualified biologist shall monitor active nests to determine when the young have fledged and are feeding on their own. The project biologist and CDFG shall be consulted for clearance before construction activities resume in the vicinity.

Responsibility and Monitoring  VTA would be responsible for adhering to construction schedule specified above, contracting a qualified biologist to conduct preconstruction surveys, and obtaining necessary approvals from CDFG.

Mitigation Measure Biology-2 (Burrowing Owl)  Within two weeks prior to any ground-disturbing project-related construction activity, the project sponsor shall have a qualified biologist conduct preconstruction surveys for burrowing owls in suitable habitat within 250 feet of the project footprint. Surveys shall be conducted in accordance with CDFG protocol. If there is more than a two week break in construction activities, surveys will be reinitiated. If no occupied burrows are found in the survey area, a letter report documenting survey methods and findings shall be submitted to CDFG, and no further measures will be necessary.

If occupied burrows are found, impacts to them shall be avoided by establishing a buffer of 165 feet during the non-breeding season (i.e., September 1 through January 31) or 250 feet during the breeding season (i.e., February 1 through August 31) for all project-related construction activities. The size of the buffer area may be adjusted if a qualified biologist and CDFG determine project-related construction activities would not be likely to have adverse effects. No project-related construction activity shall commence within the buffer area until a qualified biologist confirms that the burrow is no longer occupied, or consultations with CDFG specifically allow certain construction activities to continue.

If avoidance of occupied burrows is infeasible for project-related construction activities, onsite passive relocation techniques approved by CDFG shall be used to encourage owls to move to alternative burrows outside of the impact area. However, no occupied burrows shall be disturbed by project-related construction activities during the nesting season unless a qualified biologist verifies through noninvasive methods that the burrow is no longer occupied.

If burrowing owls are found to inhabit the site, contractor education shall be conducted prior to start of construction to inform workers of measures being taken to protect owls onsite and stop work procedures if they move into the construction area.

14  Staff Report on Burrowing Owl Mitigation, California Department of Fish and Game, 1995.
**Responsibility and Monitoring** VTA would be responsible for adhering to construction schedule specified above, contracting a qualified biologist to conduct preconstruction surveys and obtaining necessary approvals from CDFG.

**Roosting Bats**

There is a low potential for special-status bat species to occur on site due to the presence of marginally suitable roosting habitat provided by the trees within the project area. This includes Yuma myotis bat (*Myotis yumanensis*), a species tracked by the CNDBD and documented within five miles of the project area near Calaveras Reservoir.  Project construction would require removal of several medium-sized trees that provide potential roosting sites. If bats are present, removal of roost sites could result in displacement or direct loss of individuals. Therefore, the proposed project could result in a potentially significant impact to roosting bats.

The *City of Milpitas* project components would involve construction activities in the vicinity of the Calaveras Road / SR 237 overpass. The overpass structure may be used as a substrate for roosting bats at any time of year, including during the breeding season. If bats are present, construction activities could result in displacement of individuals. While such disturbance would be a potentially significant impact to roosting bats, incorporation of **Mitigation Measure Biology-3** would avoid disturbance, thereby reducing potential impacts to a less-than-significant level.

**Mitigation Measure Biology-3 (Roosting Bats)** A pre-construction survey for roosting bats shall be performed by a qualified biologist within 30 days prior to removal of trees on the site, and prior to construction activities within 200 feet of the Calaveras Road overpass structure. If no active roosts are found, then no further action would be warranted. If either a maternity roost or hibernacula (i.e., structure used by bats for hibernation) is present, the following mitigation measure shall be implemented.

- **If active maternity roosts or hibernacula are found in trees that would be removed as part of project construction, the project shall be redesigned to avoid the loss of the occupied roost if it is possible to do so.** If an active maternity roost is located and the project cannot be redesigned to avoid removal of the occupied structure, tree removal will commence before maternity colonies form (i.e., prior to March 1) or after (i.e., after July 31) young are volant (i.e., flying). Disturbance-free buffer zones as determined by a qualified biologist in consultation with CDFG will be observed during the maternity roost season (March 1 - July 31).

- **If an active roost is found in the overpass structure during the maternity roost season (March 1 - July 31), a disturbance-free buffer zone, as determined by a qualified biologist in consultation with CDFG, will be observed.**

- **If a non-breeding bat hibernacula is found in a tree scheduled for removal, the individuals shall be safely evicted, under the direction of a qualified biologist (as determined by a Memorandum of Understanding with CDFG), by opening the roosting area to allow airflow through the cavity.** Tree removal shall then follow at least one night after initial disturbance for airflow. This action should allow bats to leave during darkness, thus increasing their chance of finding new roosts with a minimum of potential predation during daylight. Trees with roosts that need to be removed shall first be disturbed at dusk, just prior to removal that same evening, to allow bats to escape during the darker hours.

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15 *Staff Report on Burrowing Owl Mitigation, California Department of Fish and Game, 1995.*
• If special-status bats are found roosting within trees on site that require removal, appropriate replacement roosts shall be created at a suitable location on site or off site in coordination with a qualified biologist, and CDFG.

**Responsibility and Monitoring** VTA would be responsible adhering to construction schedule specified above, contracting a qualified biologist to conduct preconstruction surveys, and obtaining necessary approvals from CDFG.

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

Project implementation would result in temporary impacts to riparian habitat. This would be a less-than-significant impact.

Degraded riparian habitat is present onsite; no other sensitive natural community is present in the project area (Exhibit 4.2-1 (a),(b),(c)). Within the project area, Wrigley Creek is an engineered channel designed to convey stormwater flows. The creek channel is lined primarily with nonnative plant species; however, several common native species are present within the creek and on the banks, including cattail, fat hen, saltgrass, and creeping wildrye. Few native trees are present. All vegetation would be removed from the mitigation area with the exception of a native live oak tree and other native trees, if possible. The new channel would be replanted with native trees and shrubs appropriate to the area including red willow (*Salix laesolepis*), box elder (*Acer negundo*), and blue elderberry (*Sambucus mexicana*). The upland area would be replanted with native grasses. The planting plan was developed by a qualified biologist and has been reviewed and approved by CDFG and the RWQCB. Potentially toxic levels of boron in the local soils could limit the success of woody vegetation. Monitoring and adaptive management would provide for monitoring of the potential effects of boron toxicity and outline appropriate remedial actions if boron toxicity would result in high mortality of woody plantings.

A project objective for the mitigation site is enhancement and restoration of the existing creek and adjacent floodplain and riparian habitat, and any impacts to riparian habitat would be temporary. Therefore, this would be a less-than-significant impact and no mitigation would be required.

Impacts to the creeping wildrye vegetation community would be less-than-significant because it is not an identified sensitive natural community (e.g., it is not protected by any relevant regulatory agency). However, to further reduce this less-than-significant impact, the following enhancement measure, while not required under CEQA to mitigate identified significant impacts, could reduce adverse effects or temporary disruption associated with implementation of the proposed project.

**Environmental Enhancement Measure Biology-1 (Creeping Wildrye)** VTA shall replace approximately 0.7 acre of native creeping wildrye, which would be permanently impacted during project construction. VTA shall salvage plugs of creeping wildrye from the project site prior to construction, which will be maintained at a qualified nursery and replanted along the streamside and upland areas during project construction.

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16 *Wrigley Creek Improvement Project Mitigation & Monitoring Plan, ICF Jones & Stokes, June 5, 2009.*

17 *Wrigley Creek Improvement Project Mitigation & Monitoring Plan, ICF Jones & Stokes, June 5, 2009.*
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Biology c) Would the project have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

Waters of the United States: While project construction would result in a permanent modification of waters of the United States, project implementation would result in a beneficial net increase of this resource. City of Milpitas project activities (e.g., sediment removal) would not affect waters of United States because appropriate construction techniques would be used to avoid placing fill in the channel. This would be a less-than-significant impact.

Waters of the State: While project construction would result in a permanent modification of waters of the State, project implementation would result in a beneficial net increase of this resource. City of Milpitas project activities (e.g., sediment removal) would adversely affect waters of State. This would be a less-than-significant impact with mitigation incorporation.

Waters of the United States

The mitigation project was designed as mitigation for permanent impacts to wetlands and waters of the United States and State associated with the FRR / LBC Project due to replacement and/or extension of culverts and the loss of earthen drainage ditches. This includes drainage improvements on an unnamed creek (Line B), Scott Creek, Calera Creek, Berryessa Creek, and Wrigley Creek, and several drainage ditch wetlands, as described in Section 2.2 and shown in Exhibit 2.0-3. These impacts have been evaluated under CEQA for the FRR / LBC Project and are not considered impacts of the Wrigley Creek Improvement Project.18

The mitigation project would result in the permanent modification of 1,580 linear feet of Wrigley Creek associated with the realignment and enhancement of the channel. With the incorporation of meanders, the creek would increase in net length, creating a total of 1,925 linear feet of stream channel and associated floodplain wetlands. This would result in a beneficial net creation of 345 linear feet of waters of the United States and State, which would include and go beyond the FRR / LBC Project mitigation requirements of 339 linear feet (see Section 2.2 and Exhibit 4.2-3). In addition, the mitigation project would result in creation of 1.01 acres of seasonal floodplain wetlands to meet the mitigation requirements for the permanent impacts to 0.48 acres of wetland due to the FRR / LBC project.

18 Improvements to wetlands and waters of the United States for the mitigation project would be permitted under the ACOE’s Nationwide Permit #27, Aquatic Habitat Restoration, Establishment, and Enhancement Activities, which is for “Activities in waters of the United States associated with the restoration, enhancement, and establishment of tidal and non-tidal wetlands and riparian areas and the restoration and enhancement of nontidal streams and other non-tidal open waters, provided those activities result in net increases in aquatic resource functions and services.” The cofferdam would be permitted under ACOE’s Nationwide Permit #33, Temporary Construction, Access, and Dewatering, which is for “Temporary structures, work, and discharges, including cofferdams, necessary for … dewatering of construction sites …”
Exhibit 4.2-3
Creation of Wetlands and Waters of the United States and State Provided by the Wrigley Creek Improvement Project

<table>
<thead>
<tr>
<th>Creek</th>
<th>Existing Channel Length (Linear Feet [lf])</th>
<th>Final Channel Length (Linear Feet [lf])</th>
<th>Net increase in Channel length (Linear Feet [lf])</th>
<th>Wetland Creation (acres)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wrigley Creek Improvement Project</td>
<td>1,580</td>
<td>1,925</td>
<td>345</td>
<td>1.0 acres</td>
</tr>
</tbody>
</table>

Source: Santa Clara Valley Transportation Authority November, 2009.

The City of Milpitas project would result in temporary impacts to a 1,900-linear foot section of Wrigley Creek immediately south of the mitigation site, plus 360 feet of box culvert extending under Industrial Way and the Calaveras Boulevard / SR 237 overpass, immediately north of the mitigation site (Exhibit 4.2-4(a) to (c)). There would be no permanent impact to waters of the United States or a discharge of dredged or fill material into the waters of the United States. The project description notes material would be removed by hand from the box culvert and placed into an excavator for removal, while in the Wrigley Creek section, materials would be removed by excavator. Therefore, this would be a less-than-significant impact and no mitigation would be required.

19 Excavation of sediment from the City of Milpitas project may not be subject to Clean Water Act Section 404, if there is only ‘incidental fallback’ and not a redeposit of material. The ACOE reviews these instances case-by-case.
Exhibit 4.2-4(a)
Wrigley Creek – Project Impact Area

Wrigley Creek flows from south to north in a culvert underneath Industrial Way and the Calaveras Blvd overpass.

Source: EDAW 2009; Balance 2009; ESRI 2009
Exhibit 4.2-4(c)
Wrigley Creek – Project Impact Area

City of Milpitas Project Site

Wrigley Creek

MATCHLINE

Study Boundary
Congdon’s Tarplant
Realignment Reach
Emergent Freshwater Marsh
Temporary Impact
Nonnative Annual Grassland
Perennial Grassland
Coyote Brush Scrub
Graded Areas
Ruderal
Urban

Source: EDAW 2009; Balance 2009; ESRI 2009
Waters of the State

The RWQCB considers that City of Milpitas project activities (e.g., sediment removal) would result in temporary impacts to waters and wetlands of the State (Exhibit 4.2-5) including impacts to vegetation along the creek banks during excavation activities and to any wetland vegetation in the channel. Incorporation of Mitigation Measure Biology-4 would minimize impacts to waters of the State, thereby reducing potential impacts to a less-than-significant level.

Exhibit 4.2-5
Impacts to Waters of the State and Mitigation / Revegetation Requirements for the City of Milpitas Project

<table>
<thead>
<tr>
<th>Creek</th>
<th>Temporary Impact (Linear Feet [lf])</th>
<th>Mitigation Ratio (Mitigation : Impacts)</th>
<th>Channel Length to be Revegetated (Linear Feet [lf])</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wrigley Creek – City of Milpitas Project</td>
<td>Up to 1,900</td>
<td>1:1</td>
<td>Up to 1,900 a</td>
</tr>
</tbody>
</table>

Source: Santa Clara Valley Transportation Authority November, 2009.

Mitigation Measure Biology-4 (Waters of the State) VTA and / or the City of Milpitas shall mitigate for temporary impacts to 1,900 linear feet of Wrigley Creek during sediment removal and other proposed activities by restoring the impact area. Disturbed areas will be seeded with an erosion control seed mix to stabilize disturbed soils and reduce the input of sediment to the channel. The seed mix will include only native species appropriate to the area. Implementation of the SWPPP and BMPs (see Section 4.1 Water Quality and Hydrology) would also minimize impacts to waters of the State. VTA and / or the City of Milpitas shall quantify the amount of wetland vegetation to be removed because of the City of Milpitas project maintenance activities and coordinate with the RWQCB regarding the appropriate mitigation for the temporary loss of wetlands. A minimum of 1:1 replacement shall be required. Mitigation may include removing nonnative vegetation along the 1,900-linear foot section of Wrigley Creek and replanting with native vegetation. This would include planting wetland vegetation to offset any impacts to wetland habitat due to the City of Milpitas project activities.

Responsibility and Monitoring VTA and / or the City of Milpitas would be responsible to construct the project in accordance with above requirements specified by and in coordination with relevant regulatory agencies.

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20 Impacts to wetlands will be quantified during the application process for a Section 401 Water Quality Certification.

21 The RWQCB may issue a WDR separately or in addition to a water quality certification under Clean Water Act Section 401 for the City of Milpitas project activities.
Biology d) Would the project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

Project implementation could interfere with movements of native, resident, or migratory fish or wildlife species, or with established native resident or migratory wildlife corridors. However, based on the highly disturbed nature of the habitat on site, and the proposed construction schedule, this would be a less-than-significant impact.

The project site is not known to support any native wildlife nursery sites and no such nursery sites are expected given the highly disturbed and degraded status of on-site biological resources. Wrigley Creek could provide a movement corridor for numerous aquatic and semi-aquatic invertebrate species, common frogs and other amphibians, and aquatic reptiles such as common garter snakes. Terrestrial species such as raccoons, deer, skunks, and numerous bird species may use riparian areas along streams for cover while moving between areas of suitable habitat. Temporary impacts to this corridor are expected during construction. However, no permanent impacts to this wildlife corridor are anticipated with project implementation because restoration of the site would improve its quality as a wildlife corridor, particularly with the addition of native vegetation.

Temporary steam diversion structures would be required during project construction. The design of these diversions would be in accordance with VTA’s Fish Friendly Channel Design Guidelines 22 to ensure that the structures would meet the ecological and hydrological requirements for fish passage during construction.

Construction within Wrigley Creek, including installation of temporary stream diversion structures, will be restricted to the dry season, which extends from April 15 to October 31, thus avoiding impacts to fish or aquatic wildlife. 23

CUMULATIVE IMPACTS

Identified impacts to biological resources from the proposed project would be limited to temporary, construction-phase impacts to habitat, which would be less than significant with incorporation of proposed mitigation measures. In the long-term, the proposed project would improve habitat for wildlife and plants in the watershed. Therefore, no cumulative impacts to wildlife, plants, or their habitat are anticipated from the proposed project and no mitigation measures would be required.

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22 Notice of Preparation, Wrigley Creek Improvement Project, VTA, March, 2009.

23 As stated in Condition 1 of California Department of Fish and Game 1600 Agreement for FRR / LBC Project.
This section describes ambient air quality conditions, summarizes applicable regulations, and analyzes potential short-term construction and long-term operational impacts of the proposed project on air quality. Mitigation measures are recommended as necessary to reduce significant air quality impacts to a less-than-significant level.

**Environmental Setting**

The project site is located in Santa Clara County, which is within the San Francisco Bay Area Air Basin (SFBAAB). The SFBAAB comprises all of Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, and Santa Clara Counties, the southern portion of Sonoma County, and the western portion of Solano County. Ambient concentrations of air pollutant emissions are determined by the amount of emissions released by pollutant sources and the atmosphere’s ability to transport and dilute such emissions. Natural factors that affect transport and dilution include terrain, wind, atmospheric stability, and the presence of sunlight. Therefore, existing air quality conditions in the area are determined by such natural factors as topography, meteorology, and climate, in addition to the amount of emissions released by existing air pollutant sources.

Santa Clara County is under the jurisdiction of the Bay Area Air Quality Management District (BAAQMD), which is responsible for assuring that national and State ambient air quality standards are attained and maintained. With respect to ozone, Santa Clara County is currently designated as a serious nonattainment area for the State one-hour ambient air quality standards; and nonattainment for the national eight-hour standard. Santa Clara County is also designated as a nonattainment area with respect to the State standard for respirable particulate matter with an aerodynamic diameter of ten micrometers or less (PM$_{10}$) and fine particulate matter with an aerodynamic diameter of 2.5 micrometers or less (PM$_{2.5}$). Santa Clara County is designated as an unclassified area with respect to the national standard for PM$_{10}$ and PM$_{2.5}$.

Concentrations of ozone, carbon monoxide (CO), nitrogen dioxide (NO$_2$), sulfur dioxide (SO$_2$), PM$_{10}$, PM$_{2.5}$, and lead are used as indicators of ambient air quality conditions. Because these are the most prevalent air pollutants known to be deleterious to human health, and because extensive documentation is available on health-effects criteria for these pollutants, they are commonly referred to as criteria air pollutants. Standards called the California ambient air quality standards (CAAAQS) and national ambient air quality standards (NAAQS) have been set for criteria air pollutants by the California Air Resources Board (ARB) and U.S. Environmental Protection Agency (EPA), respectively. Concentrations of criteria air pollutants are measured at several monitoring stations in the SFBAAB. The Jackson Street station, located five miles south of the project site in the City of San Jose, is the closest station with recent data for ozone, PM$_{10}$, PM$_{2.5}$, and CO. In general, the ambient air quality measurements from this station are representative of the air quality in the project vicinity. Exhibit 4.3-1 summarizes air quality data for the most recent three years of available data.

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### Exhibit 4.3-1

**Summary of Annual Data on Ambient Air Quality (2006–2008)**

<table>
<thead>
<tr>
<th>Year</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Ozone</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maximum concentration (1-hour/8-hour average, ppm)</td>
<td>0.118/0.087</td>
<td>0.083/0.068</td>
<td>0.118/0.080</td>
</tr>
<tr>
<td>Number of days State standard exceeded (1-hour/8-hour)</td>
<td>5/5</td>
<td>0/0</td>
<td>1/3</td>
</tr>
<tr>
<td>Number of days federal standard exceeded (8-hour)</td>
<td>3</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td><strong>Respirable Particulate Matter (PM$_{10}$)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maximum Concentration (µg/m$^3$)</td>
<td>73.2</td>
<td>69.1</td>
<td>57.3</td>
</tr>
<tr>
<td>Number of days State standard exceeded. (measured/estimated $^b$)</td>
<td>2/12</td>
<td>3/18</td>
<td>1/6</td>
</tr>
<tr>
<td>Number of days federal standard exceeded. (measured / estimated $^b$)</td>
<td>0/0</td>
<td>0/0</td>
<td>0/0</td>
</tr>
<tr>
<td><strong>Fine Particulate Matter (PM$_{2.5}$)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maximum Concentration (µg/m$^3$)</td>
<td>64.4</td>
<td>57.5</td>
<td>41.9</td>
</tr>
<tr>
<td>Number of days national standard exceeded. (measured / estimated $^b$)</td>
<td>7/8</td>
<td>9/9</td>
<td>5/5</td>
</tr>
<tr>
<td>National / California Annual Average (µg/m$^3$)</td>
<td>10.8/-</td>
<td>10.7/11.0</td>
<td>11.5/11.5</td>
</tr>
</tbody>
</table>

Notes:
- µg/m$^3$ = micrograms per cubic meter; ppm = parts per million;
- $^a$ Measurements from the Jackson Street station, San Jose, CA.
- $^b$ Measurements are usually collected every six days. Measured days counts the days that a measurement was greater than the level of the standard; Estimated days mathematically estimates how many days concentrations would have been greater than the level of the standard had each day been monitored.

Source: State Air Resources Board, 2009.

Both ARB and EPA use the monitoring data to designate areas according to attainment status for criteria air pollutants established by the agencies. The purpose of these designations, identified above, is to identify those areas with air quality problems and thereby initiate planning efforts for improvement.
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REGULATORY SETTING

The BAAQMD seeks to improve air quality conditions in Santa Clara County through a comprehensive program of planning, regulation, enforcement, technical innovation, and promoting understanding of air quality issues. The BAAQMD’s clean air strategy includes preparing plans and programs for the attainment of ambient air quality standards, adopting and enforcing rules and regulations, and issuing permits for stationary sources. The BAAQMD also inspects stationary sources, responds to citizens’ complaints, monitors ambient air quality and meteorological conditions, and implements other programs and regulations required by the Clean Air Act (CAA), Clean Air Act Amendments (CAAA), and California Clean Air Act (CCAA). The project must comply with all applicable regulations and thresholds established by the BAAQMD.

The BAAQMD prepares plans to attain ambient air quality standards in the SFBAAB, including ozone attainment plans (OAPs) for the national ozone standard and clean air plans (CAPs) for the California standard, in coordination with the Metropolitan Transportation Commission (MTC) and the Association of Bay Area Governments (ABAG). Past plans include the 2001 OAP and the 2000 CAP. The 2001 OAP is a revision to the SFBAAB part of the State Implementation Plan (SIP) and was prepared in response to the EPA’s partial disapproval of the 1999 OAP.

With respect to applicable air quality plans, the BAAQMD prepared the 2009 OAP to address nonattainment of the national one-hour ozone standard in the SFBAAB. The purpose of the 2009 OAP is to:

- Update the Bay Area 2005 Ozone Strategy in accordance with the requirements of the CCAA to implement “all feasible measures” to reduce ozone;
- Consider the impacts of ozone control measures on particulate matter, toxic air contaminants (TACs), and greenhouse gases (GHGs) in a single, integrated plan;
- Review progress in improving air quality in recent years; and
- Establish emission control measures to be adopted or implemented in the 2009-2012 timeframe.

Similarly, the BAAQMD prepared the 2009 CAP to address nonattainment of the CAAQS.

BAAQMD THRESHOLDS OF SIGNIFICANCE (2009 UPDATE)

As stated in Appendix G of the State CEQA Guidelines, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the determinations in the level of a project’s impact. BAAQMD is currently in the process of updating its thresholds of significance for air quality impacts. Differences between the current and proposed thresholds include lower thresholds for emissions of operational ozone precursors (reactive organic gases [ROG] and nitrogen oxides [NOx]) and PM$_{2.5}$. The proposed thresholds also include greenhouse gas (GHG) thresholds for construction and operation. Though these proposed thresholds are still under review and are not currently adopted, they are relied upon in this analysis to aid in the Appendix G impact determinations. Thus, as identified by the BAAQMD, implementation of the proposed project would result in significant air quality impacts if:

- BAAQMD-recommended control measures are not incorporated into project design or implemented during project construction;
• Long-term operational (regional) emissions of ozone precursors ROG, NOX, or PM$_{10}$ exceed the current adopted BAAQMD-recommended mass emissions threshold of 15 tons per year (TPY) or 80 pounds per day (lb/day) (BAAQMD 1999);

• Long-term operational (regional) emissions of ROG, NO$_{X}$, or PM$_{2.5}$ exceed BAAQMD’s proposed mass emission thresholds of 54 pounds per day or 82 lb/day of PM$_{10}$ (BAAQMD 2009);

• Long-term operational (local) mobile-source emissions of CO violate or contribute substantially to a violation of the NAAQS or CAAQS;

• Sensitive receptors are exposed to a substantial incremental increase in TAC emissions (e.g., stationary or mobile-source) that exceed 10 chances per million for excess cancer risk and/or a hazard index of 1 for non-cancer risk at the Maximally Exposed Individual (MEI); or

• Sensitive receptors would be located near an existing odor source where one confirmed complaint per year averaged over a three-year period, or three unconfirmed complaints per year averaged over a three-year period have been experienced by existing receptors as close as the project to the odor source; or by existing receptors in the vicinity of a similar facility considering distance, frequency, and odor control, where there is currently no nearby development and for proposed odor sources near existing receptors.

The analysis of project-generated, short-term construction-related and long-term, operation-related emissions is consistent with the BAAQMD recommendations. It includes quantification of temporary, short-term construction-related and long-term operation-related emissions of criteria air pollutants and precursors using Urban Emissions Model (URBEMIS2007 v9.2.4). In accordance with the BAAQMD’s approach, the determination of significance is based on the implementation of emissions control measures for construction emissions and mass emission thresholds established for long-term operations.  

Project-generated construction- and operation-related emissions of TACs and odors are qualitatively assessed for the potential to expose sensitive receptors to levels that exceed BAAQMD-recommended criteria.

Project-generated GHG emissions were quantified using the Mobile-Source Emission Factor model (EMFAC2007) emission factors as contained in URBEMIS 2007 v9.2.4 to determine whether project implementation would conflict with the State’s goal of reducing GHG emissions in California to 1990 levels by 2020 (i.e., whether project-generated GHG emissions would result in a substantial contribution to global climate change), as established in Assembly Bill (AB) 32 (2006). The Governor’s Office of Planning and Research (OPR) is in the process of updating Appendix G of the State CEQA Guidelines to address impacts of GHG emissions, as directed by Senate Bill 97 (2007). OPR has proposed the following additions to Appendix G. Would the project:

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• Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment; or

• Conflict with any applicable plan, policy, or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases.

BAAQMD has proposed the following significance criteria in its Draft Air Quality Guidelines 4 that will be relied upon to answer OPR’s proposed GHG-related Appendix G checklist questions:

• Short-term construction: project does not implement prescribed best management practices (BMPs) for reducing GHG emissions from construction (i.e., recycling of demolition material, locally produced construction materials, alternative fuel construction vehicles); and

• Long-term operation: generate greater than 1,100 metric tons of carbon dioxide equivalent per year (MTCO\textsubscript{2}e/yr).

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Environmental Impacts and Mitigations Measures

DISCUSSION OF INITIAL STUDY CHECKLIST ITEMS

As discussed in Chapter 3.0 Environmental Checklist, the proposed project could result in impacts to air quality and climate change resulting from short-term construction and long-term operational activities (i.e., maintenance). For checklist items a-c, short-term and long-term project-related activities would result in adverse changes relevant to all three checklist items. To avoid a repetitive discussion for each, the following checklist items are grouped together and the impacts discussed by topic (i.e., short-term construction activities, long-term operation, and climate change).

Air Quality a) Would the project conflict with or obstruct implementation of the applicable air quality plan?

Air Quality b) Would the project violate any air quality standard or contribute substantially to an existing or projected air quality violation?

Air Quality c) Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or State ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?

Summary statements for items a-c (impacts are discussed sequentially below):

Short-term construction emissions would result in emissions of pollutants that could conflict with or obstruct implementation of the applicable air quality plan, violate or contribute substantially to an existing or projected air quality violation and/or expose sensitive receptors to substantial pollutant concentrations. This would be a less-than-significant impact with mitigation incorporation.

Long-term operational activities including maintenance of the mitigation project and one-time maintenance activities associated with the City of Milpitas project would generate minimal emissions of pollutants and would not violate standards or contribute substantially to an existing or projected air quality violation and/or expose sensitive receptors to substantial pollutant concentrations. This would be a less-than-significant impact.

Project implementation would result in construction-related greenhouse gas (GHG) emissions. This would be a less-than-significant impact with mitigation incorporation.

Short-Term Construction Emissions

Construction emissions are described as “short-term” or temporary in duration and have the potential to represent a significant impact with respect to air quality, especially fugitive dust emissions (PM$_{10}$ and PM$_{2.5}$). Fugitive dust emissions are associated primarily with heavy site preparation activities and vary as a function of such parameters as soil silt content, soil moisture, wind speed, acreage of disturbance area, and miles traveled by construction vehicles on- and off-site. ROG and NO$_X$ emissions are associated primarily with gas and diesel equipment exhaust. With respect to the
proposed project, mitigation project activities would result in the temporary generation of ROG, NOX, PM_{10}, and PM_{2.5} emissions from site preparation (e.g., clearing and grading), material transport, staging and dewatering, creek grading and bank stabilization, erosion control and fence installation, utility and irrigation work, vegetation planting, and other miscellaneous activities. On-site construction equipment for these types of activities may include, but is not limited to, dozers, graders, excavators, haul trucks, a front-end loader, and water pumps. It is estimated that a maximum of 854 truck trips of roughly 30 miles in length round trip would be needed to transport 17,100 cubic yards of material necessary for construction with an average of approximately seven round trips per day. This assumes a truck capacity of 20 cubic yards and 122 days of construction activities. While this represents a “worst-case scenario” if all excavated soils would need to be removed from the site, it is anticipated that all or most of the soils could be reused as discussed in the Chapter 3.0 Environmental Checklist (see Section VII Hazards and Hazardous Materials).

Short-term construction-generated emissions of ROG, NOX, PM_{10}, and PM_{2.5} were modeled using the BAAQMD-recommended URBEMIS 2007, Version 9.2.4, computer program. Input parameters were based on default model settings and project specific information where available (e.g., number and type of equipment, amount of material transport). The modeled maximum daily construction emissions are summarized in Exhibit 4.3-2 and described in more detail below and in Appendix A: Air Quality Modeling Calculations.

**Exhibit 4.3-2**

Summary of Modeled Maximum Short-Term Construction-Generated Emissions

<table>
<thead>
<tr>
<th>Source</th>
<th>ROG (lbs/day)</th>
<th>NOX (lbs/day)</th>
<th>PM_{10} (lbs/day)</th>
<th>PM_{2.5} (lbs/day)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Creek Restoration Activities (2010)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mobile Equipment Exhaust a</td>
<td>3.4</td>
<td>30.8</td>
<td>1.5</td>
<td>1.3</td>
</tr>
<tr>
<td>Fugitive Dust</td>
<td>–</td>
<td>–</td>
<td>25.0</td>
<td>5.2</td>
</tr>
<tr>
<td>Total Maximum Unmitigated</td>
<td>3.4</td>
<td>30.8</td>
<td>26.5</td>
<td>6.5</td>
</tr>
</tbody>
</table>

Notes: lb/day = pounds per day,
ROG = reactive organic gases;
NOX = oxides of nitrogen;
PM_{10} = respirable particulate matter with an aerodynamic diameter of 10 micrometers or less;
PM_{2.5} = fine particulate matter with an aerodynamic diameter of 2.5 micrometers or less;
BAAQMD = Bay Area Air Quality Management District
a Accounts for employee commute trips, on-site heavy-duty construction equipment operations, and material transport (e.g., soil and aggregate base).

See Appendix A: Air Quality Modeling Calculations for modeling results and assumptions.


As shown in Exhibit 4.3-2, construction-related activities would generate annual unmitigated ROG, NOX, PM_{10}, and PM_{2.5} emissions of approximately 3 lb/day, 31 lb/day, 27 lb/day, and 7 lb/day, respectively. BAAQMD has not adopted mass emission thresholds for construction-generated criteria.
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air pollutants and precursors. Instead, BAAQMD requires that standard equipment exhaust (i.e., ROG and NOₓ) and fugitive dust control measures (i.e., PM₁₀ and PM₂.₅), be incorporated into project design and implemented during project construction. ⁵ Not all BAAQMD-recommended mitigation measures for control of equipment exhaust and fugitive dust emissions are currently incorporated into the project description. Thus, project-generated, construction-related emissions of criteria air pollutants and precursors could conflict with or obstruct implementation of the applicable air quality plan, violate or contribute substantially to an existing or projected air quality violation and/or expose sensitive receptors to substantial pollutant concentrations, especially considering the region’s nonattainment status. While this would be a significant impact, incorporation of Mitigation Measure Air Quality-1 into the project implements applicable BAAQMD dust and exhaust control measures, thereby reducing impacts to a less-than-significant level.

**Mitigation Measure Air Quality-1 (Construction Impacts)** VTA shall implement the following BAAQMD-recommended mitigation measures to reduce emissions of fugitive dust (PM₁₀ and PM₂.₅) during construction activities:

- 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.
- 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 [CCR]). 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 mechanic and determined to be running in proper condition prior to operation.
- Community Outreach staff shall be responsible for receiving, documenting, and responding to general construction and air quality concerns (i.e., dust) from neighboring properties. Community Outreach staff shall consult with the contractor to identify the source of the concerns and determine if proper notification and protocol were issued and followed and if not, implement reasonable measures to correct the problem. VTA shall conspicuously post a telephone number for Community Outreach at the construction site and include it in notices sent to neighbors regarding the anticipated scope of work and construction schedule.

**Responsibility and Monitoring** The above BAAQMD measures shall be incorporated into the grading and construction plans. VTA shall be responsible for notifying construction contractors about

the requirement for air quality control measures to be implemented during construction. If complaints pertaining to air quality are received, VTA shall conduct an on-site investigation. If it is determined those complaints are warranted, additional control measures as determined by VTA shall be implemented.

**LONG-TERM OPERATIONAL EMISSIONS**

Long-term operation of the mitigation project would result in nominal regional emissions of ROG, NOx, PM10, and PM2.5 from mobile and area sources. No stationary sources of emissions would be created as a result of project implementation. The mitigation project would not be maintained other than occasional litter or non-native vegetation removal as well visits by the biologists to collect data for monitoring requirements per the Mitigation Monitoring, and Reporting Plan.

For the purposes of this analysis, it is assumed that one-time maintenance activities for the City of Milpitas project would occur over a 30-day period as late as 2011. Such activities would result in area-source emissions from landscaping equipment such as lawn mowers and trimmers. In addition, sediment removal would likely use a piece of heavy equipment such as a backhoe. Mobile-source emissions would result from equipment delivery, material hauling, and worker commute trips. Project-generated, regional area and mobile-source emissions of ROG, NOx, PM10, and PM2.5 were modeled using the URBEMIS 2007 Version 9.2.4 computer program using default URBEMIS model settings. Exhibit 4.3-3 summarizes the modeled project-generated, operational emissions of criteria air pollutants and ozone precursors under project operations. As summarized, City of Milpitas project maintenance activities during a one month period would result in daily unmitigated emissions of approximately 1 lb/day of ROG, 3 lb/day of NOx, 20 lb/day of PM10, and 4 lb/day PM2.5. Once these one-time City of Milpitas project maintenance activities are completed, emissions from mitigation project maintenance activities described above in subsequent years would be substantially less.

Based on the modeling conducted, project-generated emissions of ROG, NOx, PM10, or PM2.5 would not exceed the BAAQMD’s current or proposed significance thresholds. Consequently, project-generated, operation-related emissions of criteria air pollutants and precursors would not violate standards or contribute substantially to an existing or projected air quality violation and/or expose sensitive receptors to substantial pollutant concentrations. In addition, because the BAAQMD’s significance criteria approximately correlate with heavy-duty vehicle and land use project emission reduction requirements in the SIP, project-generated emissions would also not conflict with any air quality planning efforts.

Emissions from long-term operation of the Wrigley Creek Improvement Project would result in less-than-significant impacts to air quality. Therefore, no mitigation would be required.

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6 As noted in the Chapter 2.0 Project Description, depending on the construction start date, project components requested by the City of Milpitas (i.e., sediment removal, outfall repair, and vegetation management) may not be completed in 2010; therefore, construction of these features would continue between April 15 and October 31, 2011. Accordingly, these maintenance activities are analyzed under Long-Term Operational Emissions.
### Exhibit 4.3-3
**Summary of Modeled Emissions of Criteria Air Pollutants and Precursors Generated by Project Operations in 2011**

<table>
<thead>
<tr>
<th>Source</th>
<th>Emissions (lb/day/TPY)</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>ROG</td>
<td>NOX</td>
</tr>
<tr>
<td>Area Sources</td>
<td>0.6/0.0</td>
<td>2.9</td>
<td>0.0</td>
</tr>
<tr>
<td>Mobile sources</td>
<td>0.1/0.0</td>
<td>0.1</td>
<td>0.0</td>
</tr>
<tr>
<td>Total</td>
<td>0.7/0.0*</td>
<td>3.0</td>
<td>0.0</td>
</tr>
<tr>
<td>BAAQMD Current</td>
<td></td>
<td>80</td>
<td>80</td>
</tr>
<tr>
<td>Significance Thresholds:</td>
<td></td>
<td>15</td>
<td>15</td>
</tr>
<tr>
<td>BAAQMD Proposed</td>
<td></td>
<td>54</td>
<td>54</td>
</tr>
<tr>
<td>Significance Thresholds:</td>
<td></td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>Exceeds Thresholds?</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
</tbody>
</table>

Notes:  
- lb/day = pounds per day,  
- TPY = tons per year,  
- ROG = reactive organic gases;  
- NOX = oxides of nitrogen;  
- PM\(_{10}\) = respirable particulate matter with an aerodynamic diameter of 10 micrometers or less;  
- PM\(_{2.5}\) = fine particulate matter with an aerodynamic diameter of 2.5 micrometers or less;  
- BAAQMD = Bay Area Air Quality Management District  

* Totals may not add exactly due to rounding.

Refer to **Appendix A: Air Quality Modeling Calculations** for detailed assumptions and modeling output files.


### GLOBAL CLIMATE CHANGE

GHG emissions generated by the project would be primarily in the form of carbon dioxide (CO\(_2\)) from construction equipment exhaust and long-term maintenance equipment. Although emissions of other GHGs such as methane and nitrous oxide are important with respect to global climate change, the emissions levels of these GHGs for the sources associated with project construction are nominal compared with CO\(_2\) emissions, even considering their higher global warming potential. Therefore, all GHG emissions for construction and operations are reported as CO\(_2\).

Emissions factors and calculation methods for estimating GHG emissions associated with construction projects have not been formally adopted for use by ARB, BAAQMD, or any other air district. The construction-related GHG emissions associated with project implementation were calculated using URBEMIS 2007, Version 9.2.4.

Minimal to no indirect GHG emissions associated with electricity or water consumption would be associated with implementation of the proposed project.
Construction activities associated with the proposed project would occur over an approximately six-month period in 2010. During this time, a net increase in GHG emissions would result from various construction activities. Construction-related GHG emissions would be associated with engine exhaust from heavy-duty construction equipment, transport trucks hauling materials (e.g., soil and aggregate), and worker commute trips. Although any increase in GHG emissions would add to the quantity of emissions that contribute to global climate change, it is noteworthy that emissions associated with construction of the proposed project would occur over a finite period of time (i.e., six months). After full project buildout, all construction emissions would cease.

Estimated GHG emissions associated with long-term maintenance operations of the mitigation project and one-time maintenance activities for the City of Milpitas project would be approximately 4 MTCO₂/yr (see Exhibit 4.3-4) in 2011. For context, BAAQMD has published a draft operational GHG mass emissions threshold of 1,100 MTCO₂/yr. In addition, facilities that generate more than 25,000 MTCO₂/yr are mandated to report their GHG emissions to ARB. Facilities that generate more than 10,000 MTCO₂/yr would be subject to participation in cap and trade programs established by AB 32. Again, the project would generate substantially fewer emissions than the above-referenced emissions levels. Because the project would generate approximately 4 MTCO₂e/yr, and substantially less after one-time maintenance activities for the City of Milpitas project are completed, operational-related emissions would not approach recommended emission thresholds of recognized agencies and the project’s operational GHG emissions would not be considerable nor conflict with the implementation of AB 32.

**Exhibit 4.3-4**

**Summary of Modeled Construction-Generated Emissions of Greenhouse Gases**

<table>
<thead>
<tr>
<th>Source</th>
<th>Total Mass CO₂ Emissions (metric tons per year)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Construction Emissions</td>
<td></td>
</tr>
<tr>
<td>2010 Total</td>
<td>177</td>
</tr>
<tr>
<td>Operational Emissions</td>
<td></td>
</tr>
<tr>
<td>2011 Total</td>
<td>4</td>
</tr>
</tbody>
</table>

Notes: CO₂ = carbon dioxide

a Construction and operational emissions were modeled with the URBEMIS 2007 computer model. The URBEMIS 2007 model does not account for embedded CO₂ emissions associated with the manufacture of construction equipment or production of concrete or other building materials used in project construction. URBEMIS does not estimate greenhouse gas emissions other than CO₂, such as methane and nitrous oxide, as these levels are expected to be nominal in comparison to the estimated CO₂ levels despite their higher global warming potential.

Refer to Appendix A: Air Quality Modeling Calculations for detailed model input, assumptions, and threshold calculations.


While GHG emissions from maintenance operations would be considered a less-than-significant impact, construction-related GHG emissions would be a significant impact as BAAQMD-recommended BMPs for reduction of GHG emissions during construction are not included as part of the project description. Incorporation of Mitigation Measure Air Quality-2 would reduce impacts associated with short-term construction activities and climate change to a less-than-significant level.
Mitigation Measure Air Quality-2 (GHG Emissions) VTA shall implement the following BAAQMD-recommended exhaust emissions mitigation measures during project construction:

- Alternative-fueled (e.g., biodiesel, electric) construction vehicles/equipment of at least 15 percent of the fleet;
- Utilize local building materials and sources (within 100 miles) for at least 10 percent of necessary supplies;
- Recycle at least 50 percent of construction waste or demolition materials (e.g., sackcrete). VTA and all hired contractors shall divert as much organic or inorganic waste away from landfills, as feasible, up to or exceeding 50 percent of total material removed.

Responsibility and Monitoring The above BAAQMD measures shall be incorporated into the grading and construction plans. VTA shall be responsible for notifying construction contractors about the requirement for air quality control measures to be implemented during construction.

Air Quality d) Would the project expose sensitive receptors to substantial pollutant concentrations?

Short-term construction and long-term operational activities would result in particulate exhaust emissions from diesel equipment. However, due to the distance of existing sensitive receptors from proposed activities and the dispersive qualities of diesel particulate exhaust, this would be a less-than-significant impact.

Short-Term Construction Emissions to Sensitive Receptors

Project construction, including site preparation and implementation of mitigation project features, would result in short-term generation of diesel exhaust emissions from the use of equipment required for site grading and other construction activities. Particulate exhaust emissions from diesel-fueled engines (diesel PM) were identified as a toxic air contaminant (TAC) by ARB in 1998. The potential cancer risk from the inhalation of diesel PM, as discussed below, outweighs the potential for all other health impacts. The dose to which the receptors are exposed (a function of concentration and duration of exposure) is the primary factor used to determine health risk (i.e., potential exposure to TAC emission levels that exceed applicable standards). According to the Office of Environmental Health Hazard Assessment, health risk assessments, which determine the exposure of sensitive receptors to TAC emissions, should be based on a 70-year exposure period; however, such assessments should be limited to the period/duration of activities associated with the project.

The possible sensitive receptor exposure period for the proposed project is short (less than seven months). BAAQMD does not recommend the completion of health hazard assessments for construction-related emissions of TACs. In addition, diesel PM is highly dispersive and studies

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8 EDAW | AECOM communication with Julio Salinas, Staff Toxicologist, Office of Health Hazard Assessment, August 3, 2004.

have shown that measured concentrations of vehicle-related pollutants, including ultra-fine particles, decrease dramatically within approximately 300 feet of the source. Because the use of mobilized equipment would be temporary, in combination with the dispersive properties of diesel PM, and because primary construction activities would not be active within 300 feet of any sensitive receptors, construction-related TAC emissions would not be anticipated to expose sensitive receptors to substantial pollutant concentrations.

**Long-Term Operation Emissions to Sensitive Receptors**

As discussed under item “Air Quality a)” above, other than during project construction, the proposed project includes minimal maintenance activities. This, in combination with the dispersive properties of diesel PM, and because primary maintenance activities would not be active within 300 feet of any sensitive receptors, operational-related TAC emissions would not be anticipated to expose sensitive receptors to substantial pollutant concentrations.

Both short-term construction activities and long-term operational activities are not anticipated to expose sensitive receptors to substantial pollutant concentrations. Therefore, this would be a less-than-significant impact and no mitigation would be required.

**Air Quality e) Would the project create objectionable odors affecting a substantial number of people?**

While project implementation would result in diesel exhaust emissions, it would not create or expose substantial number of people to objectionable odors. This would be a less-than-significant impact.

Construction of the project would result in diesel exhaust emissions from on-site construction equipment. The diesel exhaust emissions would be intermittent and temporary and would dissipate rapidly from the source with an increase in distance. Therefore, these emissions would not result in an objectionable odor that would affect a substantial number of people. In addition, no existing sources of odors are located in the project vicinity and operation of the project would not result in new permanent odor sources. Therefore, this would be a less-than-significant impact and no mitigation would be required.

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4.4 NOISE

This section includes a description of ambient-noise conditions, summary of applicable regulations, and an analysis of potential short-term construction and long-term operational-source noise impacts of the proposed project. Mitigation measures are recommended as necessary to reduce significant noise impacts to a less-than-significant level.

Environmental Setting

EXISTING NOISE SOURCES AND SENSITIVE RECEPTORS

The project site is located in the City of Milpitas, south of Calaveras Boulevard / State Route 237 (SR 237), north and west of Topaz Street, and east of the Union Pacific Railroad mainline (UPRR). The nearest existing noise-sensitive land uses in the vicinity include the Macedonia Missionary Baptist Church approximately 1,000 feet west of the project site across the UPRR mainline and an apartment complex located 350 feet north of the project site across Calaveras Boulevard / SR 237.

The existing noise environment within the project vicinity is primarily influenced by surface-transportation noise emanating from train and vehicular traffic on the UPRR mainline and Calaveras Boulevard / SR 237. Intermittent noise from outdoor activities at the surrounding commercial and industrial uses (e.g., loading docks, back-up alarms, delivery trucks, landscaping equipment, parking lots) also influences the existing noise environment.

Traffic on the UPRR mainline and Calaveras Boulevard / SR 237 contributes greatest to background noise levels at the project site. According to the City of Milpitas General Plan Noise Element, noise levels from the UPRR mainline are approximately 65 A-weighted decibels (dBA) day-night noise level \( L_{dn} \) at the project site and 60-65 dBA \( L_{dn} \) at surrounding land uses. Existing roadway traffic noise levels are published by the California Department of Transportation (Caltrans) for Calaveras Boulevard / SR 237. Modeling was conducted using the Federal Highway Administration (FHWA) Traffic Noise Prediction Model (RD-77-108). The FHWA model is based on California Vehicle Noise (CALVENO) reference noise factors for automobiles, medium trucks, and heavy trucks, with consideration given to vehicle volume, speed, roadway configuration, distance to the receptor, and ground attenuation factors.

1 Noise-sensitive land uses generally include those uses where exposure would result in adverse effects (e.g., sleep disturbance, annoyance), as well as uses where quiet is an essential element of their intended purpose. Residences are of primary concern because of the potential for increased and prolonged exposure of individuals to both interior and exterior noise levels. Other sensitive land uses include hospitals, convalescent facilities, parks, hotels, churches, libraries, and other uses where low interior noise levels are essential.

2 Chapter 6: Noise Element, City of Milpitas General Plan, City of Milpitas, updated 2002.

Exhibit 4.4-1 presents the modeled Community Noise Equivalent Levels (CNEL) at 50 feet from the centerline of the near travel lane and the distance from the roadway centerline to the 60- and 65-dBA CNEL contours for existing average daily traffic (ADT) volumes. Based on the modeling conducted, existing traffic on Calaveras Boulevard / SR 237 results in noise levels of approximately 68 dBA CNEL at 160 feet, which is the distance from Calaveras Boulevard / SR 237 to the residence closest to project site.

### Exhibit 4.4-1
**Summary of Modeled Traffic Noise Levels**

<table>
<thead>
<tr>
<th>Location</th>
<th>Noise Level at 50 feet (dBA CNEL)</th>
<th>Distance to 60 dBA CNEL contour (feet)</th>
<th>Distance to 65 dBA CNEL contour (feet)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Calaveras Boulevard / SR-237 in vicinity of project site.</td>
<td>76.1</td>
<td>592</td>
<td>275</td>
</tr>
</tbody>
</table>

Notes:  
- dBA = A-weighted decibels;  
- CNEL = Community Noise Equivalent Level  

### REGULATORY BACKGROUND

#### City of Milpitas

The Noise Element of the City of Milpitas General Plan has set noise standards for land use compatibility as 70 dBA CNEL for commercial, industrial, and open space areas surrounding the project area and 65 dBA CNEL for multi-family residential areas such as the apartment complex across Calaveras Boulevard / SR 237. 4

The City of Milpitas has adopted noise regulations within the Noise Ordinance. 5 The ordinance has a declaration of policies, definitions, exemptions, and the authority to enforce noise violations. **Policy 213-3(b)**, presented below, is relevant to the proposed project.

**Policy 213-3(b) Site Construction Regulations.** No person shall engage or permit others to engage in construction of any building or related road or walkway, pool or landscape improvement or in the construction operations related thereto, including, delivery of construction materials, supplies, or improvements on or to a construction site except within the hours of 7:00 AM to 7:00 PM. on weekdays and weekends. No construction work shall be conducted or performed on the holidays indicated in Section V-213-2-2.0. Holidays are defined as: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, and Christmas Day.

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4 Chapter 6: Noise Element, City of Milpitas General Plan, City of Milpitas, updated 2002.

DISCUSSION OF INITIAL STUDY CHECKLIST ITEMS

Noise a) Would the project 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 in other applicable local, State, or federal standards?

Short-term construction activities could result in annoyance and/or sleep disruption to occupants of the nearby existing noise-sensitive land uses and/or create a substantial temporary increase in ambient noise levels in the project vicinity. This would be a less-than-significant impact with mitigation incorporation.

Long-term operational activities (e.g., litter removal and mitigation monitoring) would result in noise levels that would not exceed the City of Milpitas’ noise standard of 65 dBA CNEL for multi-family residential areas. This would be a less-than-significant impact.

Short-Term Construction Activities

Construction activities at the project site would include site preparation (e.g., clearing and grubbing), material transport, staging and dewatering, creek grading and bank stabilization, erosion control and fence installation, utility and irrigation work, vegetation planting, and other miscellaneous activities. Typical construction equipment for these types of activities may include, but is not limited to, dozers, graders, excavators, haul trucks, a front-end loader, and water pumps. Typical noise levels for these types of equipment can range from 77 to 85 dBA at 50 feet, as indicated in Exhibit 4.4-2.

Exhibit 4.4-2
Modeled Construction-Equipment Noise Levels

<table>
<thead>
<tr>
<th>Type of Equipment</th>
<th>Noise Level at 50 feet (dBA)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dozer</td>
<td>85.0</td>
</tr>
<tr>
<td>Grader</td>
<td>85.0</td>
</tr>
<tr>
<td>Excavators</td>
<td>85.0</td>
</tr>
<tr>
<td>Haul Trucks</td>
<td>84.0</td>
</tr>
<tr>
<td>Front-end Loader</td>
<td>80.0</td>
</tr>
<tr>
<td>Pumps</td>
<td>77.0</td>
</tr>
<tr>
<td>Maximum Hourly Combined Noise Level</td>
<td>86.2</td>
</tr>
</tbody>
</table>

Notes: dBA = A-weighted decibels

Sources: Roadway Construction Noise Model Version 1.0 (FHWA RCNM V. 1.0), Federal Highway Administration, January 2006 and EDAW | AECOM 2009.
The simultaneous operation of on-site construction equipment could result in combined intermittent noise levels up to 86 dBA at 50 feet from the project site. Based on these noise levels and a typical noise-attenuation rate of 6 dBA per doubling of distance, exterior noise levels at noise-sensitive receptors located within 550 feet from the project site (e.g., residences) could exceed 65 dBA CNEL (i.e., the City of Milpitas’ noise standard for multi-family residences) without feasible noise controls. Intervening buildings, topographic features, and other noise sources such as the UPRR mainline and Calaveras Boulevard / SR 237 would reduce the distance from which construction-related noise would be noticeable. The nearest receptor to the project site is located 350 feet north across Calaveras Boulevard / SR 237, which provides a substantial noise barrier between the project site and residences to the north.

Project construction activities would also result in a short-term increase in traffic on the local area roadway network, but this increase would not be sufficient to increase traffic noise levels. Noticeable increases of 3 dBA (CNEL) do not typically occur without a substantial increase (i.e., doubling) in roadway traffic volumes. 6 Calaveras Boulevard / SR 237 currently has average daily traffic levels of approximately 75,000 vehicles per day. Construction-related traffic would be distributed over the area roadway network. Since the project would not generate vehicle trips that would result in a doubling of existing traffic volumes on any affected roadway segment, it would not increase the overall traffic noise levels by a substantial amount.

Noise levels from on-site, heavy-duty construction equipment could exceed standards set by the City of Milpitas (see discussion above and Exhibit 4.4-2). However, the City’s noise regulations provide exceptions for construction noise, allowing construction activities to exceed applicable noise standards when construction takes place during less noise-sensitive daytime hours (i.e., between 7:00 AM and 7:00 PM). As discussed in Chapter 2.0 Description of the Proposed Project, project construction hours would occur from 7:00 AM to 7:00 PM Monday through Friday, except holidays, consistent with City of Milpitas requirements.

One-time maintenance activities associated with the City of Milpitas project features would include sediment removal and repair of outfalls. Vegetation trimming and mowing would also occur. Sediment removal would require small pieces of heavy equipment, such as an excavator or backhoe, and landscaping would likely use lawn mowers and trimmers. Excavators create noise levels of approximately 85 dBA at 50 feet 7 and lawn mowers create noise levels of approximately 83 dBA at six feet. 8 At the nearest sensitive receptors (i.e., 350 feet) noise from excavators would be approximately 63 dBA and lawn mowers approximately 47 dBA. These noise levels would not exceed the City of Milpitas’ noise standard of 65 dBA CNEL for multi-family residential areas.

Project construction activities could still result in annoyance and/or sleep disruption to occupants of the nearby existing noise-sensitive land uses and/or create a substantial temporary increase in ambient noise levels in the project vicinity. While this would be a significant impact, incorporation of Mitigation Measure Noise-1 would reduce impacts from construction noise to a less-than-significant level.

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8 Noise measurement of typical lawn mower by EDAW | AECOM noise analyst, 2006.
Mitigation Measure Noise-1 (Construction Impacts) In addition to adherence of provisions set forth in the City of Milpitas Municipal Code (discussed above), VTA shall mitigate construction noise impacts by implementing the following measures:

- Properly maintain construction equipment and equip with appropriate noise control features, such as mufflers, in accordance with manufacturers’ specifications;
- Locate temporary stationary noise generating equipment as far as possible from identified sensitive receptors;
- Utilize “quiet” air compressors and other temporary stationary noise sources (e.g., generators) where technology exists;
- Radios shall be controlled so as not to be audible outside the project site; and
- Community Outreach staff shall be responsible for receiving, documenting, and responding to general construction and noise-related concerns from neighboring properties. Community Outreach staff shall consult with the contractor to identify the source of the concerns and determine if proper notification and protocol were issued and followed (e.g., compliance with permitted construction hours) and if not, implement reasonable measures to correct the problem. VTA shall conspicuously post a telephone number for Community Outreach at the construction site and include it in notices sent to neighbors regarding the anticipated scope of work and construction schedule.

Responsibility and Monitoring VTA would be responsible to ensure that the above mitigation measure would be implemented during project construction. In addition, VTA would be responsible for designating Community Outreach staff to monitor complaints. VTA’s resident inspector and the contractor would ensure noise problems are corrected.

Long-Term Operational Source Noise

Long-term operation of the project would not include any new major stationary or mobile noise sources. Maintenance of the mitigation project would be limited to litter removal, nonnative vegetation removal (if necessary), and monitoring by biologists. Noise levels associated with these activities would not exceed the City of Milpitas’ noise standard of 65 dBA CNEL for multi-family residential areas. Thus, because maintenance activities would not exceed applicable standards and no long-term stationary and mobile noise sources would be created, this would be a less-than-significant impact and no mitigation would be required.

Noise b) Would the project result in exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels? Construction activities would result in groundborne vibration that would not exceed State or federal recommended standards. This would be a less-than-significant impact

Construction activities could result in varying degrees of temporary groundborne vibration, depending on the specific construction equipment used and operations involved. Vibration generated by construction equipment spreads through the ground and diminishes in magnitude with increases in distance. Exhibit 4.4-3 displays vibration levels for typical equipment that would be used during construction of the proposed project.
4.4 Noise

Wrigley Creek Improvement Project
Final Initial Study / Mitigated Negative Declaration
January 8, 2010

Exhibit 4.4-3
Typical Construction-Equipment Vibration Levels

<table>
<thead>
<tr>
<th>Equipment</th>
<th>PPV at 25 feet (in/sec) a</th>
<th>Approximate Lv at 25 feet b VdB</th>
</tr>
</thead>
<tbody>
<tr>
<td>Large Bulldozer</td>
<td>0.089</td>
<td>87</td>
</tr>
<tr>
<td>Trucks</td>
<td>0.076</td>
<td>86</td>
</tr>
<tr>
<td>Small Bulldozer</td>
<td>0.003</td>
<td>58</td>
</tr>
<tr>
<td>Caltrans’ Recommended Standard</td>
<td>0.2</td>
<td>--</td>
</tr>
<tr>
<td>FTA’s Maximum-Acceptable Vibration Standard</td>
<td>--</td>
<td>80</td>
</tr>
<tr>
<td>Exceeds Threshold?</td>
<td>No</td>
<td>No</td>
</tr>
</tbody>
</table>

a Where PPV is the peak particle velocity in inches per second
b Where Lv is the velocity level in decibels (VdB) referenced to 1 microinch/second and based on the root mean square (RMS) velocity amplitude.


As discussed above, it is assumed that on-site construction equipment could include, but is not limited to, dozers, graders, excavators, haul trucks, front-end loaders, and water pumps. According to the Federal Transit Administration (FTA), vibration levels associated with the use of bulldozers range from approximately 0.003 to 0.089 inches per second peak particle velocity and 58- to 87-inch velocity level (Lv) in vibration decibels (VdB) at 25 feet, as shown in Exhibit 4.4-3. Using FTA-recommended procedures, predicted worst-case vibration levels of approximately 0.00 inches per second PPV and 53 VdB at the nearest sensitive residence (i.e., 350 feet) could occur from use of large bulldozers. These vibration levels would not exceed Caltrans recommended standard of 0.2 inches per second PPV with respect to the prevention of structural damage for normal buildings or the FTA’s maximum-acceptable vibration standard of 80 VdB with respect to human annoyance for residential uses.

Therefore, vibration and groundborne noise resulting from the project would not expose persons to levels exceeding either Caltrans or FTA recommendations. Long-term operations and maintenance of


the project would not include any vibration sources. Therefore, this would be a less-than-significant impact and no mitigation would be required.

**Noise c)** *Would the project result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?*

While project implementation would result in periodic maintenance activities, it would not result in any new permanent stationary or mobile noise sources. This would be a less-than-significant impact.

As discussed in “Noise a)” above, the long-term operation of the proposed project would not include any new stationary or mobile noise sources. In addition, as discussed in “Noise a)” above, maintenance activities related to mitigation project features (e.g., litter removal, etc.) would not exceed applicable standards. As a result, no substantial permanent increase in ambient noise levels would occur. Accordingly, this would be a less-than-significant impact and no mitigation would be required.

**Noise d)** *Would the project result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?*

Short-term construction activities could result in annoyance and/or sleep disruption to occupants of the nearby existing noise-sensitive land uses and/or create a substantial temporary increase in ambient noise levels in the project vicinity. This would be a less-than-significant impact with mitigation incorporation.

As discussed in “Noise a)” above, the City of Milpitas has adopted a noise ordinance for which construction-generated noise levels are limited to between 7:00 AM and 7:00 PM. Nevertheless, if construction equipment were not properly equipped with noise control devices or if stationary construction equipment were located close to identified sensitive receptors, construction-generated noise could result in annoyance and/or sleep disruption to occupants of the nearby existing noise-sensitive land uses (e.g., residences) and could create a substantial temporary increase in ambient noise levels in the project vicinity. As a result, this would be a significant impact.

Implementation of **Mitigation Measure Noise-1** (see above) would reduce short-term construction source noise to a less-than-significant level.
4.5 AESTHETICS

This section describes the existing visual conditions of the project site and relevant policies/provisions of the City of Milpitas General Plan. In addition, potential visual impacts that would result from project implementation are evaluated through the use of a photo-realistic visual simulation.

Environmental Setting

LAND USES IN THE PROJECT VICINITY

The project site is located in a highly urbanized area just southwest of the center of the City of Milpitas. As described in Chapter 2.0 Description of the Proposed Project, the project site is bound to the north by Industrial Way, to the east by a commercial and industrial park, to west by the Union Pacific Railroad and Santa Clara Valley Transportation Authority (VTA) railroad right-of-way, and to the south by additional industrial development.

In the project site vicinity, at the intersection of East Calaveras Boulevard / State Route 237 and North / South Milpitas Boulevard, a major shopping corridor exists. Mercado Real Shopping Center is at the southwest corner, Beresford Square Shopping Center is at the northwest corner of the intersection, and Town Center Shopping Center is just northeast of the East Calaveras Boulevard and North Milpitas Boulevard intersection. The Milpitas Civic Center is located next to the Town Center Shopping Center, at the northeast corner of East Calaveras Boulevard and North Milpitas Boulevard.

PROJECT SITE VISUAL CHARACTERISTICS

The viewpoint selected for analysis is from eastbound lanes of the Calaveras Boulevard / SR-237 overcrossing of Wrigley Creek and the Union Pacific Railroad right-of-way. Exhibit 4.5-1 shows the viewpoint location, which faces southeast towards the project site and is indicated by a red arrow. This is one of the few public vantage points of the project site.

Exhibit 4.5-2 illustrates the existing visual conditions of the project site. The project site is framed by the Union Pacific Railroad right-of-way (buffered by the temporary fence and narrow gravel lane), orange construction fencing, and trees in the western foreground; dense trees and shrubs adjacent to the Mercado Real Shopping Center and industrial uses to the east; and overhead utility lines along Industrial Way in the northern foreground. Along its eastern boundary, the Wrigley Creek channel is largely obscured by brown ruderal vegetation. A small, man-made trail diagonally crosses the site from southwest to northeast before exiting onto Industrial Way.

The aesthetic quality of the project has been substantially degraded by overhead utility lines, public dumping (trash and debris is visible adjacent to Industrial Way) and non-native ruderal vegetation. Although not clearly visible from vantage points, the creek channel contains a relatively large amount of trash and debris (e.g., plastic products and shopping carts.) The blue tarpaulin of a homeless encampment is visible in the western portion of the project site.
Exhibit 4.5-1
Public Viewpoint Location

Exhibit 4.5-2
Existing Visual Conditions

REGULATORY SETTING

City of Milpitas General Plan

Section 4.7 Scenic Resources and Routes section of the Milpitas General Plan describes existing visual resources within the city including a network of designated Scenic Corridors and Scenic Connectors. There are no designated Scenic Corridors in the project vicinity; however, the entire length of Calaveras Boulevard is designated as a Scenic Connector, which is defined as a:

“...designated street connecting or providing access to Scenic Corridors or distant views. A scenic connector may not necessarily traverse an area of scenic value, and the abutting land is not subject to the scenic corridor land use controls. However, special design treatment, which may include roadside landscaping, undergrounding of utility lines, and street furnishings will be carried out to provide a visual continuity with the scenic corridors.”

Environmental Impacts and Mitigation Measures

As described in Chapter 3.0 Environmental Checklist Form, the project would have no visual impacts related to scenic vistas, state scenic highways, or nighttime lighting and glare. The following evaluates proposed aesthetic conditions with project development.

Aesthetics c) Would the project substantially degrade the existing character or quality of the site and its surroundings?

Proposed restoration activities would substantially improve the visual quality of Wrigley Creek and the project site. Therefore, project implementation would result in no or beneficial impacts.

Exhibit 4.5-3 illustrates proposed aesthetic conditions that would occur with project implementation. The proposed creek meanders, wetland and riparian vegetation, and the additional upland plantings would be the most prominent visual features. The visual simulation shows a variety of plant species and shrubs, created by the restoration project. Wrigley Creek would meander through the center of the project site from south to north, with surface water resources that would support the surrounding riparian wetland environment. The restoration would promote a greater variety of seasonal vegetation as compared to existing conditions, thereby improving the visual quality of the site.

A proposed chain-link fence would enclose the north end of the project site, while a split rail fence would border the western boundary. The fencing would be outside of the Chevron pipeline easement bordering the railroad right-of-way. A buffer of open grassland would be created between the railroad right-of-way and the restored project site.

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1 Figure 4.6 Scenic Resources and Routes, Chapter 4 Open Space and Environmental Conservation Element, City of Milpitas General Plan, City of Milpitas, Updated 2002. Available online at http://www.ci.milpitas.ca.gov/_pdfs/plan_plan_general_chapter4.pdf
Sources: EDAW | AECOM, July 2009. Plant photos in visual simulation were taken from: EDAW | AECOM library; www.forestryimages.org (courtesy of University of Arizona and California Department of Forestry and Fire Protection); and calphotos.berkeley.edu (courtesy of US Forest Service and Saint Mary's College).
Appropriate signs would be posted on the chain link fence along Industrial Way informing the public that the project is an environmentally sensitive restoration area prohibiting public access and dumping. The deterrence of dumping and access would substantially improve the visual quality of the project site.

The proposed restoration of Wrigley Creek would not result in the development of structures or other features that would alter or obstruct views from any public open space or from any existing or planned residential area. Improved visual quality of the project site adjacent to Calaveras Boulevard / SR 237, a designated Scenic Connector, would be consistent with the goals and policies of the Milpitas General Plan.

In summary, project construction and restoration activities would improve the visual character of the project site. Therefore project implementation would result in no or a beneficial impact.
4.6 CULTURAL RESOURCES

This section evaluates potential impacts to cultural resources as a result of the proposed Wrigley Creek Improvement Project. This section is based on archival research and archeological studies conducted at the project site.

Environmental Setting

PREVIOUS CULTURAL RESOURCES SURVEYS

The project site has undergone extensive cultural resources surveys as part of the FRR / LBC Project as well as the Santa Clara Valley Transportation Authority Silicon Valley Rapid Transit Corridor (SVRTC) Project. Technical reports surveying the potential for cultural resources were prepared for both projects as part of their environmental review and are incorporated by reference.¹ ² ³

No archeological deposits or other cultural resources were identified within the areas surveyed for the FRR / LBC project. However, several locations, including a portion of the Wrigley Creek Improvement Project site, were identified during the SVRTC Project studies as having potential for buried archaeological deposits.⁴ This potential is based on the position of historic-period watercourses, as shown on 1899 through 1944 United States Geological Survey (USGS) topographic maps (including Arroyo de Los Coches in the vicinity of Wrigley Creek), in relation to recent Holocene ⁵ age surface landforms. These landforms developed during the span of human occupation in California and are known to contain buried archaeological sites in other portions of the Santa Clara Valley and wider East Bay area. The report concluded that for significant earth disturbing activities in any of the high sensitivity areas, it is recommended that a subsurface geo-archaeological reconnaissance (e.g., backhoe trenching) be undertaken to determine if buried resources are present. In addition, it recommended that a program of archaeological monitoring be implemented during project-related earthmoving activities.


³ As both reports contain extensive detail about prehistoric, ethnographic, and historic context, this section will focus on issues related directly to the project site.


⁵ The Holocene (meaning “entirely recent” in Greek), is the most recent epoch in geologic time, lasting from about 11,000 years ago until the present day and is characterized by the development of human civilization.
CULTURAL RESOURCES SURVEY OF PROJECT SITE

Based on the above recommendations and high sensitivity determination of the proposed project site, Far Western (VTA’s cultural resources consultant) conducted subsurface geo-archaeological explorations for the Wrigley Creek Improvement Project site on September 1, 2009. Appendix B Cultural Resources Report provides their results. The work focused on the portions of the project area where substantial earth disturbances would occur, while remaining a safe distance away from a Chevron pipeline that runs generally north-south through the project area.

Exploration trenches were excavated at eight locations in an effort to determine the presence or absence of buried prehistoric archaeological remains. The exact location and size of each trench was determined in the field based on existing conditions and constraints, and the ongoing results of trenching. The trench dimensions averaged about 1.0 meter (3.3 feet) wide, 2.7 meters (~8.9 feet) deep, and 3.3 meters (~10.8 feet) long, though some were excavated longer and / or deeper in areas where the subsurface deposits appeared younger and / or variable. In all, about 70 cubic meters of material were excavated from the trenches (more than 26 linear meters overall), for an average of about 8.8 cubic meters per trench. Buried Holocene-age soils or land surfaces overlain by artificial fill and / or younger alluvium were identified in all but two trenches, however both of these trenches encountered railroad construction fill that could not be penetrated. The buried soil/land surfaces occurred at depths ranging from 0.7 to 3.2 meters (~2.3-10.5 feet) below the present ground surface.

The presence or absence of archaeological materials was determined by examining and raking the deposits as they were removed from the trenches and by examining the trench walls whenever possible. No prehistoric archaeological deposits were identified as a result of this investigation. Given that eight trenches were excavated across the project area, it is very unlikely that the project area contains a substantial buried prehistoric archaeological site. However, it is always possible that small, sparse, and/or isolated prehistoric archaeological deposits may be buried in the project area.

An intact, buried historic-period archaeological site, consisting of numerous complete bottles, cans, boots, coal, and various metal fragments was identified in Trench 5 at depths ranging from 50 to 75 centimeters below surface. Analysis of bottles recovered from this deposit suggests that the site dates to the late 1950’s to early 1960’s. Given that this deposit is likely greater than fifty years old it will be recorded as an archaeological site. However, no further archaeological studies are recommended because archaeological resources from the late twentieth century are unlikely to yield information not available in the historic record. For these reasons, the project sponsor’s consultant recommends no further archaeological investigations of the project site.

NATIVE AMERICAN CONSULTATION

The Native American Heritage commission (NAHC) was contacted in August 2009 and requested to review the Sacred Lands Files for the Wrigley Creek Improvement Project area. No resources of concern were identified from the review of the sacred lands file. The NAHC identified nine individuals or groups who may have information relevant to the project area. In September 2009, a letter was sent by certified mail to each of the nine contacts asking them to share relevant concerns, information, or recommendations concerning cultural resources. The distribution list and letters are attached (see Appendix B). In October 2009, an attempt was made to contact the individuals or groups by telephone as a follow-up to the letter. In most cases, a message was left that explained the purpose of the call and provided a name and number at VTA should he/she want to return the call. In addition, a follow-up email was sent to the individuals or groups not reached by letter or telephone. See the attached contact log in Appendix B for documentation of the consultation efforts.
Below is a summary of the input received from the NAHC contacts:

- Mr. Valentin Lopez said that the project area is in Rosemary Cambra’s territory and deferred to Ms. Cambra for input.

- Ms. Irenne Zweirlein said that she is concerned about the site due to its proximity to other burials sites and the railroad corridor. She advised that VTA should have excavation work monitored and have a plan for unexpected discoveries.

- Ms. Jean-Marie Feyling noted that many burials were discovered in the vicinity of the U.S. 101 / Alviso and SR 237 / North First Street interchanges. The railroad corridor is sensitive for cultural resources because it was a travel corridor used by the ancient people.

- Ms. Rosemary Cambra wrote that “there are no specifically identified ancestral sites that are known to us to exist within the specific proposed study area…” However, the project site is near other known cultural sites. She recommended, as a minimum measure, that excavations be monitored and all information obtained be passed on to the Tribe.

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**Environmental Impacts and Mitigation Measures**

Checklist items a) through d) are considered together

**Cultural Resources a)** *Would the project cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?*

**Cultural Resources b)** *Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?*

**Cultural Resources c)** *Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?*

**Cultural Resources d)** *Would the project disturb any human remains, including those interred outside of formal cemeteries?*

While no discernible impacts to cultural resources, including historical, archaeological, and paleontological resources and / or human remains, are anticipated, the possibility cannot be precluded that such resources are present below the ground surface and could be damaged during proposed grading and construction activities. This would be a less-than-significant impact with mitigation incorporation.

The *Wrigley Creek Improvement Project* site contains no known cultural or historic resources. However, historical, archaeological, paleontological, and / or human remains may be encountered during proposed construction and grading activities. While disturbance of these resources would be considered a potentially significant impact, incorporation of the following mitigation measure would reduce this impact to a less-than-significant level.
Mitigation Measure Cultural Resources-1 (Disturbance of Subsurface Cultural Resources during Project Construction.) If subsurface cultural resources deposits are encountered during construction, work in the immediate vicinity shall be halted until a qualified archaeologist can assess the significance of the finds. The construction contract will include the following specifications regarding archaeological resources:

Sub-surface construction activities, including clearing and grubbing, excavation, grading, and other earthmoving or land surface alteration activities, shall be monitored by a VTA archaeologist and/or Native American monitor, as determined by VTA.

Should any archaeological or historical artifacts or skeletal material be discovered or unearthed during construction activities, all work within ten meters (~33 feet) of the find shall be halted. The contractor (subcontractor or Resident Inspector, as appropriate) shall immediately notify VTA Environmental Programs and Resources Management Department staff at (408) 321-5789, who will initiate procedures in accordance with 36 CFR 800.11 and State Law (California Public Resources Code, Section 5097.98 and Health and Safety Code, Section 7050.5 and Santa Clara County Ordinance Code Section B6-16 through B6-23). Construction activities within ten meters (~33 feet) of the find shall remain halted until authorization is obtained from the archaeologist or VTA Environmental Programs and Resources Management Department staff that construction in the vicinity of the find may recommence.

Responsibility and Monitoring VTA would be responsible for including this measure in the contracts of all contractors engaged in project construction and grading activities. In the event that prehistoric archeological deposits are discovered, local Native American individuals or organizations shall be consulted when making resource management decisions. All applicable State and local requirements concerning the handling and disposition of resource finds shall be strictly enforced.
4.7 HAZARDS AND HAZARDOUS MATERIALS

This section evaluates potential impacts due to hazardous materials as a result of the proposed Wrigley Creek Improvement Project. Chapter 3.0 Environmental Checklist identified additional analysis was necessary to evaluate the quality of existing soils and potential impacts related to their re-use. This section is based on the results of a soil and sediment quality investigation performed by Northgate Environmental Management, Inc. at the project site. The details of are included in the Soil and Sediment Testing Report Wrigley Creek Improvement Project Milpitas, California, (October 9, 2009) herein incorporated by reference and available on request from VTA. Summary tables of the quantitative results of this investigation are in included in Appendix D Soil and Sediment Testing Summary.

Environmental Setting

Northgate Environmental Management, Inc conducted an investigation of the mitigation site on September 1, 2009. This investigation included:

- Collecting soil samples from five soil borings advanced in the proposed excavation area of the existing floodplain zone adjacent to the creek to evaluate off-site soil reuse options;
- Collecting sediment samples from five locations along the existing creek channel to evaluate sediment reuse options;
- Collecting soil samples from stockpiled fill materials that have been deposited on the site to evaluate off-site disposal options;
- Collecting samples from stockpiled building materials to evaluate the potential presence of asbestos; and
- Analyzing the soil and sediment samples for total petroleum hydrocarbons (TPH), volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs); organochlorine pesticides, polychlorinated biphenyls (PCBs), and metals.

Subsurface soils encountered in borings at the site consisted primarily of sandy and silty clay, grading to lean clay at depths of two to five feet below ground surface. Groundwater was not encountered within ten feet of the ground surface in any of the boreholes.

EVALUATION CRITERIA

Soil samples were evaluated using VTA’s Screening Values presented in the Silicon Valley Rapid Transit Project-Wide Contaminant Management Plan; the Environmental Screening levels (ESLs)

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1 Silicon Valley Rapid Transit Project-Wide Contaminant Management Plan, Santa Clara Valley Transit Authority, July 31, 2008.
established by the Regional Water Quality Control Board ²; and the Total Threshold Limit Concentrations (TTLCs), established by the State of California ³ for defining a waste as a hazardous waste for landfill disposal purposes. The sediment quality evaluation also uses the VTA Ecological Screening Values that include consideration of impacts to aquatic organisms. These evaluation criteria are further explained in the Soil and Sediment Testing Report Wrigley Creek Improvement Project Milpitas, California.

SOIL QUALITY

TPH as gasoline (TPH-g), TPH as diesel (TPH-d), TPH as oil (TPH-o), VOCs, SVOCs, and PCBs were not detected above the laboratory method reporting limits (MRLs) in any soil samples collected.

With the exception of arsenic and vanadium, the measured concentrations of metals were all below the Tier 1 ESLs and the VTA Screening Values, where established. All of the arsenic samples exceed RWQCB Tier 1 ESLs. However, the Tier 1 ESL is below naturally occurring background levels. Two of the five samples exceed the VTA Screening Values for unrestricted land use. The measured concentrations of arsenic did not exceed the ESL for construction worker safety or the TTLC.

Vanadium was detected at concentrations above the Tier 1 ESL for residential land use. However, the measured concentrations do not exceed the ESL for construction worker safety or the TTLC. The measured concentrations of vanadium are considered to represent naturally occurring background levels and do not represent a substantial environmental concern. No VTA Screening Value for vanadium has been established.

DDT and DDE were the only organochlorine pesticides measured above the laboratory MRLs in the soil samples, and exceed the VTA Screening Value for DDT and DDE based on potential impacts to the aquatic environment, but are well below both the VTA Screening Value s for off-site residential land use and the RWQCB Tier 1 ESL. The results are also well below the TTLC for total DDT compounds.

STOCKPILED FILL SOIL QUALITY

Chemical test results for the stockpiled fill soil on the site show that the samples variously contain elevated levels of TPH-o, mercury, vanadium, and organochlorine pesticides. TPH-o was detected in one sample is above the Tier 1 ESL but below the VTA Screening Value. Mercury was present in one sample that exceeds the Tier 1 ESL but is below the ESL for construction worker safety. Vanadium is above the Tier 1 ESL but below the ESL for construction worker safety, and is likely representative of naturally occurring background levels. Arsenic, measured on average, is below the VTA Screening Value. Chlordane and dieldrin exceed the RWQCB Tier 1 ESLs as well as the ESLs for construction worker health and safety. None of the measured concentrations are above the TTLC values for defining a waste as hazardous waste.

² Screening for Environmental Concerns at Sites with Contaminated Soil and Groundwater, Interim Final, Regional Water Quality Control Board, November 2005, Revised May 2008

³ Title 22, California Code of Regulations.
SEDIMENT QUALITY

Sediment samples were collected along the existing channel of Wrigley Creek to evaluate the potential reuse of the sediment in constructing the new creek channel. It should be noted that for the organochlorine pesticide analyses, the results for the sediment samples were evaluated in relation to the laboratory method detection limits (MDLs) rather than method reporting limits (MRLs). This lowers the detection limit, but still results in detection limits above the VTA Ecological Screening Value. DDE was measured at an estimated concentration that exceeds the VTA Ecological Screening Value. No other pesticides were detected above the laboratory MDL. However, as discussed above, the laboratory MDLs for DDT and DDE are above the VTA Ecological Screening Values.

TPH-g, VOCs, SVOCs, and PCBs, were not measured in the samples above the laboratory MRLs. TPH-d was measured above the MRL in two of the samples. TPH-o was measured in all five samples. All of the measured concentrations of TPH-d, and TPH-o were below the VTA Ecological Screening Values. The test results were also below the RWQCB Tier 1 ESLs and the ESLs for construction worker exposure.

Metals were not detected above the VTA Ecological Screening Values or RWQCB Tier 1 ESLs, with the exception of arsenic, lead, and vanadium. The highest concentration of arsenic was measured in sample collected near the outfall north of East Calaveras Boulevard in the City of Milpitas project area. The average concentration of arsenic in the five samples is below the VTA Ecological Screening Value. Arsenic concentrations were below the ESL for construction worker safety or the TTLC.

Three samples contained lead above the VTA Ecological Screening Value. The highest concentration of lead was measured in sample collected near the outfall north of East Calaveras Boulevard in the City of Milpitas project area. The average concentration of lead in the four remaining samples still exceeds the VTA Ecological Screening Value. The measured concentrations of lead do not exceed the Tier 1 ESL, the ESL for construction worker safety, or the TTLC.

Vanadium was measured at concentrations that exceed the Tier 1 ESL. However, none of the concentrations were above the ESL for construction worker safety or the TTLC. These concentrations of vanadium are considered within the range of naturally occurring background levels, and do not represent a substantial environmental concern.

STOCKPILED BUILDING MATERIAL QUALITY

The stockpiled building material test results show that none of the building material samples contain asbestos.

GROUNDWATER

Groundwater was not encountered within ten feet of the ground surface in any of the boreholes during soil and sediment testing, and no sampling and testing was performed for groundwater in the project area. However, it is assumed that groundwater is potentially contaminated in the project area.
Environmental Impacts and Mitigation Measures

The results of the investigation of the mitigation site are presented below. Where contaminated sites are known or are discovered during construction, there is potential for exposure of construction workers and the public to hazardous materials, emissions of hazardous dusts, releases of contaminated water, and onsite and offsite transport of hazardous materials.

SOIL QUALITY

The soil testing indicates that soil within ten feet of the ground surface in the project area is suitable for general off-site reuse with the following exceptions and restrictions:

- The presence of DDT and DDE in the soil above the VTA Ecological Screening Value for potential aquatic organism ecological impacts but below the VTA Screening Value for residential land use requires that existing soil adjacent to Wrigley Creek be prohibited from reuse as fill at any off-site location located within 50 feet of a surface water body. No other off-site reuse restrictions apply.

- Arsenic is present above the VTA SV for unrestricted off-site land use in the soil sample collected at the south end of the proposed excavation area. This soil should be selectively excavated, stockpiled, and re-tested prior to removal from the site to provide additional evaluation of potential off-site reuse options. Depending on the test results, off-site landfill disposal as non-hazardous waste (including clean daily cover) may be an appropriate option if the additional testing still indicates arsenic above the VTA SV. The testing performed during this investigation indicates that the average arsenic concentration of arsenic in the remaining soils meets the VTA screening criteria for off-site reuse, except from reuse as fill at any off-site location located within 50 feet of a surface water body, and no further testing is necessary.

STOCKPILED FILL SOIL QUALITY

The soil testing indicates that the small stockpiles of fill material deposited at the site variously contain oil, mercury, chlordane, and dieldrin above RWQCB Tier 1 ESLs for unrestricted off-site land use. These soils (estimated to be approximately 20 cubic yards of soil) should be transported to an appropriate landfill for off-site disposal. None of the measured chemical constituents exceed any applicable TTCLs for classifying the waste as hazardous waste. However, landfills may require additional testing for soluble metals or pesticides.

SEDIMENT QUALITY

Sediment testing indicates that lead may be present in the existing creek sediments at the mitigation site above the VTA Ecological Screening Value for reuse in freshwater aquatic settings. VTA consulted with John Bourgeois, Restoration Ecologist, HT Harvey and Associates on November 24, 2009 to discuss the re-use of soil with concentrations of lead between 14 to 140 mg/kg. Since the soil met the Tier 1 ESL of 200 mg/kg, Mr. Bourgeois recommended that the sediment in question be left in place (in the existing channel) and capped by greater than three feet of clean fill. Therefore, in the mitigation site, the sediment would not be reused. However, for the City of Milpitas project, sediment removed from the desilting activities will be stockpiled and characterized for reuse or disposal in accordance with applicable laws and regulations (see Hazards and Hazardous Materials b) below).
STOCKPILED BUILDING MATERIAL QUALITY

The testing did not indicate the presence of asbestos in the stockpiled building materials. These materials may be disposed of as general construction debris.

GROUNDWATER

While groundwater was not encountered within 10 feet of the ground surface in any of the boreholes during soil and sediment testing, it is anticipated that groundwater would be encountered during construction excavation activities and dewatering would be required. It is also anticipated that groundwater encountered during excavation would contain contaminants that require remediation prior to discharge.

DISCUSSION OF INITIAL STUDY CHECKLIST ITEMS

As discussed in Chapter 3.0 Environmental Checklist, the proposed project could result in impacts due to hazardous materials resulting from short-term construction activities, primarily grading and excavation, related to the routine transport, use, or disposal of hazardous materials or the emissions of hazardous materials via airborne contamination. The primary issues related to hazardous materials during construction are the health and safety of construction workers, the public, and the environment, and the proper management of hazardous materials. Checklist items a) and b) are considered together in the following discussion.

Hazards and Hazardous Materials a) Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

Hazards and Hazardous Materials b) Would the project create a significant hazard to the public or the environment through reasonably foreseeable upset and/or accident conditions involving the release of hazardous materials into the environment?

Construction and grading activities including the re-use and transport of on-site soils could result in a health risk to site workers or the public. This would be a less-than-significant impact with mitigation incorporation.

Grading and construction activities could result in the accidental rupture of the identified Chevron fuel pipeline present onsite, the potential for such an accident is remote. Precautions included in the project design would reduce this impact to a less-than-significant level.

GRADING AND SOIL REUSE AND TRANSPORT

Transportation procedures for hazardous materials are designed to minimize potential health, safety, and environmental risks. Transportation would be both onsite (within the project area) and offsite (along a public or private right-of-way). Much of the material excavated during construction would be transported onsite to a stockpile or reuse area. Soil and sediment that contains chemical constituents at
levels greater than the acceptable reuse concentrations would be disposed of offsite at an appropriate disposal facility. It should be noted that soil reuse is not required, or may not be an option due to geotechnical reasons or other site characteristics. Contaminated or excess material would be disposed of in accordance with applicable laws and regulations.

Stockpiled material on the project site that is designated for either reuse or offsite disposal would be fully characterized. Records would be kept for all stockpiled material. For stockpiled material intended for offsite disposal, the records would also include the sampling and analytical results for samples used to profile the material for disposal. Onsite storage of material would meet the following requirements:

- Best Management Practices for erosion control shall be implemented to prevent migration of sediment into the storm drain system or surface waters.
- A silt fence shall be constructed around the perimeter of the stockpile area to mitigate migration of soil and sediment into the storm drains or surface waters.
- Saturated soils, if any, would be placed on 10 millimeter plastic sheeting.
- Soils classified for the reuse or classified as waste for disposal would be covered with 10 millimeter plastic sheeting. Sheetings would be anchored to prevent removal by the wind.

Proposed construction activities such as excavation, backfilling, grading operations, stockpiling soil, construction vehicle traffic, and wind blowing over disturbed soil may expose site workers and the public within the surrounding area to chemicals of concern via airborne contamination. Exposures are possible either by the volatilization of contaminants into ambient air or the movement of airborne particulate matter containing contaminants.

To protect the health and safety of construction workers, the public, and the environment, and to ensure the proper management of hazardous materials, a required Health and Safety Plan for the project that is both site-specific and meets Occupational Safety and Health Administration requirements would be prepared, CERCLA certified, and implemented during construction. The Health and Safety Plan would inform construction workers of the presence of elevated levels of hazardous materials at the project site, and outline procedures for limiting worker and public exposure to these constituents. In addition, mitigation identified in Section 4.3 Air Quality and Climate Change would implement appropriate construction control measures to reduce air pollutant emissions of hazardous materials for construction activities. Therefore, this would be a less-than-significant impact with mitigation incorporation (see Mitigation Measure Hazards and Hazardous Materials-1 below).

Dewatering activities would be conducted within the excavation limits either by utilizing a well-based dewatering system and/or by pumping from the excavation using trash pumps in low spots. The variation of groundwater contamination would not allow the dewatering methods to adequately segregate clean groundwater from contaminated groundwater. Therefore, all extracted groundwater would be considered as potentially contaminated and would require characterization to determine the appropriate treatment requirements for discharge / disposal.

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4 The contractor would prepare the Health and Safety Plan subject to the approval of VTA. The contractor and VTA’s resident inspector would be responsible to ensure that the Health and Safety Plan is implemented as required during project construction.
Discharge of treated dewatering groundwater to the storm drain system is regulated by the RWQCB, under a National Pollutant Discharge Elimination System (NPDES) general permit. VTA anticipates discharge under Order No. R2-2004-0055, for the discharge of extracted and treated groundwater. The contractor would apply for the NPDES permit from the RWQCB. The contractor would also meet the substantive requirements for discharge of stormwater runoff associated with construction activity. Regular system sampling and reporting is required under the NPDES permit. Solids and spent carbon generated from a dewatering system would be handled and disposed of in accordance with appropriate and relevant State and federal regulations. The contractor would be responsible for system operation, maintenance, sampling, and reporting as required by the NPDES permit.

As noted in Chapter 3.0 Environmental Checklist, release of construction-related hazardous materials could affect Wrigley Creek and downstream waters. This impact would be less than significant with implementation of a Storm Water Pollution Prevention Plan as discussed in Section 4.1 Water Quality and Hydrology. Release of hazardous chemicals (e.g., herbicides) from future maintenance activities (i.e., control of invasive species) would not pose a substantial risk to persons in the project vicinity and therefore would be a less-than-significant impact (see Section 4.1 Water Quality and Hydrology).

**Mitigation Measure Hazards and Hazardous Materials-1 (Soils)**
Same as Mitigation Measure Air Quality-1 (Construction Impacts).

**Responsibility and Monitoring**
See Mitigation Measure Air Quality-1.

**CHEVRON PIPELINE**

Identified subsurface utilities on or adjacent to the Wrigley Creek project site include a Chevron pipeline, which carries highly-flammable liquid fuel. While there is a remote potential for accident (i.e., rupture and fire / explosion) during grading activities, the pipeline is well delineated and all required precautions have been incorporated into the proposed design and would be observed during project construction. There would be no grading above the pipeline or in the ten-foot protection zone (i.e., the Chevron easement). Future leaks of the pipeline would not expose people to hazardous materials as no occupied structures are proposed as part of the project. This would be a less-than-significant impact.

**Hazards and Hazardous Materials c)**

Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

Proposed construction and future maintenance activities would result in a less-than-significant impact with mitigation incorporation to an identified school within one-quarter mile of the project site.

The Elan Esprit preschool is located just under one-quarter mile from the project site to the west of the site’s northern boundary. As described in Section 4.3 Air Quality and Climate Change, diesel emissions, a toxic air contaminant, would be generated during short-term construction activities and would not pose a substantial hazard to this school or the multifamily residences located closer to the site (approximately 324 feet) due to the dispersive nature of diesel exhaust and recommended mitigation measures (see Mitigation Measure Air Quality-1 [Construction Impacts]). Long-term operation and maintenance activities such as the application of herbicides would result in a less-than-
significant impact to sensitive receptors given the relatively small amounts and frequency that they would be applied.

**Mitigation Measure Hazards and Hazardous Materials-2 (Emissions near Schools)** Same as Mitigation Measure Air Quality-1 (Construction Impacts).

**Responsibility and Monitoring** See Mitigation Measure Air Quality-1.

Checklist Items d) through h) were determined to result in “No Impact”. Please refer to the Hazards and Hazardous Materials section of Chapter 3.0 Environmental Checklist for additional explanation.
5.0 COMMENTS AND RESPONSES

5.1 INTRODUCTION

The Initial Study / Proposed Mitigated Negative Declaration was circulated for agency and public review for 34 days beginning on November 25, 2009, and ending on December 28, 2009. A Notice of Availability (NOA) was distributed through the Office of Planning and Research / State Clearinghouse and filed with the Santa Clara County Clerk on November 25. The NOA was also published the Milpitas Post on November 26 and mailed to approximately 4,900 residences and businesses along the Freight Railroad Relocation / Lower Berryessa Creek Project corridor on November 30. All written comments received during the public-review period are addressed in this section. The governmental agencies that commented on the Initial Study / Proposed Mitigated Negative Declaration are listed in Section 5.2 Persons Commenting.

Section 5.3 Response to Comments presents and responds to all comments on the Initial Study / Proposed Mitigated Negative Declaration. The original letters are reproduced here. The letters are numbered (i.e., Letter #1) at the top of the letter. In addition, comments are numbered in the margins of the comment letters and responses are keyed to the comment numbers (i.e., Response to Comment 1-1 is a response to the first comment of the first letter).

In some instances, text changes resulting from the comments and responses are recommended. In these instances, information that is to be deleted is crossed out, and information that is added is underlined. The text changes and revisions resulting from comments and responses have been incorporated in the original Initial Study / Proposed Mitigated Negative Declaration text, as indicated in the responses. All of these changes result in insignificant modifications to the original Initial Study / Proposed Mitigated Negative Declaration text. Furthermore, they do not raise new or more severe impacts or new mitigations not considered in the Initial Study / Proposed Mitigated Negative Declaration and do not require recirculation for further review and comment in accordance with State CEQA Guidelines Section 15073.5.

5.2 PERSONS COMMENTING

Comments on the Initial Study / Proposed Mitigated Negative Declaration were received from the following agencies:

1. California Department of Transportation (Caltrans)


2. City of Milpitas

Fernando Bravo, Principal Civil Engineer, Engineering Division, letter dated December 28, 2009.

5.3 RESPONSE TO COMMENTS

The two comment letters submitted to VTA on the Initial Study / Proposed Mitigated Negative Declaration are presented in the following pages. The original letters are reproduced, and comments are numbered for referencing with responses.
December 10, 2009

Ms. Ann Calnan
Santa Clara Valley Transportation Authority
3331 North First Street, Building B-2
San José, CA 95134

Dear Ms. Calnan:

Wrigley Creek Improvement Project – Mitigated Negative Declaration (MND)

Thank you for including the California Department of Transportation (Department) in the environmental review process for the proposed project. We have reviewed the MND and have the following comments to offer.

Encroachment Permit
Please be advised that any work or traffic control that encroaches onto the State Right of Way (ROW) requires an encroachment permit that is issued by the Department. To apply, a completed encroachment permit application, environmental documentation, and five (5) sets of plans clearly indicating State ROW must be submitted to the address below. Traffic-related mitigation measures should be incorporated into the construction plans during the encroachment permit process.

Office of Permits, California DOT, District 4
P.O. Box 23660
Oakland, CA 94623-0660

See the website link below for more information.
http://www.dot.ca.gov/hq/traffops/developserv/permits/

Should you require further information or have any questions regarding this letter, please call José L. Olveda of my staff at (510) 286-5535.

Sincerely,

Lisa Carboni
District Branch Chief
Local Development – Intergovernmental Review

c: Scott Morgan (State Clearinghouse)
Response to Comment 1-1

Construction of the proposed City of Milpitas project component (see Section 2.3, Project Description) would encroach within State right-of-way (i.e., under the State Route 237 / Calaveras Boulevard overpass) in the northern portion of the Wrigley Creek Improvement Project area where the project would desilt the box culvert under Industrial Way. Desilting the box culvert would only occur if agreement is reached between VTA and the City of Milpitas in a future Cooperative Agreement. If the work proceeds, VTA would obtain an encroachment permit from the California Department of Transportation (Caltrans) and submit all necessary documentation, as required.

Construction of the proposed mitigation project component would not encroach within State right-of-way. Therefore, no encroachment permit would be required from Caltrans.

For both project components, construction vehicles would use Industrial Way, a City road, to access and egress the site. Traffic control on SR 237 / Calaveras Boulevard would not be required.

No revision of the Initial Study / Mitigated Negative Declaration is considered necessary.
December 28, 2009

Ann Calnan,
Environmental Planner
Santa Clara Valley Transportation Authority
3331 North First Street, Building A
San Jose, CA 95134-1927

Subject: Comments to C211 Wrigley Creek Improvement Project
Initial Study/Proposed Mitigated Negative Declaration
Dated: November 25, 2009

Dear Ms. Calnan:

Thank you for the opportunity to review the Wrigley Creek Improvement Project, Initial Study/Proposed Mitigated Negative Declaration, dated November 25, 2009. The City has reviewed the initial study and has the following comment:

1. Under Section 2.5 Cumulative Projects, Page 2.0-17 Milpitas Transit Area Specific Plan (TASP): Please delete the last sentence noting the following, “As of July 2009, no specific projects have been approved by the City of Milpitas.” The City of Milpitas has entitled two major projects within the TASP. These projects include 1) Milpitas Station a 318 dwelling Units Residential Project; and 2) Citation a 638 Dwelling Units Residential Project. Please revise to note this changes in the TASP.

Should you have any question regarding our comments, please contact me at (408) 856-3328.

Sincerely,

Fernando G. Bravo, P.E.
Principal Civil Engineer
Engineering Land Development Section

Cc: Greg Armendariz, P.E., Director of Public Work/City Engineer
Jim Costantini, P.E., Deputy Director-Engr. & Constr. Division
James Lindsay, Planning Director
File: 100.13.20
Response to Comment 2-1

Based on this comment, the last sentence of the last paragraph on page 2.0-17 of the Initial Study / Proposed Mitigated Negative Declaration is revised as follows:

Milpitas Transit Area Specific Plan

The Milpitas Transit Area Specific Plan EIR was approved in June 2008 by the Milpitas City Council and in April 2009 was amended to include parking standards (Exhibit 2.0-8, #5). The Milpitas Transit Area is centered on the area surrounding the existing Great Mall and Montague Light Rail Transit stations and the future BART station proposed near the intersection of Montague Expressway and Capitol Avenue. Located at the southern edge of the city, it is immediately adjacent to San Jose. The Transit Area is 437 acres in size, of which 146 acres are in the Great Mall Redevelopment Area and 245 acres are in other redevelopment areas. The maximum amount of development analyzed in this project’s EIR includes 7,109 housing units, 993,843 square feet of office space, 287,075 square feet of retail and 350 hotel rooms. The Transit Area Specific Plan is a component of the City’s General Plan and has binding legal authority to guide land use, circulation, and infrastructure in the Planning Area. As of July 2009, no specific projects have been approved by the City of Milpitas. The City of Milpitas has entitled two major projects within the Transit Area Specific Plan: “Milpitas Station”, a 318-unit residential project, and “Citation”, a 638-unit residential project.

Discussion

The “Citation” and “Milpitas Station” projects are located approximately one mile south of the proposed Wrigley Creek Improvement Project near the intersection of Milpitas Boulevard and Montague Expressway, and both residential projects have received approvals from the City of Milpitas. It is anticipated that neither of these projects would be constructed concurrently with the Wrigley Creek Improvement Project (see Chapter 2.0 Description of the Proposed Project). In addition, even if the projects were under construction at the same time, or if their construction periods overlapped in any way, there is sufficient distance between the projects such that construction-related impacts that would result from the implementation of the Wrigley Creek Improvement Project would not be cumulatively considerable. Accordingly, no changes to the impact assessments in Chapter 4.0 Environmental Setting, Impacts, and Mitigation Measures are necessary.

Given that the Wrigley Creek Improvement Project is a project that restores and enhances a section of Wrigley Creek and provides for minimal maintenance activities, it would not result in long-term impacts that, when considered with other reasonably foreseeable projects, including “Citation” and “Milpitas Station”, would be cumulatively considerable. Accordingly, no changes to the impact assessments in Chapter 4.0 Environmental Setting, Impacts, and Mitigation Measures are necessary.

1 AECOM communication with Fernando Bravo, Principal Civil Engineer, Engineering Division, City of Milpitas, January 4, 2010.
6.0 REPORT PREPARATION

6.1 REPORT PREPARERS

This Initial Study / Mitigated Negative Declaration was prepared by an environmental study team led by AECOM (formerly EDAW | AECOM) under contract to the Santa Clara Valley Transportation Authority (VTA). The analyses were coordinated primarily with Ann Calnan, Senior Environmental Planner, VTA.

EDAW | AECOM

Mark Winsor – Principal  
Jayni Allsep – Project Director  
Brent Schroeder – Project Manager  
Rudy Calderon – Environmental Planner  
Kara Baker – Water Quality & Hydrology  
Cameron Mueller – Environmental Analyst  
Honey Walters – Senior Air Quality & Noise  
Jake Weirich – Air Quality & Noise Technician  
Angie Harbin-Ireland – Senior Biologist  
Hildie Spautz – Biologist

Santa Clara Valley Transportation Authority

Tom Fitzwater – Manager, Environmental Programs and Resources Management  
Ann Calnan – Senior Environmental Planner  
Lauren Bobadilla – Senior Environmental Planner

ICF/Jones & Stokes (Consultant to VTA)

Matthew Jones – Biological Resources

Balance Hydrologics, Inc. (Consultant to VTA)

Brian Hastings – Water Quality & Hydrology

6.2 PEOPLE AND ORGANIZATIONS CONSULTED

City of Milpitas

Fernando Bravo – Principal Civil Engineer
6.3 BIBLIOGRAPHY


California Department of Fish and Game, California Natural Diversity Data Base (CNDDB), 2009


California Department of Toxic Substances Control, Envirostar Database, Accessed September 23, 2009 online at http://www.envirostor.dtsc.ca.gov


City of Milpitas, *Figure 4.6 Scenic Resources and Routes*, Chapter 4 Open Space and Environmental Conservation Element, City of Milpitas General Plan, Updated 2002. Available online at http://www.ci.milpitas.ca.gov/_pdfs/plan_plan_general_chapter4.pdf


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Regional Water Quality Control Board, *Screening for Environmental Concerns at Sites with Contaminated Soil and Groundwater, Interim Final*, November 2005, (Revised May 2008)

Regional Water Quality Control Board (RWQCB), *Water Quality Certification for the Valley Transit Authority’s Freight Railroad Relocation / Lower Berryessa Creek Project in the City of Fremont in Alameda County and the City of Milpitas in Santa Clara County*, 2009.


Santa Clara Valley Transportation Authority, *Notice of Preparation, Wrigley Creek Improvement Project*, March 2009.


7.0 APPENDICES
Detail Report for Annual Area Source Unmitigated Emissions (Tons/Year)

File Name: C:\Documents and Settings\weirich\Desktop\Wrigley Creek\wrigley creek.urb924
Project Name: Wrigley Creek Improvement Project
Project Location: Santa Clara County
On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006
Off-Road Vehicle Emissions Based on: OFFROAD2007

**AREA SOURCE EMISSION ESTIMATES (Annual Tons Per Year, Unmitigated)**

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<tr>
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<th>ROG</th>
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**Area Source Changes to Defaults**
### AREA SOURCE EMISSION ESTIMATES (Summer Pounds Per Day, Unmitigated)

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*Area Source Changes to Defaults*
Detail Report for Annual Construction Unmitigated Emissions (Tons/Year)

File Name: C:\Documents and Settings\weirichj\Desktop\Wrigley Creek\wrigley creek.urb924
Project Name: Wrigley Creek Improvement Project
Project Location: Santa Clara County
On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006
Off-Road Vehicle Emissions Based on: OFFROAD2007

CONSTRUCTION EMISSION ESTIMATES (Annual Tons Per Year, Unmitigated)

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Phase Assumptions
Phase: Fine Grading 4/15/2010 - 10/1/2010 - Default Fine Site Grading Description
Total Acres Disturbed: 5
Maximum Daily Acreage Disturbed: 1.25
Fugitive Dust Level of Detail: Default
20 lbs per acre-day
On Road Truck Travel (VMT): 210.25

Off-Road Equipment:
1. Graders (174 hp) operating at a 0.61 load factor for 6 hours per day
1. Rubber Tired Dozers (357 hp) operating at a 0.59 load factor for 6 hours per day
1. Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 7 hours per day
1. Water Trucks (189 hp) operating at a 0.5 load factor for 8 hours per day


Total Acres Disturbed: 1

Maximum Daily Acreage Disturbed: 1

Fugitive Dust Level of Detail: Default

20 lbs per acre-day

On Road Truck Travel (VMT): 4.35

Off-Road Equipment:
1. Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 7 hours per day
**Detail Report for Summer Construction Unmitigated Emissions (Pounds/Day)**

**File Name:** C:\Documents and Settings\weirichj\Desktop\Wrigley Creek\wrigley creek.urb924

**Project Name:** Wrigley Creek Improvement Project

**Project Location:** Santa Clara County

**On-Road Vehicle Emissions Based on:** Version : Emfac2007 V2.3 Nov 1 2006

**Off-Road Vehicle Emissions Based on:** OFFROAD2007

**CONSTRUCTION EMISSION ESTIMATES (Summer Pounds Per Day, Unmitigated)**

<table>
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<th>PM10 Exhaust</th>
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<th>PM2.5 Exhaust</th>
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**Phase Assumptions**

Phase: Fine Grading 4/15/2010 - 10/1/2010 - Default Fine Site Grading Description

Total Acres Disturbed: 5

Maximum Daily Acreage Disturbed: 1.25

Fugitive Dust Level of Detail: Default
Fugitive Dust Level of Detail: Default
20 lbs per acre-day
On Road Truck Travel (VMT): 210.25

Off-Road Equipment:
1 Graders (174 hp) operating at a 0.61 load factor for 6 hours per day
1 Rubber Tired Dozers (357 hp) operating at a 0.59 load factor for 6 hours per day
1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 7 hours per day
1 Water Trucks (189 hp) operating at a 0.5 load factor for 8 hours per day

Total Acres Disturbed: 1
Maximum Daily Acreage Disturbed: 1
Fugitive Dust Level of Detail: Default
20 lbs per acre-day
On Road Truck Travel (VMT): 4.35

Off-Road Equipment:
1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 7 hours per day
APPENDIX B – CULTURAL RESOURCES REPORT

VTA conducted consultation with the Native American Heritage Commission (NAHC) for the Wrigley Creek Improvement Project as discussed in Section 4.6 Cultural Resources. This appendix includes the following documentation of that consultation:

- August 13, 2008 letter from VTA to Native American Heritage Commission (NAHC) requesting a search of the Sacred Lands File.
- August 18, 2009 letter from NAHC to VTA reporting no known resources in the project area and providing a list of nine Native American contacts for the area.
- Log of all contacts with NAHC interested parties
- September 8, 2009 letters to Jakki Kehl; Valentin Lopez; Edward Ketchum; Irene Zweirlein; Jean-Marie Feyling; Ann Marie Sayers; Rosemary Cambra; Andrew Galvan, and Ramona Garibay requesting information about the project area
- September 16, 2009 record of telephone conversation with Tina Marie Feyling
- September 17, 2009 emails to Andrew Galvan; Ann Marie Sayers; Edward Ketchum; Irene Zweirlein; Jakki Kehl; Jean Marie Feyling; Rosemary Cambra; Ramona Garibay; Valentin Lopez
- October 2, 2009 fax from Rosemary Cambra of the Muwekma Ohlone Indian Tribe
- October 6, 2009 emails to Jean Marie Sayers
- October 6, 2009 letter to Ann Marie Sayers
- October 7, 15, & 18, 2009 emails to Irene Zweirlein
- October 20, 2009 email to Rosemary Cambra
- October 20, 2009 letter to Rosemary Cambra
August 13, 2009

Debbie Pilas-Treadway  
Native American Heritage Commission  
915 Capitol Mall, Suite 364  
Sacramento, CA 95874

Subject: Wrigley Creek Improvement Project

Dear Ms. Pilas-Treadway:

The Santa Clara Valley Transportation Authority is proposing improvements to Wrigley Creek in the City of Milpitas, County of Santa Clara, California. The proposed project will improve hydrologic and geomorphic functions of Wrigley Creek thereby restoring the natural creek functions. See the attached maps and location information below.

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<tr>
<th>Quad: Milpitas</th>
<th>County: Santa Clara County</th>
</tr>
</thead>
<tbody>
<tr>
<td>Township: T6S</td>
<td>Range: R1E</td>
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</table>

VTA requests that you check your Sacred Lands File to see if any sites may be located within or adjacent to the Project area. If any sites are identified, please provide the names of the groups of individuals to contact regarding the sacred site(s). Also, please provide a current list of Native American contacts who may have an interest in this Project so that they may be consulted.

Contact me at (408) 321-5776 or Lauren.bobadilla@vta.org if you have any questions. Thank you very much for your assistance.

Sincerely,

Lauren Bobadilla  
Senior Environmental Planner

Enclosures: Figure 1 - General Project Location  
Figure 2 - Project Site
Figure 1: General Project Location
Wrigley Creek Improvement Project

Figure 2: Project Site
August 18, 2009

Lauren Bobadilla
Valley Transportation Authority
3331 North First Street
San Jose, CA 95134-1927

Sent by Fax: N/A
Number of Pages: 3

Re: Proposed Wrigley Creek Improvement Project, Santa Clara County.

Dear Ms. Bobadilla:

A record search of the sacred land file has failed to indicate the presence of Native American cultural resources in the immediate project area. The absence of specific site information in the sacred lands file does not indicate the absence of cultural resources in any project area. Other sources of cultural resources should also be contacted for information regarding known and recorded sites.

Enclosed is a list of Native Americans individuals/organizations who may have knowledge of cultural resources in the project area. The Commission makes no recommendation or preference of a single individual, or group over another. This list should provide a starting place in locating areas of potential adverse impact within the proposed project area. I suggest you contact all of those indicated, if they cannot supply information, they might recommend others with specific knowledge. By contacting all those listed, your organization will be better able to respond to claims of failure to consult with the appropriate tribe or group. If a response has not been received within two weeks of notification, the Commission requests that you follow-up with a telephone call to ensure that the project information has been received.

If you receive notification of change of addresses and phone numbers from any of these individuals or groups, please notify me. With your assistance we are able to assure that our lists contain current information. If you have any questions or need additional information, please contact me at (916) 653-4038.

Sincerely,

Debbie Pilas-Treadway
Environmental Specialist III
Native American Contacts
Santa Clara County
August 18, 2009

Jakki Kehl
720 North 2nd Street
Patterson, CA 95363
jakki@bigvalley.net
(209) 892-1060

Amah/Mutsun Tribal Band
Jean-Marie Feyling
19350 Hunter Court
Redding, CA 96003
amah_mutsun@yahoo.com
530-243-1633

Amah Mutsun Tribal Band
Valentin Lopez, Chairperson
3015 Eastern Ave, #40
Sacramento, CA 95821
vlopez@amahmutsun.org
(916) 481-5785

Indian Canyon Mutsun Band of Costanoan
Ann Marie Sayers, Chairperson
P.O. Box 28
Hollister, CA 95024
ams@garlic.com
831-637-4238

Amah Mutsun Tribal Band
Edward Ketchum
35867 Yosemite Ave
Davis, CA 95616
aerieaways@aol.com

Muwekma Ohlone Indian Tribe of the SF Bay Area
Rosemary Cambra, Chairperson
PO Box 360791
Milpitas, CA 95036
muwekma@muwekma.org
408-434-1668
408-434-1673

Amah/Mutsun Tribal Band
Irene Zwierlein, Chairperson
789 Canada Road
Woodside, CA 94062
amah_mutsun@yahoo.com
(650) 851-7747 - Home
(650) 851-7489 - Fax

The Ohlone Indian Tribe
Andrew Galvan
PO Box 3152
Fremont, CA 94539
chochenyo@AOL.com
(510) 882-0527 - Cell
(510) 687-9393 - Fax

This list is current only as of the date of this document.

Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resources Code and Section 5097.96 of the Public Resources Code.

This list is only applicable for contacting local Native Americans with regard to cultural resources for the proposed Wrigley Creek Improvement project, Santa Clara County.
Trina Marine Ruano Family
Ramona Garibay, Representative
16010 Halmar Lane, CA 95330
soaproot@msn.com
209-629-8619
Ohlone/Costanoan
Bay Miwok
Plains Miwok
Patwin

Native American Contacts
Santa Clara County
August 18, 2009

This list is current only as of the date of this document.

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<table>
<thead>
<tr>
<th>Title</th>
<th>First</th>
<th>Last</th>
<th>Position</th>
<th>Tribe/Band</th>
<th>Association</th>
<th>Address</th>
<th>City</th>
<th>State</th>
<th>Zip</th>
<th>phone number</th>
<th>email address</th>
<th>NAHC List date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ms. Jakki Kehl</td>
<td>Jakki</td>
<td>Kehl</td>
<td>Chairperson</td>
<td>Ohlone/Costanoan</td>
<td></td>
<td>720 North 2nd Street</td>
<td>Patterson</td>
<td>CA</td>
<td>95363</td>
<td>209-892-2438 not in service 10/6</td>
<td><a href="mailto:jakki@bigvalley.net">jakki@bigvalley.net</a></td>
<td>8/18/2009</td>
</tr>
<tr>
<td>Mr. Valentin Lopez</td>
<td>Valentin</td>
<td>Lopez</td>
<td>Chairperson</td>
<td>Amah Mutsun Tribal</td>
<td>Band</td>
<td>3015 Eastern Avenue #40</td>
<td>Sacramento</td>
<td>CA</td>
<td>95821</td>
<td>916-481-5785</td>
<td><a href="mailto:vlopez@amahmutsun.org">vlopez@amahmutsun.org</a></td>
<td>8/18/2009</td>
</tr>
<tr>
<td>Mr. Edward Ketchum</td>
<td>Edward</td>
<td>Ketchum</td>
<td>Chairperson</td>
<td>Amah Mutsun Tribal</td>
<td>Band</td>
<td>35867 Yosemite Avenue</td>
<td>Davis</td>
<td>CA</td>
<td>95616</td>
<td>650-851-7489fax</td>
<td><a href="mailto:amahways@aol.com">amahways@aol.com</a></td>
<td>8/18/2009</td>
</tr>
<tr>
<td>Ms. Irene Zwierlein</td>
<td>Irene</td>
<td>Zwierlein</td>
<td>Chairperson</td>
<td>Amah/Mutsun Tribal</td>
<td>Band</td>
<td>789 Canada Road</td>
<td>Woodside</td>
<td>CA</td>
<td>94062</td>
<td>650-851-7747 left msg.10/6</td>
<td><a href="mailto:amah_mutsun@yahoo.com">amah_mutsun@yahoo.com</a></td>
<td>8/18/2009</td>
</tr>
<tr>
<td>Ms. Jean-Marie Feyling</td>
<td>Jean-Marie</td>
<td>Feyling</td>
<td>Chairperson</td>
<td>Amah/Mutsun Tribal</td>
<td>Band</td>
<td>19350 Hunter Court</td>
<td>Redding</td>
<td>CA</td>
<td>96003</td>
<td>530-243-1633</td>
<td><a href="mailto:amah_mutsun@yahoo.com">amah_mutsun@yahoo.com</a></td>
<td>8/18/2009</td>
</tr>
<tr>
<td>Ms. Ann Marie Sayers</td>
<td>Ann Marie</td>
<td>Sayers</td>
<td>Chairperson</td>
<td>Indian Canyon Mutsun</td>
<td>Band of Costanoan</td>
<td>P.O. Box 28</td>
<td>Hollister</td>
<td>CA</td>
<td>95024</td>
<td>650-831-637-4238</td>
<td><a href="mailto:ams@garlic.com">ams@garlic.com</a></td>
<td>8/18/2009</td>
</tr>
<tr>
<td>Ms. Rosemary Cambra</td>
<td>Rosemary</td>
<td>Cambra</td>
<td>Chairperson</td>
<td>Muwekma Ohlone</td>
<td>Indian Tribe of SF Bay</td>
<td>Area</td>
<td>P.O. Box 360791</td>
<td>Milpitas</td>
<td>CA</td>
<td>95036</td>
<td>408-434-1668 no answer.no msg10/6</td>
<td><a href="mailto:muwekma@muwekma.org">muwekma@muwekma.org</a></td>
</tr>
<tr>
<td>Mr. Andrew Galvan</td>
<td>Andrew</td>
<td>Galvan</td>
<td>Representative</td>
<td>Ohlone/Costanoan Bay</td>
<td>Miwok Plains Miwok</td>
<td>P.O. Box 3152</td>
<td>Fremont</td>
<td>CA</td>
<td>94539</td>
<td>510-882-0527cell left msg.10/6</td>
<td><a href="mailto:chochenyo@aol.com">chochenyo@aol.com</a></td>
<td>8/18/2009</td>
</tr>
<tr>
<td>Ms. Ramona Garibay</td>
<td>Ramona</td>
<td>Garibay</td>
<td>Representative</td>
<td>Ohlone/Costanoan Bay</td>
<td>Miwok Plains Miwok</td>
<td>16010 Halmar Lane</td>
<td>Lathrop</td>
<td>CA</td>
<td>95330</td>
<td>510-300-5971cell left msg.10/6</td>
<td><a href="mailto:soaproot@msn.com">soaproot@msn.com</a></td>
<td>8/18/2009</td>
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<tr>
<td>First</td>
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<td>Correspondence/Telephone calls</td>
<td>Comments/concerns</td>
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<tr>
<td>Jakki</td>
<td>Kehl</td>
<td>9/8/09 letter mailed; 9/17/09 email sent; 9/22/09 delivery confirmed by certified mail return receipt; 10/6/09 left msg for JK to call LB.</td>
<td>10/20/09 - no contact from JK.</td>
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<tr>
<td>Valentin</td>
<td>Lopez</td>
<td>9/8/09 letter mailed; 9/10/09 delivery confirmed by certified mail return receipt; 9/17/09 report emailed; 10/4/09 telephone conversation</td>
<td>Per TC 10/6, VL said Milpitas area is R.Cambra’s territory. Because R.Cambra responded, he will defer to her and we do not have to consult with him further.</td>
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<tr>
<td>Edward</td>
<td>Ketchum</td>
<td>9/8/09 letter mailed; 9/17/09 email sent; 10/6/09 delivery confirmed by certified mail return receipt</td>
<td>10/20/09 - no contact from EK.</td>
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<tr>
<td>Irene</td>
<td>Zwiertlein</td>
<td>9/8/09 letter mailed; 9/10/09 delivery confirmed by certified mail return receipt; 9/17/09 report emailed; 10/6/09 left msg for IZ to call LB; 10/15/09 email to IZ with project info.</td>
<td>10/18/09 email received from IZ. She is concerned about site due to location near other burials and railroad. Advises we have excavation monitored and have plan for unexpected discoveries.</td>
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<tr>
<td>Jean-Marie</td>
<td>Feyling</td>
<td>9/8/09 letter mailed; 9/10/09 delivery confirmed by certified mail return receipt; 9/15/09 telephone conversation w/TM Feyling; 9/17/09 report emailed; 10/6/09 left msg for JMF to call LB.</td>
<td>Per TC 9/15, JMF noted that areas in vicinity of 101/Altso &amp; 237/tst are very sensitive, many burials. Also railroad corridor is sensitive, was path for ancient people. Asked how deep trenches were and how deep project would go. LB to provide info.</td>
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<tr>
<td>Ann Marie</td>
<td>Sayers</td>
<td>9/8/09 letter mailed; 9/17/09 email sent; 9/25/09 envelope returned as “unclaimed”; 10/5/09 letter resent by regular mail</td>
<td>Per 10/6 TC, LB provided project information &amp; info from R.Cambra’s fax. AMS asked when bid to be awarded &amp; construction to start; snail mail and land line best for contact. LB to mail letter and FW report.</td>
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<tr>
<td>Rosemary</td>
<td>Cambra</td>
<td>9/8/09 letter mailed; 9/17/09 email sent; 9/15/09 delivery confirmed by certified mail return receipt; 10/20/09 fax from RCambra received (attached); 10/6/09 no answer, no voice msg; 10/19/09 Info requested in 9/28 fax sent by email.</td>
<td>09/28/09 fax received from RC. “…there are no specifically identified ancestral sites that are known to us to exist within the specific proposed study area…” However, this site is near other known sites. Recommends, as a minimum, excavations be monitored and all information obtained be passed on to the Tribe.</td>
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<tr>
<td>Andrew</td>
<td>Galvan</td>
<td>9/8/09 letter mailed; 9/10/09 delivery confirmed by certified mail return receipt; 9/17/09 report emailed; 10/6/09 left msg for AG to call LB.</td>
<td>10/20/09 - no contact from AG.</td>
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<tr>
<td>Ramona</td>
<td>Garbay</td>
<td>9/8/09 letter mailed; 9/11/09 delivery confirmed by certified mail return receipt; 9/17/09 report emailed; 10/6/09 left msg for RG to call LB.</td>
<td>10/20/09 - no contact from RG.</td>
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</tbody>
</table>
September 8, 2009

Ms. Jakki Kehl
720 North 2nd Street
Patterson, CA  95363

Subject: Wrigley Creek Improvement Project, Santa Clara County
    Compliance with Section 106 of the National Historic Preservation Act
    (36 CFR 800.2[c] – Consulting Parties)

Dear Ms. Kehl:

The Santa Clara Valley Transportation Authority (VTA) is proposing to construct the Wrigley Creek Improvement Project (Project) within the City of Milpitas in Santa Clara County. The proposed Project would restore the natural creek functions of a portion of Wrigley Creek by creating a meandering stream alignment to replace the existing linear stream alignment just south of Calaveras Boulevard. See the attached map.

A review of the Sacred Lands Files conducted by the Native American Heritage Commission identified no resources of concern in the area. There are no known prehistoric or historic-period cultural resources within or adjacent to the Wrigley Creek Project area, based on record searches, archival research, and archaeological field surveys.

You are being contacted about this Project because you are identified by the Native American Heritage Commission as a Native American Contact for the Santa Clara County as of August 18, 2009.

Please review the enclosed Project information and provide any comments, thoughts, suggestions, and information you may have about cultural resources in the Project area. Contact me at (408) 321-5776 or Lauren.bobadilla@vta.org to discuss any questions or concerns you may have about the proposed Project.

Thank you very much for your interest and assistance.

Sincerely,

[Signature]

Lauren Bobadilla
Environmental Planner

Enclosures
September 8, 2009

Amah Mutsun Tribal Band
Mr. Valentin Lopez
3015 Eastern Avenue #40
Sacramento, CA 95821

Subject: Wrigley Creek Improvement Project, Santa Clara County
          Compliance with Section 106 of the National Historic Preservation Act
          (36 CFR 800.2[c] – Consulting Parties)

Dear Mr. Lopez:

The Santa Clara Valley Transportation Authority (VTA) is proposing to construct the Wrigley Creek Improvement Project (Project) within the City of Milpitas in Santa Clara County. The proposed Project would restore the natural creek functions of a portion of Wrigley Creek by creating a meandering stream alignment to replace the existing linear stream alignment just south of Calaveras Boulevard. See the attached map.

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Thank you very much for your interest and assistance.

Sincerely,

Lauren Bobadilla
Environmental Planner

Enclosures
September 8, 2009

Amah Mutsun Tribal Band
Mr. Edward Ketchum
35867 Yosemite Avenue
Davis, CA 95616

Subject: Wrigley Creek Improvement Project, Santa Clara County
Compliance with Section 106 of the National Historic Preservation Act
(36 CFR 800.2[c] – Consulting Parties)

Dear Mr. Ketchum:

The Santa Clara Valley Transportation Authority (VTA) is proposing to construct the Wrigley Creek Improvement Project (Project) within the City of Milpitas in Santa Clara County. The proposed Project would restore the natural creek functions of a portion of Wrigley Creek by creating a meandering stream alignment to replace the existing linear stream alignment just south of Calaveras Boulevard. See the attached map.

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Thank you very much for your interest and assistance.

Sincerely,

Lauren Bobadilla
Environmental Planner

Enclosures
September 8, 2009

Amah/Mutsun Tribal Band
Ms. Irene Zwierlein
789 Canada Road
Woodside, CA  94062

Subject: Wrigley Creek Improvement Project, Santa Clara County
Compliance with Section 106 of the National Historic Preservation Act
(36 CFR 800.2[c] – Consulting Parties)

Dear Ms. Zwierlein:

The Santa Clara Valley Transportation Authority (VTA) is proposing to construct the Wrigley Creek Improvement Project (Project) within the City of Milpitas in Santa Clara County. The proposed Project would restore the natural creek functions of a portion of Wrigley Creek by creating a meandering stream alignment to replace the existing linear stream alignment just south of Calaveras Boulevard. See the attached map.

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Thank you very much for your interest and assistance.

Sincerely,

[Signature]

Lauren Bobadilla
Environmental Planner

Enclosures
September 8, 2009

Amah/Mutsun Tribal Band
Ms. Jean-Marie Feyling
19350 Hunter Court
Redding, CA 96003

Subject:  Wrigley Creek Improvement Project, Santa Clara County
  Compliance with Section 106 of the National Historic Preservation Act
  (36 CFR 800.2[c] – Consulting Parties)

Dear Ms. Feyling:

The Santa Clara Valley Transportation Authority (VTA) is proposing to construct the Wrigley Creek Improvement Project (Project) within the City of Milpitas in Santa Clara County. The proposed Project would restore the natural creek functions of a portion of Wrigley Creek by creating a meandering stream alignment to replace the existing linear stream alignment just south of Calaveras Boulevard. See the attached map.

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Thank you very much for your interest and assistance.

Sincerely,

Lauren Bobadilla
Environmental Planner

Enclosures
September 8, 2009

Indian Canyon Mutsun Band of Costanoan
Ms. Ann Marie Sayers
P.O. Box 28
Hollister, CA 95024

Subject: Wrigley Creek Improvement Project, Santa Clara County
Compliance with Section 106 of the National Historic Preservation Act
(36 CFR 800.2[c] – Consulting Parties)

Dear Ms. Sayers:

The Santa Clara Valley Transportation Authority (VTA) is proposing to construct the Wrigley Creek Improvement Project (Project) within the City of Milpitas in Santa Clara County. The proposed Project would restore the natural creek functions of a portion of Wrigley Creek by creating a meandering stream alignment to replace the existing linear stream alignment just south of Calaveras Boulevard. See the attached map.

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Thank you very much for your interest and assistance.

Sincerely,

Lauren Bobadilla
Environmental Planner

Enclosures
September 8, 2009

Muwekma Ohlone Indian Tribe of SF Bay Area  
Ms. Rosemary Cambra  
P.O. Box 360791  
Milpitas, CA 95036  

Subject: Wrigley Creek Improvement Project, Santa Clara County Compliance with Section 106 of the National Historic Preservation Act (36 CFR 800.2[c] – Consulting Parties)

Dear Ms. Cambra:

The Santa Clara Valley Transportation Authority (VTA) is proposing to construct the Wrigley Creek Improvement Project (Project) within the City of Milpitas in Santa Clara County. The proposed Project would restore the natural creek functions of a portion of Wrigley Creek by creating a meandering stream alignment to replace the existing linear stream alignment just south of Calaveras Boulevard. See the attached map.

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Thank you very much for your interest and assistance.

Sincerely,

Lauren Bobadilla  
Environmental Planner

Enclosures
September 8, 2009

The Ohlone Indian Tribe  
Mr. Andrew Galvan  
P.O. Box 3152  
Fremont, CA  94539

Subject: Wrigley Creek Improvement Project, Santa Clara County  
Compliance with Section 106 of the National Historic Preservation Act  
(36 CFR 800.2[c] – Consulting Parties)

Dear Mr. Galvan:

The Santa Clara Valley Transportation Authority (VTA) is proposing to construct the Wrigley Creek Improvement Project (Project) within the City of Milpitas in Santa Clara County. The proposed Project would restore the natural creek functions of a portion of Wrigley Creek by creating a meandering stream alignment to replace the existing linear stream alignment just south of Calaveras Boulevard. See the attached map.

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Thank you very much for your interest and assistance.

Sincerely,

Lauren Bobadilla  
Environmental Planner

Enclosures
September 8, 2009

Trina Marine Ruano Family  
Ms. Ramona Garibay  
16010 Halmar Lane  
Lathrop, CA  95330

Subject: Wrigley Creek Improvement Project, Santa Clara County  
Compliance with Section 106 of the National Historic Preservation Act  
(36 CFR 800.2[c] – Consulting Parties)

Dear Ms. Garibay:

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A review of the Sacred Lands Files conducted by the Native American Heritage Commission identified no resources of concern in the area. There are no known prehistoric or historic-period cultural resources within or adjacent to the Wrigley Creek Project area, based on record searches, archival research, and archaeological field surveys.

You are being contacted about this Project because you are identified by the Native American Heritage Commission as a Native American Contact for the Santa Clara County as of August 18, 2009.

Please review the enclosed Project information and provide any comments, thoughts, suggestions, and information you may have about cultural resources in the Project area. Contact me at (408) 321-5776 or Lauren.bobadilla@vta.org to discuss any questions or concerns you may have about the proposed Project.

Thank you very much for your interest and assistance.

Sincerely,

Lauren Bobadilla  
Environmental Planner

Enclosures
Figure 1: General Project Location
Wrigley Creek Improvement Project

Figure 2: Project Site
MEMORANDUM

TO: File

FROM: Lauren Bobadilla

DATE: September 16, 2009

SUBJECT: Wrigley Creek Improvement Project
Telephone Conversation with Tina Marie Feyling

Date: 9/15/2009
Time: 4:44 pm
Phone: 530-243-1633; cell 650-207-4685

• Where there are railroad tracks, there are resources because the railroad was constructed at/along ancient Indian routes;
• TMF is concerned due to proximity to the many burials found in the Alviso/237 area.
• Did our test trenches go deep enough?
• LB to get more information on the trenches.

End.
Hi Mr. Galvan,

A few days ago you received information about the Wrigley Creek Improvement Project proposed by VTA. Attached, for your information and reference, is additional information about the project. Attached is the letter report on the presence/absence testing completed by Far Western for the project. The report was not available at the time of the first mailing. No resources were discovered.

If you have any questions or concerns, please contact me.

Thank you again for your time.

Lauren Gibo Bobadilla
VTA Environmental Programs & Resources Management
(408) 321-5776  FAX (408) 321-5787
lauren.bobadilla@vta.org
Hi Ms. Sayers,

VTA is proposing the Wrigley Creek Improvement Project in Milpitas, California. The project would restore natural creek functions of a portion of the Wrigley Creek by creating a meandering stream alignment to replace the existing linear stream alignment just south of Calaveras Boulevard in Milpitas.

On September 8, 2009, I mailed information about the project to you @ P.O. Box 28 in Hollister. This email is a follow-up to the letter. The 9/8 letter and project information are attached. Also attached is a letter report on the presence/absence testing completed by Far Western for this project. The testing found no evidence of prehistoric resources.

Please contact me if you have any concerns or questions about this project and its impacts. Also, if you have or know of other individuals who may have information about sacred resources in the area, please contact me.

Thank you very much for your time.

Lauren Gibo Bobadilla
VTA Environmental Programs & Resources Management
(408) 321-5776    FAX (408) 321-5787
lauren.bobadilla@vta.org
Hi again Ms. Sayers,
I forgot to attach the copy of the 9/8 letter and project information to my earlier email so here it is.
Thanks for your patience.

Lauren Gibo Bobadilla
VTA Environmental Programs & Resources Management
(408) 321-5776 FAX (408) 321-5787
lauren.bobadilla@vta.org
Hi Mr. Ketchum,

VTA is proposing the Wrigley Creek Improvement Project in Milpitas, California. The project would restore natural creek functions of a portion of the Wrigley Creek by creating a meandering stream alignment to replace the existing linear stream alignment just south of Calaveras Boulevard in Milpitas.

On September 8, 2009, I mailed a information about the project to you @ 35867 Yosemite Avenue in Davis. This email is a follow-up to the letter. The 9/8 letter and project information are attached. Also attached is a letter report on the presence/absence testing completed by Far Western for this project. No resources were found.

Please contact me if you have any concerns or questions about this project and its impacts. Also, if you have or know of other individuals who may have information about sacred resources in the area, please contact me.

Thank you very much for your time.

Lauren Gibo Bobadilla
VTA Environmental Programs & Resources Management
(408) 321-5776    FAX (408) 321-5787
lauren.bobadilla@vta.org
Hi Irene,

Attached, for your information and reference, is a copy of the letter report on the presence/absence testing for the Wrigley Creek Improvement Project prepared by Far Western. No resources were discovered.

On September 8, 2009, I mailed a letter to you with information about the project. At the time of the mailing, this report was not available.

If you have any questions or concerns, please contact me.

Thank you very much for your time.

Lauren Gibo Bobadilla
VTA Environmental Programs & Resources Management
(408) 321-5776    FAX (408) 321-5787
lauren.bobadilla@vta.org
Hi Jakki,
VTA is proposing the Wrigley Creek Improvement Project in Milpitas, California. The project would restore natural creek functions of a portion of the Wrigley Creek by creating a meandering stream alignment to replace the existing linear stream alignment just south of Calaveras Boulevard in Milpitas.

On September 8, 2009, I mailed information about the project to you @ 720 North 2nd Street in Patterson. This email is a follow-up to the letter. The 9/8 letter and project information are attached. Also attached is a letter report on the presence/absence testing completed by Far Western for this project.

Please contact me if you have any concerns or questions about this project and its impacts. Also, if you have or know of other individuals who may have information about sacred resources in the area, please contact me.

I have not heard from you in a while… I hope you are doing well. Thanks, Jakki.

Lauren Gibo Bobadilla
VTA Environmental Programs & Resources Management
(408) 321-5776 FAX (408) 321-5787
lauren.bobadilla@vta.org
Your message did not reach some or all of the intended recipients.

Subject: Wrigley Creek Improvement Project in Milpitas, CA
Sent: 9/17/2009 9:29 AM

The following recipient(s) cannot be reached:
jakki@bigvalley.net on 9/17/2009 9:30 AM

There was a SMTP communication problem with the recipient's email server. Please contact your system administrator.

<romailfe1.vta.org #5.5.0 smtp;552 cuda_nsu 5.2.2 Message would exceed quota for <jakki@bigvalley.net>>
Hi Jean-Marie,
I’m so glad you called yesterday. I’ll call you again so we can talk more.
In the meantime, I want you to have the attached information:

- Copy of the Far Western letter report. This is the report of the presence/absence subsurface testing done for the project.
- Copy of the project grading plan with notes on depth of excavation.

Based on the 65% plan sheets for Creek Grading and Bank Stabilization Plan, the depth of the new stream channel varies from about 6 to almost 11 feet deep. I did the math in red—I subtracted the elevations at the lowest points in the channel from the elevations at the top of banks.

Far Western’s report gives general information about the trenches. I’ve asked Phil Kaijankoski, Far Western archaeologist, for information about each of the trenches. I’ll send the information to you as soon as I get it from FW.

Thanks!

Lauren Gibo Bobadilla
VTA Environmental Programs & Resources Management
(408) 321-5776    FAX (408) 321-5787
lauren.bobadilla@vta.org
Hi Rosemary,

VTA is proposing to construct the Wrigley Creek Improvement Project in Milpitas, California. The project would restore natural creek functions of a portion of the Wrigley Creek by creating a meandering stream alignment to replace the existing linear stream alignment just south of Calaveras Boulevard in Milpitas.

On September 8, 2009, I mailed information about the project to you @ P.O. Box 360791 in Milpitas. This email is a follow-up to the letter. The 9/8 letter and project information are attached. Also attached is a letter report on the presence/absence testing completed by Far Western for this project. No resources were discovered.

Please contact me if you have any concerns or questions about this project and its impacts. Also, if you have or know of others who may have information about resources in the area, please contact me.

Thank you very much for your time.

Lauren Gibo Bobadilla  
VTA Environmental Programs & Resources Management  
(408) 321-5776   FAX (408) 321-5787  
lauren.bobadilla@vta.org
Hi Ms. Garibay,

A few days ago you received information about the Wrigley Creek Improvement Project proposed by VTA. Attached, for your information and reference, is additional information about the project. Attached is the letter report on the presence/absence testing completed by Far Western for the project. The report was not available at the time of the first mailing. No resources were discovered.

If you have any questions or concerns, please contact me.

Thank you again for your time.

Lauren Gibo Bobadilla  
VTA Environmental Programs & Resources Management  
(408) 321-5776  FAX (408) 321-5787  
lauren.bobadilla@vta.org
Your message did not reach some or all of the intended recipients.

Subject: Wrigley Creek Improvement Project in Milpitas
Sent: 9/17/2009 2:17 PM

The following recipient(s) cannot be reached:
soaproot@msn.com on 9/17/2009 2:18 PM

There was a SMTP communication problem with the recipient's email server. Please contact your system administrator.
<col0-mc3-f42.Col0.hotmail.com #5.5.0 smtp;550 Requested action not taken: mailbox unavailable (64168608:3309:0)>
Hi Mr. Lopez,

For your information and reference, I’ve attached the letter report on the presence/absence testing completed by Far Western for the Wrigley Creek Improvement Project in Milpitas, CA. No resources were discovered.

On 9/8/2009, I mailed to you a letter with information about the project. At the time of the mailing, the report was not available.

If you have any questions or concerns about the project, please contact me.

Thank you very much for your time.

Lauren Gibo Bobadilla  
VTA Environmental Programs & Resources Management  
(408) 321-5776   FAX (408) 321-5787  
lauren.bobadilla@vta.org
To: Lauren Bobadilla, Environmental Planner
From: Norma E. Sanchez, Tribal Administrator for Rosemary Cambra, Chairwoman
Fax: (408) 321-5787
Pages: 11

Phones: (408) 321-5776
Date: 10/2/2009

Re: WRIGLEY CREEK IMPROVEMENT PROJECT
CC: OFCS 2009

☐ Urgent ☑ For Review ☐ Please Comment ☐ Please Reply ☐ Please Recycle

Comments: Hi Lauren, I am faxing you Rosemary Cambra’s recommendations for the Wrigley Creek Improvement Project for your review. If you should have any questions please do not hesitate to call her at (408) 914-5797 or email her at rcambra@muwekma.org.
MUWEKMA OHLONE INDIAN TRIBE
OF THE San Francisco BAY AREA REGION
inclu Huššištak Makiš Mak-Muwekma “The Road To The Future For Our People”

September 28, 2009

Ms. Lauren Bobadilla
Environmental Planner
Santa Clara Valley Transportation Authority
3331 North First Street
San Jose, Ca. 95134-1927

Dear Lauren:

Thank you for contacting our Tribal office with regards to the proposed Wrigley Creek Improvement Project located south of Calaveras Blvd. in the City of Milpitas. As far as our Tribe knows, there are no specifically identified ancestral sites (cultural resources) that are known to us to exist within the specific proposed study area/locality which was identified on the map that you enclosed, however, there are several significant sites and aspects relative to our tribe’s ancestral heritage and history that does indeed factor into our concerns and response to your inquiry. These concerns are as follows:

1) Prehistoric site CA-SCL-38, the Yukisma Site (aka Alms House Mound) located along the west side of Penitencia Creek within the Elmwood Correctional facility is the location of a massive ancestral Ohlone mortuary mound/cemetery site. This site over the years has yielded approximately 300 human burials and cremations with the possibility of several thousand more burials still remaining within the surrounding area of the locality. Between 1993 and 1994 our Tribe’s CRM firm Ohlone Families Consulting Services was contracted by Santa Clara County and was involved in the identification, excavation, removal and reburial of 244 of our ancestral remains as a result of court ordered barracks for the Elmwood Correctional facility.

2) The Yukisma Site was the location of funerary/burial activities spanning from the Early/Middle Transition Period (256 BC) through every single ensuing temporal period up until the middle 1700s AD. Therefore, the site spanned approximately 2000 years of ceremonial/funerary-related activities.

3) The Yukisma Site (CA-SCL-38) is located less than 1 mile to the southwest of the proposed project parcel.

4) The documented presence of this ancestral mortuary mound site within this area means that other affiliated ancestral cemetery and/or village sites probably exist or existed (unrecorded) within the proposed project area especially in the proximaty of the Wrigley Creek drainage.
5) Another important ancestral cemetery is located approximately ¾ of a mile to the west/southwest of the project area by Abbott Ave. and the Calaveras Blvd. off ramp. A minimum of eight burials were excavated by San Jose State University in the 1960s. This site is probably that which was recorded as CA-SCL-2A.

6) Given the above concerns, we would like to ask of your office about what kind of predictive model is the contracted environmental/cultural resource management firm planning to implement as part of this EIR in order to predict the potential presence of any of our ancestral cultural resources. Furthermore, your letter did not provide the full scope of the construction project or the extent of subsurface disturbance or excavation or the nature of the historic land-use patterns on this parcel. Please provide that information.

7) This area also has specific meaning to the tribe because in the early 1990s our tribe was responsible for the excavation and reburied our ancestral remains from the Yukisma Mound site.

8) The project area is located near the ethnohistoric boundary between the Alson Ohlone (aka Santa Agueda) tribal group (to which enrolled Muwekma Tribal members have direct lineal descent from) and the Tamien Ohlone speaking tribal groups who were missionized first at Mission Santa Clara at the time of contact and later went to Mission San Jose after its establishment after 1797.

9) The Muwekma tribally enrolled Armija-Thompson families have direct lineal descent from the historic Alson Ohlone tribal group from this area.

10) The Ohlone tribal groups located to the east and northeast of the Mission Santa Clara were identified by the Santa Clara Mission fathers as coming from the San Francisco Solano and Santa Agueda districts. The Mission Santa Clara Indians were also referred to as Clareños, which also referred to the speakers of the Tamien Ohlone languages spoken in and around Santa Clara Valley and adjacent areas. The Clareño Ohlone people and the East Bay Chocheño Ohlone speaking people spoke a similar language. When J. Peabody Harrington interviewed two of our Tribal Elders, Maria de los Angeles Colos and Jose Guzman during the 1920s-early 30s, he was informed that “the Clareños were much intermarried with the Chocheños, the dialects were similar. Muwekma – la Gente.” (Harrington Notes, dated October 1929). Therefore, we are concerned that any investigation on this parcel of land be exceedingly thorough and comprehensive and shared with our Tribe.

Based up the above it appears the proposed project may indeed have potential adverse impacts on subsurface ancestral cultural resources and/or ancestral remains. As in cases that have happened so many times in the past, our Tribe does not want to find itself in the position of interfacing with the “old boy” archaeological mitigation process. Our Tribe wants to be kept fully informed whenever any of our ancestral remains or sites is encountered as prescribed under SB 18. Furthermore, we would recommend as a minimum that the proposed project be monitored during subsurface excavations. Furthermore, we would like to obtain a copy of the preliminary CRM report for this project.
Some Historic Background on the Muwekma Ohlone Tribe

As you may already know the Muwekma Ohlone Tribe is comprised of all of the surviving lineages who are aboriginal to the San Francisco Bay region and whom were missionized into Missions Dolores, Santa Clara and San Jose. Our Tribe became Federally recognized through the Congressional Homeless California Indian Appropriation Acts of 1906 and 1908 and later years, and our Tribe was identified as the Verona Band of Alameda County by the Indian Service Bureau and the Reno, and later, Sacramento Agencies between 1906 to 1927. Our family heads enrolled with the BIA under the 1928 California Indian Jurisdictional Act and all of our applications were approved by the Secretary of Interior. Our families again enrolled with the BIA during the 1948-1957 and 1968-1970 enrollment periods and those applications were also approved by the Secretary of Interior as well.

One of the direct ancestors of the Marine lineage was Liberato Culpecse of the Jalquin Ohlone tribal group whom occupied the East Bay areas of south Oakland, San Leandro, San Lorenzo, Hayward, Castro Valley and adjacent lands. Liberato’s father was named Faustino at the time of his baptism on December 18, 1794 at Mission Dolores. His Indian name was Poylemenja and he was identified as being from the “Chaclanes” “otra banda frenta de este” (SFB # 1552). According to Milliken, the Chaclanes were the same tribal group as the Sacelanes whose territory included the inland valleys just east of Oakland including the Walnut Creek and Lafayette region.

It was into the complex and rapidly changing world of the emergent Hispanic Empire, that Liberato Culpecse, at the age of 14 years old (born 1787) was baptized on November 18, 1801 at Mission Dolores, along with other members of his tribe. Seven years later in 1808, Liberato Culpecse had married his first wife Catalina Pispisoboj and she died three years later on October 16, 1811.

After the death of his wife, Liberato was allowed to relocate to the Mission San Jose region, where he met his second wife Efrena Quennatole. Efrena Quennatole who was Napian/Karquin Ohlone was born in 1797 and baptized at Mission San Jose on January 1, 1815 at the age of 18 years. Father Fortuny married Liberato and Efrena (who by then was a widow) on July 13, 1818.

Liberato Culpecse and Efrena Quennatole had a son named Jose Liberato Dionisio (a.k.a. Liberato Nonessa). Liberato and Efrena later had a daughter named Maria Efrena. Both Jose Liberato Dionisio and Maria Efrena married other Mission San Jose Indians. Liberato Dionisio’s second wife was Maria de Jesus who was the daughter of Captain Rupardo Leyo (Leopardo) and was the younger sister of Captain Jose Antonio. Liberato Dionisio and Maria de Jesus had several children including Francisca Nonessa Guzman, born May 7, 1867. Maria Efrena had married an Indian man named Pamilio Yakilamne (from the Ilamne Tribe of the Sacramento Delta region) and they had several children including their youngest daughter Avelina Cornates (Marine). During the late 19th and early 20th centuries, Francisca Nonessa Guzman and Avelina Cornates Marine became two of the founding matriarchs of the present-day Guzman and Marine lineages. They, along with the other tribal families, comprised the historic Federally Recognized Verona Band tribal community residing at the following East Bay rancherias: San Lorenzo, Alusal (Pleasanton), Del Mocho (Livermore), El Molino (Niles), Sunol, and later Newark.

Avelina Cornates Marine was born in November 1863 and baptized at Mission San Jose on January 17, 1864. By the late 1880s she had met Raphael Marine, who came to the United States from Costa Rica, but oral tradition indicates that he was originally from Sicily.
Avelina Cornates and Raphael Marine had together nine living children by 1903, six of whom have surviving descendants who are presently enrolled in the Muwekma Tribe.

In the 1880s, the Hearst family purchased part of the Bernal Rancho containing the Alisal Rancheria and Mrs. Hearst permitted the 125 Muwekmas living at Alisal to remain on the land, and even employing some of them to do her laundry. During the early part of the 20th century, the Muwekma Ohlone Indians (later identified as the Verona Band by the BIA) became Federally Recognized and appear on the Special Indian Census conducted by Agent C. E. Kelsey in 1905-1906.

Concurrently, during this period of time, Mrs. Phoebe Hearst was responsible for funding the fledgling Department of Anthropology at U.C. Berkeley. Dr. Alfred L. Kroeber, one of the early pioneering anthropologists, became known as "the Father of California Anthropology" interviewed some of the knowledgeable speakers of the Indian languages amongst the Mission San Jose Indians in the East Bay.

As mentioned above, another important lineage enrolled in the Muwekma Tribe is the Armija/Thompson lineage which traces their ancestry back to Jose Elias (Armija) and Delfina Guerrera and their ancestors back to the Alson Oholone ("del estero") from the Milpitas/Fremont Plain, Seunen Oholone from the Pleasanton/Dublin area, Chupcan and Tumcan Tribal Groups from the Mt. Diablo and Byron areas.

Elias Armijo (aka Joseph Alas) and Delfina Guerrera were full blooded Mission San Jose Indians and the parents of Maria Flora, Eduardo (Avelino), Margarita, Juan, Chrysanto, Magdalena and Gregoria Maria Armija. Both Elias and Delfina were listed as Indians on the 1870 Census as living in Murray Township, Alameda County (page 103A, household # 59) on the Alisal Rancheria. At the top of the same census page are listed A. Burnell (Augustin Bernal) and his family (household #58). The next series of entries on the same census page identify some of the other Verona Band Indian households living on the Alisal Rancheria. The first family listed below A. Burnell is (#59) Alius, Hosea (Aleas, Jose), Indian, age 25 (b. 1845); his wife, Delfina, Indian, age 17 (b. 1853); and their two children Flora (age 4 b. 1866) and Avelino (Eduardo), age 1 (b. 1869) [1870 Census, Murray Township, Alameda County, page 103A].

The Armija's appear again 10 years later on the 1880 Census living in Centerville, Washington Township, as Jose Aleas, Indian, age 37; Delfina, Indian, wife, age 23; and children: Maria Flora (age 18), Jesus Eduard (age 8), Maria M(argaret) (age 7), Juan C. (age 6), Chrysontos (age 4), Maria M(argdelena) (age 3), and Maria (Gregonia) (age 2 months) [1880 Census, Alameda County, page 517A].

On the 1900 Indian Population Census Washington Township, Alameda County, Jose and Delfina Armija's eldest son, Eduardo Armija, was listed under his mother-in-law Josepha Maria (as Head of household), along with his second wife Jonah (Chona Bautista), and their son Narciso. Also listed are Eduardo's younger brother, Chrysontos and his wife Belle (Izabel Villanen); and Thomas Duncan (who was later married to Petra Inigo (Phoebe Alaniz) in 1903 [Washington Township, page 291B].

Also listed on the 1900 Indian Population Census for neighboring Murray Township (in Livermore) are Phoebe Enigo (Petra Inigo/Phoebe Alaniz) and her daughter, Mary Guzman. Living at Phoebe Inigo's residence (probably the same house that Susanna Nichols was born in) is Magdalena Marshall (Armija/Thompson), who is identified as Lena Matlo, (widowed, age 22, b. May 1878). Petra Inigo was also the godmother to Magdalena's first child Rosa Bernal in 1895 (see below). At this time, Magdalena was pregnant with her son Henry Marshall who was born on Dec. 11, 1900.
Although not formally married to Joseph Machado (Marshall), Henry would be the first of two sons she had with him. Also listed along with Magdalena was Carrie Matlo (Machado/Marshall). Carrie Matlo was actually Carrie Calista Peralta, who was born October 14, 1898, and was the daughter of Magdalena's older sister, Margarita Armija and her second husband Antonio Peralta. Petra Inigo was Carrie's godmother. Petra Inigo and Magdalena Armija had taken the responsibility for caring for Carrie, because according to Carrie's older sister, Belle Stokes Nichols and brother, Joseph Aleas' BIA applications (#'s 10300 and 10299), their mother, Margarita Armija died sometime "around 1900" (Murray Township, page 23A).

Magdalena Armija was later listed on Kelsey's 1905-1906 Special Indian Census as "Marthelina Marshall" with one child (son Henry Marshall). She was also listed on this census as living in Niles and being "without land".

By 1908 or 1909 Magdalena Armija had married Ernest Thompson Sr. The 1910 Census lists Ernest Thompson (as Head of household), Lena, wife (age 33) and two children, Flora (1) and Henry Marshall (9) as living on Mission San Jose Road. Living next to them was Peter Sattos (Juarez) and his wife, Maggie (Margarita Pinos), and Maggie's niece, Laura (Peregrina Pinos Santos' daughter, Erolinda Santos.

Based upon the censuses and mission records, the family lineage of Jose Aleas and Delfina have been traced back several generations to the Seunen Ohlone tribe (Dublin/Livermore region) the "del estero"

Alson Ohlone Tribe (Fremont/Milpitas/north San Jose plain) and the Tamcan Tribe (Byron region). Jose Aleas like many of the Indians of the Verona Band had many names and variations of the spelling of his name. He was known as Elias Armija, Jose Aleas, Jose de la Cruz Elias and others.

The following Mission San Jose record information has been identified for Elias Armija's (Jose Aleas) ancestry. Jose Elias Armija's mother was Perpetua SSAUECHEQUI from the Tamcan Tribal group from around Byron area.

1809 Mar 16, #1636 Perpetua SSAUECHEQUI, Tamcan Tribe
  1807 (2 years old at baptism)
  Deceased (gentil difunto)
  Oyojola o Guayaatne
  Godparents: Maria Higuera

Jose Elias Armija's father was Silvestre (Avendano) who was born February 26, 1800. It was from the baptismal information of his siblings Ancieto and Fermin that we know that they were from "del estero" which is the Fremont Plain within the Alson Ohlone Tribal territory:

1800 Feb 26, #292 Silvestre, Mission (del estero)
  Feb 26, 1800
  Crisanto (neosfitos)
  Crisanta
  Godparents: Teodora Peralta
**Perpetua Ssauechequi** had married **Silvestre Avendano** sometime before 1842 and they had a son named Jose Elias who was baptized at Mission San Jose:

1842 Nov 6, #8167,  **Jose Elias**  
Oct 1842 (1 month old)  
Silvestre Avendano (MSJ # 292)  
Perpetua (MSJ # 1636)  
Godparents: Carlos Berrelleza & Maria Josefa Galindo

**Delfina Armijia's Family Lineage**

Mission San Jose records indicate that Delfina’s father was **Francisco Solano** and that his lineage is traced to the **Chupcan Tribe** of the Mt. Diablo/Walnut Creek area and also to the **Seunen Ohlone Tribe** of the Dublin/Livermore region. Francisco Solano’s father was **Primo Veuslla** of the **Seunen Tribe**, his mother was **Remedia Lai-iapa** of the **Chupcan Tribe**.

1803 Apr 2, #887,  **Primo VEUSLLA**, Seunen [Souen] Tribe (near Dublin)  
1794 (9 years old at baptism)

Francisco Solano’s mother was **Remedia**, daughter of **Radegunda Toleppata** of the Chupcan Tribe.  
1811 Mar 16, #1839,  **Radegunda TOLEPPATA**, Chupcan Tribe (Adulta)  
Born: 1773 (38 years old at baptism)

Note: Identified as mother of Obtaciano #1836, Basilio #1751, Rogato #1755 & Remedia #1757. Radegunda died and was buried at Mission San Jose on September 25, 1824 (MSJ-D # 3211).

1811 Feb 27, #1757,  **Remedia LAL-ÍAPA**, [LALAPA] Chupcan Tribe  
1803 (8 yrs old at baptism)  
deceased  
Radegunda  
Godparents: Quintina

By 1828 Primo and Remedia are married and Remedia gave birth to Francisco.

1828 Apr 8, #5881,  **Francisco Solano** (Neofitos)  
Apr 7, 1828 (born day before)  
Primo (#887)  
Remedia (#1757)  
Godparents: -

Note: "Ilamada Tivasia...Hermana de Chiquetu..."

*Jose Guzman and Maria Colos shared with Harrington on October 14, 1929, the following recollections [probably dating back to around the time of the 1870 Ghost Dance] about the brother-in law of Francisco Solano, named Martin:*

"Martin was cunado (brother-in-law) of Inf's tio Francisco Solano. The wife of Martin was sister of Francisco Solano. Martin was good to land on top of the sweat house above San Leandro -- both inf. and Jose have heard him. He was an Akwena."
“He used to come to Pleasanton at times to. He was sermoneo. Also (?), they called them in. Call it echando sermon. Might say also espicheiro. Buenas cosas hablan — how could I tell you all he says - aconsejando la gente, to all the people, to instruct man and woman heard all he said from temescal top there” (Harrington 1929-1930: reel 36:504).

Francisco Solano had married Maria Soledad Castro.

1843 Jan 8, #8187, Page 259, Maria Soledad (Castro?)
1838 (five years old at time of baptism)
not mentioned
not mentioned
Godparents: Dona Maria de Jesus Castro

Francisco and Soledad had four children together and one of them was Delfina who was born in 1851:

1851, Jul 24, #8467, Delfina Sobien (Solano)
Feb, 1851
Solano Jóbien (Sobien)?
Soledad Cloc (Castro)
Godparents: Simon Roc & Maria Miranda

Jose Elias Armija and Delfina were married around 1865. Their daughter Magdalena Armija Marshall Thompson died a few months after she enrolled herself and her child with the BIA in October 1930:

Magdalena (Armija) Thompson (BIA Application # 10296) was a full blooded Indian born 5-27-1877. Her BIA application listed her children as Emily Thompson (b. 10-31-1910), Ernest Thompson (b. 4-21-1912), Eduardo Thompson (b. 7-21-1914), and Lorenzo (Lawrence) Thompson (b. 9-9-1918).

Ernest Thompson Sr. (an American) was her husband at the time of her enrollment. On her BIA application she identified her father as Elias Armija (died about 1880) and her mother as Delfina (Armija) Guerrera (died about 1884). Both of them were born in Alameda County. Delfina's mother was identified as Soledad Guerrera (Maria Soledad Castro). Phoebe Alaniz (Petra Inigo) witnessed her application on October 7, 1930 that she knew Magdalena and her mother for 45 years.

**Shattering the Myth that the Ohlones/Costanoans were Never Federally Recognized**

In 1989 our Tribe sent a letter to the Branch of Acknowledgement and Research in order to have our Acknowledged status restored. After eight years in the petitioning process, and after the submittal of several thousand pages of historic and legal documentation, on May 24, 1996 the Bureau of Indian Affairs' Branch of Acknowledgment and Research (BAR) made a positive determination that:

Based upon the documentation provided, and the BIA’s background study on Federal acknowledgment in California between 1887 and 1933, we have concluded on a preliminary basis that the Pleasanton or Verona Band of Alameda County was previous acknowledged between 1914 and 1927. The band was among the groups, identified as bands, under the jurisdiction of the Indian agency at Sacramento, California. The agency dealt with the Verona Band as a group and identified it as a distinct social and political entity.
On December 8, 1999, the Muwekma Tribal Council and its legal consultants filed a law suit against the Interior Department/BIA — naming Secretary Bruce Babbitt and AS-IA Kevin Gover over the fact the Muwekma as a previously Federally recognized tribe it should not have to wait 20 or more years to complete our reaffirmation process.

In 2000 – D.C. District Court Justice Ricardo Urbina wrote in his Introduction of his Memorandum Opinion Granting the Plaintiff's Motion to Amend the Court's Order (July 28, 2000) and Memorandum Order Denying the Defendants' to Alter or Amend the Court's Orders (June 11, 2002) that:

"The Muwekma Tribe is a tribe of Ohlone Indians indigenous to the present-day San Francisco Bay area. In the early part of the Twentieth Century, the Department of the Interior ("DOI") recognized the Muwekma tribe as an Indian tribe under the jurisdiction of the United States." (Civil Case No. 99-3261 RMU D.D.C.)

On October 30, 2000, response by the Department of Interior’s Branch of Acknowledgment and Research/Tribal Services Division of the Bureau of Indian Affairs to Justice Urbina’s Court Order regarding the Muwekma Ohlone Tribal enrollment and descendency from the previous Federally recognized tribe, BIA staff concluded:

"... When combined with the members who have both types of ancestors), 100% of the membership is represented. Thus, analysis shows that the petition’s membership can trace (and, based on a sampling, can document) its various lineages back to individuals or to one or more siblings of individuals appearing on the 1900, "Kelsey", and 1910 census enumerations described above.”

On July 25, 2002, Congresswoman Zoe Lofgren issued her “Extension of Remarks” on the floor of the House of Representatives stating:

"The Muwekma Ohlone Indian Tribe is a sovereign Indian Nation located within several counties in the San Francisco Bay Area since time immemorial.

"In 1906, the Tribe was formally identified by the Special Indian Census conducted by Indian Agent C. E. Kelsey, as a result of the Congressional Appropriation Act mandate to identify and to purchase land for homeless California Indian tribes.

"At this time, the Department of Interior and the Bureau of Indian Affairs federally acknowledged the Verona Band as coming under the jurisdiction of the Reno and Sacramento Agencies between 1906 and 1927.

"The Congress of the United States also recognized the Verona Band pursuant to Chapter 14 of Title 25 of the United States Code, which was affirmed by the United States Court of Claims in the Case of Indians of California v. United States (1942) 98 Ct. Cl.583.

"The Court of Claims case judgment instructed the identification of the Indians of California with the creation of Indian rolls. The direct ancestors of the present-day Muwekma Ohlone Tribe participated in and enrolled under the 1928 California Indian Jurisdictional Act and the ensuing Claims Settlement of 1944 with the Secretary of the Interior approving all of their enrollment applications."
“Meanwhile, as a result of inconsistent federal policies of neglect toward the California Indians, the government breached the trust responsibility relationship with the Muwekma tribe and left the Tribe landless and without either services or benefits. As a result, the Tribe has suffered losses and displacement. Despite these hardships the Tribe has never relinquished their Indian tribal status and their status was never terminated.

“In 1984, in an attempt to have the federal government acknowledge the status of the Tribe, the Muwekma Ohlone people formally organized a tribal council in conformance with the guidelines under the Indian Reorganization Act of 1934.

“In 1989, the Muwekma Ohlone Tribal leadership submitted a resolution to the Bureau of Indian Affairs’ Branch of Acknowledgment and Research with the intent to petition for Federal acknowledgment. This application is known as Petition #111. This federal process is known to take many years to complete.

“Simultaneously, in the 1980’s and 1990’s, the United States Congress recognized the federal government’s neglect of the California Indians and directed a Commission to study the history and current status of the California Indians and to deliver a report with recommendations. In the late 1990’s the Congressional mandated report – the California Advisory Report, recommended that the Muwekma Ohlone tribe be reaffirmed to its status as a federally recognized tribe along with five other Tribes, the Dunlap Band of Mono Indians, the Lower Lake Koi Tribe, the Tsimungwe Council, the Southern Sierra Miwuk Nation, and the Tolowa Nation.

“On May 24, 1996, the Bureau of Indian Affairs pursuant to the regulatory process then issued a letter to the Muwekma Ohlone tribe concluding that the Tribe was indeed a Federally Recognized Tribe.

“In an effort to reaffirm their status and compel a timely decision by the Department of the Interior, the Muwekma Ohlone Tribe sued the Bureau of Indian Affairs. The Court has mandated that the Department issue a decision this year. That decision is expected in early August.

“Specifically, on July 28, 2000, and again on June 11, 2002, Judge Ricardo Urbina wrote in his Introduction of his Memorandum Opinion Granting the Plaintiff’s Motion to Amend the Court’s Order (July 28, 2000) and Memorandum Order Denying the Defendants’ to Alter or Amend the Court’s Orders (June 11, 2002) affirmatively stating that:

‘The Muwekma Tribe is a tribe of Ohlone Indians indigenous to the present-day San Francisco Bay area. In the early part of the Twentieth Century, the Department of the Interior (“DOI”) recognized the Muwekma tribe as an Indian tribe under the jurisdiction of the United States.’ (Civil Case No. 99-3261 RMU D.D.C.)

“I proudly support the long struggle of the Muwekma Ohlone Tribe as they continue to seek justice and to finally, and without further delay, achieve their goal of their reaffirmation of their tribal status by the federal government. This process has dragged on long enough. I hope that the Bureau of Indian Affairs and the Department of Interior will do the right thing and act positively to grant the Muwekma Ohlone tribe their rights as a Federally Recognized Indian Tribe. The Muwekma Ohlone Tribe has waited long enough; let them get on with their lives as they seek to improve the lives of the members of this proud tribe.
“To do anything else is to deny this tribe Justice. They have waited patiently and should not have to wait any longer.”

Most recently, on September 21, 2006, another victory was handed to the Muwekma Tribe by the U.S. District Court in Washington, D.C. stating:

“The following facts are not in dispute. Muwekma is a group of American Indians indigenous to the San Francisco Bay area, the members of which are direct descendants of the historical Mission San Jose Tribe, also known as the Pleasanton or Verona Band of Alameda County (“the Verona Band”). ... From 1914 to 1927, the Verona Band was recognized by the federal government as an Indian tribe. ... Neither Congress nor any executive agency ever formally withdrew federal recognition of the Verona Band. ... “Upon remand, the Department must provide a detailed explanation of the reasons for its refusal to waive the Part 83 procedures when evaluating Muwekma’s request for federal tribal recognition, particularly in light of its willingness to “clarify[y] the status of [Ione] ... [and] reaffirm[] the status of [Lower Lake] without requiring [them] to submit ... petition[s] under ... Part 83.” Such an explanation may not rely on the fact that a “lengthy and thorough” evaluation of Muwekma’s petition. At issue for the purpose of this remand is not whether the Department correctly evaluated Muwekma’s completed petition under the Part 83 criteria, but whether it had a sufficient basis to require Muwekma to proceed under the heightened evidentiary burden of the Part 83 procedures in the first place, given Muwekma’s alleged similarity to Ione and Lower Lake.”

As of December 2008, it appears that the BIA failed to respond to Judge Walton’s court order, and we are now patiently waiting to the Court’s final decision.

In conclusion, while our Tribe is awaiting a final decision from the U.S. District Court in Washington, D.C. about our restoration status, we nonetheless, are continuing to exercise our sovereignty and authority as a Recognized Tribe. Therefore, once again thank you for contacting our Tribal office with regards the proposed project and we would like for VTA to have the consulting CRM firm include in its ethnographic section accurate and updated historic and legal information about our Tribe. In the past we have been troubled by the generic treatment in EIR’s about our Tribe’s history and heritage, which are usually fraught with myths, stereotypes and much outdated, undernourished and just plain erroneous information, usually cited from Malcolm Margolin’s interpretive fantasy The Ohlone Way, and Levy’s section “Costanoan” in the Handbook on North American Indians, Vol. 8, 1978.

Your researchers can obtain useful information from Milliken’s publications as well as from our website www.muwekma.org. Should you have any additional questions or would like to obtain primary documentation, please contact our tribal office and we shall consider your request. Finally we want to obtain a copy of the final cultural resource section of CRM report when it is complete.

On behalf of the Muwekma Tribe,

Rosemary Cambra, Chairwoman

Cc:
Muwekma Tribal Council
Cultural Resources File
VTA Wrigley Creek Improvement Project, City of Milpitas
Hi again, Jean-Maire,

On 9/17, I emailed you with some information about the archaeological work completed for VTA’s Wrigley Creek Improvement Project. This email is attached for your reference.

I promised to send you information about the trenches that were excavated during the investigation. Here is the information in the form of a table. The depths of each trench is shown on the table. I’ve added information about the depths of excavation by the project. The deepest project excavation is expected to be 10.7 feet or 3.27 meters. The deepest trench was 12.58 feet or 3.7 meters.

I hope this information answers your questions about the project impacts and testing.
I’ll be sending the information you provided to Far Western and also to the consultant preparing the environmental document for the project.

If you have any questions, please contact me. Thank you very much for your input and interest in this project.

If you have

Lauren Gibo Bobadilla  
*VTA Environmental Programs & Resources Management*  
(408) 321-5776  FAX (408) 321-5787  
lauren.bobadilla@vta.org
Hi again,
I forgot to attach the 9/17 email as promised. Here it is for your reference.

Lauren Gibo Bobadilla
VTA Environmental Programs & Resources Management
(408) 321-5776  FAX (408) 321-5787
lauren.bobadilla@vta.org
October 6, 2009

Ann Marie Sayers
P.O. Box 28
Hollister, CA 95042

Subject: Wrigley Creek Improvement Project in Santa Clara County

Dear Ms. Sayers:

Enclosed are copies of the correspondence and emails relating to the Santa Clara Valley Transportation Authority (VTA) Wrigley Creek Improvement Project.

Please review the enclosures and provide any comments or concerns you may have about the project. Contact me at (408) 321-5776 or by email at lauren.bobadilla@vta.org.

Thank you very much for your time and attention.

Sincerely,

Lauren Bobadilla
Senior Environmental Planner

Enclosures
Lauren
Any thing near Coyote Creek need to have some kind of monitoring hopefully you will also use a Native American along with the other monitors

Thanks

Irenne Zwierlein

--- On Tue, 10/6/09, Bobadilla, Lauren
Lauren.Bobadilla@vta.org wrote:

From: Bobadilla, Lauren <Lauren.Bobadilla@vta.org>
Subject: VTA's Wrigley Creek Improvement Project in Santa Clara County
To: amah_mutsun@yahoo.com
Date: Tuesday, October 6, 2009, 11:47 AM

Hi again, Jean-Maire,

On 9/17, I emailed you with some information about the archaeological work completed for VTA’s Wrigley Creek Improvement Project. This email is attached for your reference.

I promised to send you information about the trenches that were excavated during the investigation. Here is the information in the form of a table. The depths of each trench is shown on the table. I’ve added information about the depths of excavation by the project. The deepest project excavation is expected to be 10.7 feet or 3.27 meters. The deepest trench was 12.58 feet or 3.7 meters.
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If you have any questions, please contact me. Thank you very much for your input and interest in this project.

If you have

Lauren Gibo Bobadilla

VTA Environmental Programs & Resources Management

(408) 321-5776   FAX (408) 321-5787

lauren.bobadilla@vta.org
Hi again, Irenne,
I re-read my email and realized I didn’t make any sense....
What I meant to ask is
Is Wrigley Creek as “sensitive” as Coyote Creek?
This project is along Wrigley Creek, about 1.5 miles east of Coyote Creek.

I apologize for my confusion.

Lauren Gibo Bobadilla
VTA Environmental Programs & Resources Management
(408) 321-5776    FAX (408) 321-5787
lauren.bobadilla@vta.org
Lauren
Any thing near Coyote Creek need to have some kind of monitoring hopefully you will also use a Native American along with the other monitors

Thanks

Irenne Zwierlein

--- On Tue, 10/6/09, Bobadilla, Lauren <Lauren.Bobadilla@vta.org> wrote:

From: Bobadilla, Lauren <Lauren.Bobadilla@vta.org>
Subject: VTA's Wrigley Creek Improvement Project in Santa Clara County
To: amah_mutsun@yahoo.com
Date: Tuesday, October 6, 2009, 11:47 AM

Hi again, Jean-Maire,
On 9/17, I emailed you with some information about the archaeological work completed for VTA’s Wrigley Creek Improvement Project. This email is attached for your reference.

I promised to send you information about the trenches that were excavated during the investigation. Here is the information in the form of a table. The depths of each trench is shown on the table. I’ve added information about the depths of excavation by the project. The deepest project excavation is expected to be 10.7 feet or 3.27 meters. The deepest trench was 12.58 feet or 3.7 meters.

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I’ll be sending the information you provided to Far Western and also to the consultant preparing the environmental document for the project.

If you have any questions, please contact me. Thank you very much for your input and interest in this project.

If you have
Lauren Gibo Bobadilla
VTA Environmental Programs & Resources Management
(408) 321-5776 FAX (408) 321-5787
lauren.bobadilla@vta.org
I reviewed the area of the project. There are a few points that do cause some concern. One being the location of nearby burial sites and the second being the presence of railroad and creek. It would be my recommendation that any excavation be monitored and to have a plan of action ready for either the disturbance of burials or artifact. It would be better to have a plan than be unprepared upon occurrence of a find, this will help them keep from delaying the project while they scramble to figure out processes and plan.

Irenne Zwierlein

Hi Irenne,

Here are copies of the following:

- First letter about the project with project information (letter is dated September 8, 2009);
- Letter report on the results of geoarchaeological subsurface testing conducted by Far Western Anthropological Research Group;
- Notes on depths of test trenches and project impacts.

Hope this helps.
Let me know if you have any questions or concerns.
Thanks for taking the time to look at this project.

Lauren Gibo Bobadilla
VTA Environmental Programs & Resources Management
(408) 321-5776    FAX (408) 321-5787
lauren.bobadilla@vta.org
To: Bobadilla, Lauren  
Subject: Re: FW: VTA's Wrigley Creek Improvement Project in Santa Clara County

please send the information on this project to me again and I will re read it

thank you

Irenne Zwierlein

--- On Thu, 10/15/09, Bobadilla, Lauren <Lauren.Bobadilla@vta.org> wrote:

From: Bobadilla, Lauren <Lauren.Bobadilla@vta.org>  
Subject: FW: VTA's Wrigley Creek Improvement Project in Santa Clara County  
To: "Irenne zwierlein" <amah_mutsun@yahoo.com>  
Date: Thursday, October 15, 2009, 10:28 AM

Hi again, Irenne,
I re-read my email and realized I didn’t make any sense....
What I meant to ask is
Is Wrigley Creek as “sensitive” as Coyote Creek?
This project is along Wrigley Creek, about 1.5 miles east of Coyote Creek.

I apologize for my confusion.

Lauren Gibo Bobadilla  
VTA Environmental Programs & Resources Management  
(408) 321-5776    FAX (408) 321-5787  
lauren.bobadilla@vta.org

From: Bobadilla, Lauren  
Sent: Thursday, October 08, 2009 7:58 AM  
To: 'Irenne zwierlein'  
Subject: RE: VTA's Wrigley Creek Improvement Project in Santa Clara County

Hi Irenne,  
Thanks for responding.
Is Wrigley Creek as “sensitive” as Wrigley Creek?
This project is along Wrigley Creek, about 1.5 miles east of Coyote Creek.

Lauren Gibo Bobadilla
VTA Environmental Programs & Resources Management
(408) 321-5776    FAX (408) 321-5787
lauren.bobadilla@vta.org

From: irenne zwierlein [mailto:amah_mutsun@yahoo.com]
Sent: Wednesday, October 07, 2009 10:39 PM
To: Bobadilla, Lauren
Subject: Re: VTA's Wrigley Creek Improvement Project in Santa Clara County

Lauren

Any thing near Coyote Creek need to have some kind of monitoring
hopefully you will also use a Native American along with the other monitors

Thanks

Irenne Zwierlein

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From: Bobadilla, Lauren <Lauren.Bobadilla@vta.org>
Subject: VTA's Wrigley Creek Improvement Project in Santa Clara County
To: amah_mutsun@yahoo.com
Date: Tuesday, October 6, 2009, 11:47 AM

Hi again, Jean-Maire,
On 9/17, I emailed you with some information about the archaeological work
completed for VTA's Wrigley Creek Improvement Project. This email is attached for
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I promised to send you information about the trenches that were excavated during
the investigation. Here is the information in the form of a table. The depths of each
trench is shown on the table. I’ve added information about the depths of excavation
by the project. The deepest project excavation is expected to be 10.7 feet or 3.27
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I hope this information answers your questions about the project impacts and testing. I’ll be sending the information you provided to Far Western and also to the consultant preparing the environmental document for the project.

If you have any questions, please contact me. Thank you very much for your input and interest in this project.

If you have
Lauren Gibo Bobadilla
VTA Environmental Programs & Resources Management
(408) 321-5776   FAX (408) 321-5787
lauren.bobadilla@vta.org
Hi Rosemary,
Thank you very much for your 9/28/2009 fax.

In the fax, you asked about
1. the *predictive model* being used to predict the potential presence of any ancestral cultural resources; and
2. the scope of the construction project or extent of subsurface disturbance.

To answer your questions, below is information about each item.

1. Predictive Model. The “foundation” report for the Wrigley Creek Improvement Project (WCIP) study is the *Archaeological Survey and Sensitivity Report for SVRTC EIS/SEIR Alternative (ASSR)* by Far Western. The WCIP is within the footprint and APE for the SVRTC (BART) project. Therefore the ASSR for the SVRTC was used for the Natural & Cultural Background, the Study Methods, and Study Results. Selected sections and figures from the latest version of the ASSR are attached for your reference. (The complete report is too big to send by email so I’m sending sections of the report that relate to the WCIP. I will mail a CD containing the complete ASSR to you.)
2. Scope of the Construction. The depth of excavation is shown on the attached plan sheets and spreadsheet. The depths of the test trenches are also noted.

Hope these attachments answer your questions.
If they don’t, contact me.
Thanks again.

Lauren Gibo Bobadilla
VTA Environmental Programs & Resources Management
(408) 321-5776    FAX (408) 321-5787
lauren.bobadilla@vta.org
October 20, 2009

Muwekma Ohlone Indian Tribe of SF Bay Area
Ms. Rosemary Cambra
P.O. Box 360791
Milpitas, CA 95036

Subject: Wrigley Creek Improvement Project, Santa Clara County

Dear Ms. Cambra:

Enclosed, as noted in my email of October 20, is a CD containing the March 2008 Draft Archaeological Survey and Sensitivity Report prepared for the Silicon Valley Rapid Transit Corridor Project (SVRTC) by Far Western Anthropological Research Group, Inc.

The Wrigley Creek Improvement Project (WCIP) is within the footprint and Area of Potential Effects (APE) of the SVRTC project. The research and analysis completed for the SVRTC in Milpitas and presented in the ASSR apply to the WCIP project.

If you have any questions or comments please Lauren Bobadilla, VTA Environmental Planner, at (408) 321-5776 or lauren.bobadilla@vta.org. Thank you, again, for your input.

Sincerely,

[Signature]

Lauren Bobadilla
Senior Environmental Planner

Enclosure
APPENDIX C – REGULATORY PERMITS APPLICABLE TO
WRIGLEY CREEK IMPROVEMENT PROJECT
FREIGHT RAILROAD RELOCATION / LOWER BERRYESSA CREEK PROJECT
ARMY CORPS OF ENGINEERS – SECTION 404 PERMIT
Regulatory Division

SUBJECT: File Number 26644S

Ms. Ann Calnan
Santa Clara Valley Transportation Authority
3331 North First Street, Building B
San Jose, California 95134-1927

Dear Ms. Calnan:

This letter is written in response to your submittal concerning Department of the Army authorization to place 0.002 acres of permanent fill to replace culverts at five individual stream crossings in order to remove UPRR tracks from the VTA right of way as part of the Freight Railroad relocation/Berryessa Culvert project in Alameda and Santa Clara Counties, California.

Based on a review of the information you submitted, your project qualifies for authorization under Department of the Army Nationwide Permit 14 - linear transportation Projects (72 Fed. Reg. 11092, March 12, 2007), pursuant to Section 404 of the Clean Water Act (33 U.S.C. Section 1344). See Enclosure 1. All work shall be completed in accordance with the plans and drawings contained in your preconstruction notification dated August 14, 2008.

The project must be in compliance with the General Conditions cited in Enclosure 2 for this Nationwide Permit authorization to remain valid. Non-compliance with any condition could result in the suspension, modification or revocation of the authorization for your project, thereby requiring you to obtain an Individual Permit from the Corps. This Nationwide Permit authorization does not obviate the need to obtain other State or local approvals required by law.

This authorization will remain valid for two years from the date of this letter unless the Nationwide Permit is modified, suspended or revoked. If you have commenced work or are under contract to commence work prior to the suspension, or revocation of the Nationwide Permit and the project would not comply with the resulting Nationwide Permit authorization, you have twelve (12) months from that date to complete the project under the present terms and conditions of the Nationwide Permit. Upon completion of the project and all associated mitigation requirements, you shall sign and return the Certification of Compliance, Enclosure 3, verifying that you have complied with the terms and conditions of the permit.

This authorization will not be effective until you have obtained a Section 401 water quality certification from the San Francisco Bay Regional Water Quality Control Board (RWQCB). If the RWQCB fails to act on a valid request for certification within two (2) months
after receipt of a complete application, the Corps will presume a waiver of water quality certification has been obtained. You shall submit a copy of the certification to the Corps prior to the commencement of work.

Should you have any questions regarding this matter, please call Bob Smith of our Regulatory Division at (415) 503-6792. Please address all correspondence to the Regulatory Division and refer to the File Number at the head of this letter. If you would like to provide comments on our permit review process, please complete the Customer Survey Form available online at http://per2.nwp.usace.army.mil/survey.html.

Sincerely,

Mark R. D’Avignon
Chief, South Branch

Enclosures

Copy furnished (w/o enclosures):

ICF, San Jose, CA
Date: 17 October 2008
TO: File No.: 26644S
FROM: Bob Smith
SUBJECT: SCVTA Freight Railroad Relocation

As a requirement for relocation of the UPRR freight track, Santa Clara Valley Transportation Authority will be enlarging and widening culverts at five creek crossings to improve drainage. The five crossings will have a permanent impact no greater than 0.008 acre. The five stream crossings to be impacted occur in the highly urbanized flat lands of Fremont and Milpitas. The project area is not located in designated critical habitat for California red-legged frogs. The streams where the work will occur are concrete-lined or contain only intermittent flows with no suitable red-legged frog habitat. Bullfrogs and mosquito fish were observed during surveys in most locations when water was present. Sustainable populations are unlikely to be present outside of Coyote Creek and/or Guadalupe River which will not be impacted by this project. No project impacts to red-legged frogs are anticipated.

The project meets the requirements for authorization under NWP 14.
14. **Linear Transportation Projects.** Activities required for the construction, expansion, modification, or improvement of linear transportation projects (e.g., roads, highways, railways, trails, airport runways, and taxiways) in waters of the United States. For linear transportation projects in non-tidal waters, the discharge cannot cause the loss of greater than 1/2-acre of waters of the United States. For linear transportation projects in tidal waters, the discharge cannot cause the loss of greater than 1/3-acre of waters of the United States. Any stream channel modification, including bank stabilization, is limited to the minimum necessary to construct or protect the linear transportation project; such modifications must be in the immediate vicinity of the project.

This NWP also authorizes temporary structures, fills, and work necessary to construct the linear transportation project. Appropriate measures must be taken to maintain normal downstream flows and minimize flooding to the maximum extent practicable, when temporary structures, work, and discharges, including cofferdams, are necessary for construction activities, access fills, or dewatering of construction sites. Temporary fills must consist of materials, and be placed in a manner, that will not be eroded by expected high flows. Temporary fills must be removed in their entirety and the affected areas returned to pre-construction elevations. The areas affected by temporary fills must be revegetated, as appropriate.

This NWP cannot be used to authorize non-linear features commonly associated with transportation projects, such as vehicle maintenance or storage buildings, parking lots, train stations, or aircraft hangars.

**Notification:** The permittee must submit a pre-construction notification to the district engineer prior to commencing the activity if: (1) the loss of waters of the United States exceeds 1/10 acre; or (2) there is a discharge in a special aquatic site, including wetlands. (See general condition 27.) (Sections 10 and 404)

**Note:** Some discharges for the construction of farm roads or forest roads, or temporary roads for moving mining equipment, may qualify for an exemption under Section 404(f) of the Clean Water Act (see 33 CFR 323.4).
Enclosure 2 - Nationwide Permit General Conditions

Note: To qualify for NWP authorization, the prospective permittee must comply with the following general conditions, as appropriate, in addition to any regional or case-specific conditions imposed by the division engineer or district engineer. Prospective permittees should contact the appropriate Corps district office to determine if regional conditions have been imposed on an NWP. Prospective permittees should also contact the appropriate Corps district office to determine the status of Clean Water Act Section 401 water quality certification and/or Coastal Zone Management Act consistency for an NWP.

1. Navigation. (a) No activity may cause more than a minimal adverse effect on navigation. (b) Any safety lights and signals prescribed by the U.S. Coast Guard, through regulations or otherwise, must be installed and maintained at the permittee’s expense on authorized facilities in navigable waters of the United States. (c) The permittee understands and agrees that, if future operations by the United States require the removal, relocation, or other alteration, of the structure or work herein authorized, or if, in the opinion of the Secretary of the Army or his authorized representative, said structure or work shall cause unreasonable obstruction to the free navigation of the navigable waters, the permittee will be required, upon due notice from the Corps of Engineers, to remove, relocate, or alter the structural work or obstructions caused thereby, without expense to the United States. No claim shall be made against the United States on account of any such removal or alteration.

2. Aquatic Life Movements. No activity may substantially disrupt the necessary life cycle movements of those species of aquatic life indigenous to the waterbody, including those species that normally migrate through the area, unless the activity’s primary purpose is to impound water. Culverts placed in streams must be installed to maintain low flow conditions.

3. Spawning Areas. Activities in spawning areas during spawning seasons must be avoided to the maximum extent practicable. Activities that result in the physical destruction (e.g., through excavation, fill, or downstream smothering by substantial turbidity) of an important spawning area are not authorized.

4. Migratory Bird Breeding Areas. Activities in waters of the United States that serve as breeding areas for migratory birds must be avoided to the maximum extent practicable.

5. Shellfish Beds. No activity may occur in areas of concentrated shellfish populations, unless the activity is directly related to a shellfish harvesting activity authorized by NWP 4 and 48.

6. Suitable Material. No activity may use unsuitable material (e.g., trash, debris, car bodies, asphalt, etc.). Material used for construction or discharged must be free from toxic pollutants in toxic amounts (see Section 307 of the Clean Water Act).

7. Water Supply Intakes. No activity may occur in the proximity of a public water supply intake, except where the activity is for the repair or improvement of public water supply intake structures or adjacent bank stabilization.

8. Adverse Effects From Impoundments. If the activity creates an impoundment of water, adverse effects to the aquatic system due to accelerating the passage of water, and/or restricting its flow must be minimized to the maximum extent practicable.

9. Management of Water Flows. To the maximum extent practicable, the preconstruction course, condition, capacity, and location of open waters must be maintained for each activity, including stream channelization and storm water management activities, except as provided below. The activity must be constructed to withstand expected high flows. The activity must not restrict or impede the passage of normal or high flows, unless the primary purpose of the activity is to impound water or manage high flows. The activity may alter the preconstruction course, condition, capacity, and location of open waters if it benefits the aquatic environment (e.g., stream restoration or relocation activities).

10. Fills Within 100-Year Floodplains. The activity must comply with applicable FEMA-approved state or local floodplain management requirements.

11. Equipment. Heavy equipment working in wetlands or mudflats must be placed on mats, or other measures must be taken to minimize soil disturbance.

12. Soil Erosion and Sediment Controls. Appropriate soil erosion and sediment controls must be used and maintained in effective operating condition during construction, and all exposed soil and other fills, as well as any work below the ordinary high water mark or high tide line, must be permanently stabilized at the earliest practicable date. Permittees are encouraged to perform work within waters of the United States during periods of low-flow or no-flow.

13. Removal of Temporary Fills. Temporary fills must be removed in their entirety and the affected areas returned to pre-construction elevations. The affected areas must be revegetated, as appropriate.

14. Proper Maintenance. Any authorized structure or fill shall be properly maintained, including maintenance to ensure public safety.

15. Wild and Scenic Rivers. No activity may occur in a component of the National Wild and Scenic River System, or in a river officially designated by Congress as a "study river" for possible inclusion in the system while the river is in an official study status, unless the appropriate Federal agency with direct management responsibility for such river, has determined in writing that the proposed activity will not adversely affect the Wild and Scenic River designation or study status. Information on Wild and
Scenic Rivers may be obtained from the appropriate Federal land management agency in the area (e.g., National Park Service, U.S. Forest Service, Bureau of Land Management, U.S. Fish and Wildlife Service).

16. Tribal Rights. No activity or its operation may impair reserved tribal rights, including, but not limited to, reserved water rights and treaty fishing and hunting rights.

17. Endangered Species. (a) No activity is authorized under any NWP which is likely to jeopardize the continued existence of a threatened or endangered species or a species proposed for such designation, as identified under the Federal Endangered Species Act (ESA), or which will destroy or adversely modify the critical habitat of such species. No activity is authorized under any NWP which "may affect" a listed species or critical habitat, unless Section 7 consultation addressing the effects of the proposed activity has been completed.

(b) Federal agencies should follow their own procedures for complying with the requirements of the ESA. Federal permittees must provide the district engineer with the appropriate documentation to demonstrate compliance with those requirements.

(c) Non-federal permittees shall notify the district engineer if the authorized activity may have the potential to cause effects or that consultation under Section 106 of the NHPA has been completed.

(d) Authorization of an activity by a NWP does not authorize the "take" of a threatened or endangered species as defined under the ESA. In the absence of separate authorization (e.g., an ESA Section 10 Permit, a Biological Opinion with "incidental take" provisions, etc.) from the U.S. FWS or the NMFS, both lethal and non-lethal "takes" of protected species are in violation of the ESA. Information on the location of threatened and endangered species and their critical habitat can be obtained directly from the offices of the U.S. FWS and NMFS or their world wide Web pages at http://www.fws.gov and http://www.noaa.gov/fisheries.html respectively.

18. Historic Properties. (a) In cases where the district engineer determines that the activity may affect properties listed, or eligible for listing, in the National Register of Historic Places, the activity is not authorized, until the requirements of Section 106 of the National Historic Preservation Act (NHPA) have been satisfied.

(b) Federal permittees should follow their own procedures for complying with the requirements of Section 106 of the National Historic Preservation Act. Federal permittees must provide the district engineer with the appropriate documentation to demonstrate compliance with those requirements.

(c) Non-federal permittees must submit a pre-construction notification to the district engineer if the authorized activity may have the potential to cause effects to any historic properties listed, determined to be eligible for listing on, or potentially eligible for listing on the National Register of Historic Places, including previously unidentified properties. For such activities, the preconstruction notification must state which historic properties may be affected by the proposed work or include a vicinity map indicating the location of the historic properties or the potential for the presence of historic properties. Assistance regarding information on the location of potential for the presence of historic resources can be sought from the State Historic Preservation Officer or Tribal Historic Preservation Officer, as appropriate, and the National Register of Historic Places (see 33 CFR 330.4(g)). The district engineer shall make a reasonable and good faith effort to carry out appropriate identification efforts, which may include background research, consultation, oral history interviews, sample field investigation, and field survey. Based on the information submitted and these efforts, the district engineer shall determine whether the proposed activity has the potential to cause an effect on the historic properties. Where the non-Federal applicant has identified historic properties which the activity may have the potential to cause effects and so notified the Corps, the non-Federal applicant shall not begin the activity until notified by the district engineer that the activity has no potential to cause effects or that consultation under Section 106 of the NHPA has been completed.

(d) The district engineer will notify the prospective permittee within 45 days of receipt of a complete preconstruction notification whether NHPA Section 106 consultation is required. Section 106 consultation is not required when the Corps determines that the activity does not have the potential to cause effects on historic properties (see 36 CFR 800.3(a)). If NHPA section 106 consultation is required and will occur, the district engineer will notify the non-Federal applicant that he or she cannot begin work until Section 106 consultation is completed.

(e) Prospective permittees should be aware that section 110(k) of the NHPA (16 U.S.C. 470h-2(k)) prevents the Corps from granting a permit or other assistance to an applicant who, with intent to avoid the requirements of Section 106 of the NHPA, has intentionally significantly adversely
affected a historic property to which the permit would relate, or having legal power to prevent it, allowed such significant adverse effect to occur, unless the Corps, after consultation with the Advisory Council on Historic Preservation (ACHP), determines that circumstances justify granting such assistance despite the adverse effect created or permitted by the applicant. If circumstances justify granting the assistance, the Corps is required to notify the ACHP and provide documentation specifying the circumstances, explaining the degree of damage to the integrity of any historic properties affected, and proposed mitigation. This documentation must include any views obtained from the applicant, SHPO/THPO, appropriate Indian tribes if the undertaking occurs on or affects historic properties on tribal lands or affects properties of interest to those tribes, and other parties known to have a legitimate interest in the impacts to the permitted activity on historic properties.

20. Mitigation. The district engineer will consider the following factors when determining appropriate and practicable mitigation necessary to ensure that adverse effects on the aquatic environment are minimal:

(a) The activity must be designed and constructed to avoid and minimize adverse effects, both temporary and permanent, to waters of the United States to the maximum extent practicable at the project site (i.e., on site).

(b) Mitigation in all its forms (avoiding, minimizing, rectifying, reducing, or compensating) will be required to the extent necessary to ensure that the adverse effects to the aquatic environment are minimal.

(c) Compensatory mitigation at a minimum one-for-one ratio will be required for all wetland losses that exceed 1/8 acre and require preconstruction notification, unless the district engineer determines in writing that some other form of mitigation would be more environmentally appropriate and provides a project-specific waiver of this requirement. For wetland losses of 1/8 acre or less that require pre-construction notification, the district engineer may determine on a case-by-case basis that compensatory mitigation is required to ensure that the activity results in minimal adverse effects on the aquatic environment. Since the likelihood of success is greater and the impacts to potentially valuable uplands are reduced, wetland restoration should be the first compensatory mitigation option considered.

(d) For losses of streams or other open waters that require pre-construction notification, the district engineer may require compensatory mitigation, such as stream restoration, to ensure that the activity results in minimal adverse effects on the aquatic environment.

(e) Compensatory mitigation will not be used to increase the acreage losses allowed by the acreage limits of the NWPs. For example, if an NWP has an acreage limit of 1/8 acre, it cannot be used to authorize any project resulting in the loss of greater than 1/8 acre of waters of the United States, even if compensatory mitigation is provided that replaces or restores some of the lost waters. However, compensatory mitigation can and should be used, as necessary, to ensure that a project already meeting the established acreage limits also satisfies the minimal impact requirement associated with the NWPs.

(f) Compensatory mitigation plans for projects in or near streams or other open waters will normally include a requirement for the establishment, maintenance, and legal protection (e.g., conservation easements) of riparian areas next to open waters. In some cases, riparian areas may be the only compensatory mitigation required. Riparian areas should consist of native species. The width of the required riparian area will address documented water quality or aquatic habitat loss concerns. Normally, the riparian area will be 25 to 50 feet wide on each side of the stream, but the district engineer may require slightly wider riparian areas to address documented water quality or habitat loss concerns. Where both wetlands and open waters exist on the project site, the district engineer will determine the appropriate compensatory mitigation (e.g., riparian areas and/or wetlands compensation) based on what is best for the aquatic environment on a watershed basis. In cases where riparian areas are determined to be the most appropriate form of compensatory mitigation, the district engineer may waive or reduce the requirement to provide wetland compensatory mitigation for wetland losses.

(g) Permittees may propose the use of mitigation banks, in-lieu fee arrangements or separate activitiespecific compensatory mitigation. In all cases, the mitigation provisions will specify the party responsible for accomplishing and/or complying with the mitigation plan.

(h) Where certain functions and services of waters of the United States are permanently adversely affected, such as the conversion of a forested or scrub-shrub wetland to a herbaceous wetland in a permanently maintained utility line right-of-way, mitigation may be required to reduce the adverse effects of the project to the minimal level.

21. Water Quality. Where States and authorized Tribes, or EPA where applicable, have not previously certified compliance of an NWP with CWA Section 401, individual 401 Water Quality Certification must be obtained or waived (see 33 CFR 330.4(c)). The
district engineer or State or Tribe may require additional water quality management measures to ensure that the authorized activity does not result in more than minimal degradation of water quality.

22. Coastal Zone Management. In coastal states where an NWP has not previously received a state coastal zone management consistency concurrence, an individual state coastal zone management consistency concurrence must be obtained, or a presumption of concurrence must occur (see 33 CFR 330.4(d)). The district engineer or a State may require additional measures to ensure that the authorized activity is consistent with state coastal zone management requirements.

23. Regional and Case-By-Case Conditions. The activity must comply with any regional conditions that may have been added by the Division Engineer (see 33 CFR 330.4(c)) and with any case specific conditions added by the Corps or by the state, Indian Tribe, or U.S. EPA in its section 401 Water Quality Certification, or by the state in its Coastal Zone Management Act consistency determination.

24. Use of Multiple Nationwide Permits. The use of more than one NWP for a single and complete project is prohibited, except when the acreage loss of waters of the United States authorized by the NWP does not exceed the acreage limit of the NWP with the highest specified acreage limit. For example, if a road crossing over tidal waters is constructed under NWP 14, with associated bank stabilization authorized by NWP 13, the maximum acreage loss of waters of the United States for the total project cannot exceed 5-acre.

25. Transfer of Nationwide Permit Verifications. If the permittee sells the property associated with a nationwide permit verification, the permittee may transfer the nationwide permit verification to the new owner by submitting a letter to the appropriate Corps district office to validate the transfer. A copy of the nationwide permit verification must be attached to the letter, and the letter must contain the following statement and signature: "When the structures or work authorized by this nationwide permit are still in existence at the time the property is transferred, the terms and conditions of this nationwide permit, including any special conditions, will continue to be binding on the new owner(s) of the property. To validate the transfer of this nationwide permit and the associated liabilities associated with compliance with its terms and conditions, have the transferee sign and date below."

(Transferee)________________________
(Date) ______________________

26. Compliance Certification. Each permittee who received an NWP verification from the Corps must submit a signed certification regarding the completed work and any required mitigation. The certification form must be forwarded by the Corps with the NWP verification letter and will include:
(a) A statement that the authorized work was done in accordance with the NWP authorization, including any general or specific conditions;
(b) A statement that any required mitigation was completed in accordance with the permit conditions; and
(c) The signature of the permittee certifying the completion of the work and mitigation.

27. Pre-Construction Notification. (a) Timing. Where required by the terms of the NWP, the prospective permittee must notify the district engineer by submitting a pre-construction notification (PCN) as early as possible. The district engineer must determine if the PCN is complete within 30 calendar days of the date of receipt and, as a general rule, will request additional information necessary to make the PCN complete only once. However, if the prospective permittee does not provide all of the requested information, then the district engineer will notify the prospective permittee that the PCN is still incomplete and the PCN review process will not commence until all of the requested information has been received by the district engineer. The prospective permittee shall not begin the activity:
(1) Until notified in writing by the district engineer that the activity may proceed under the NWP with any special conditions imposed by the district or division engineer; or
(2) If 45 calendar days have passed from the district engineer's receipt of the complete PCN and the prospective permittee has not received written notice from the district or division engineer. However, if the permittee was required to notify the Corps pursuant to general condition 17 that listed species or critical habitat might be affected or in the vicinity of the project, or to notify the Corps pursuant to general condition 18 that the activity may have the potential to cause effects to historic properties, the permittee cannot begin the activity until receiving written notification from the Corps that is "no effect" on listed species or "no potential to cause effects" on historic properties, or that any consultation required under Section 7 of the Endangered Species Act (see 33 CFR 330.4(f)) and/or Section 106 of the National Historic Preservation Act (see 33 CFR 330.4(g)) is completed. Also, work cannot begin under NWPs 21, 49, or 50 until the permittee has received written approval from the Corps. If the proposed activity requires a written waiver to exceed specified limits of an NWP, the permittee cannot begin the activity until the district engineer issues the waiver. If the district or division engineer notifies the permittee in writing that an individual permit is required within 45 calendar days of receipt of a complete PCN, the permittee cannot begin the activity until an individual permit has been obtained. Subsequently, the permittee's right to proceed under the NWP may be modified, suspended, or revoked only in accordance with the procedure set forth in 33 CFR 330.5(d)(2).
(b) Contents of Pre-Construction Notification: The PCN must be in writing and include the following information:
(1) Name, address and telephone numbers of the prospective permittee;
(2) Location of the proposed project;
(3) A description of the proposed project; the project's purpose; direct and indirect adverse environmental effects the project would cause; any other NWP(s), regional general permit(s), or individual permit(s) used or intended to be used to authorize any part of the proposed project or any related activity. The description should be sufficiently detailed to allow the district engineer to determine that the adverse effects of the project will be minimal and to
determine the need for compensatory mitigation. Sketches should be provided when necessary to show that the activity complies with the terms of the NWP. (Sketches usually clarify the project and when provided result in a quicker decision.);
(4) The PCN must include a delineation of special aquatic sites and other waters of the United States on the project site. Wetland delineations must be prepared in accordance with the current method required by the Corps. The permittee may ask the Corps to delineate the special aquatic sites and other waters of the United States, but there may be a delay if the Corps does the delineation, especially if the project site is large or contains many waters of the United States. Furthermore, the 45 day period will not start until the delineation has been submitted to or completed by the Corps, where appropriate;
(5) If the proposed activity will result in the loss of greater than 0.01 acre of wetlands and a PCN is required, the prospective permittee must submit a statement describing how the mitigation requirement will be satisfied. As an alternative, the prospective permittee may submit a conceptual or detailed mitigation plan.
(6) If any listed species or designated critical habitat might be affected or is in the vicinity of the project, or if the project is located in designated critical habitat, for non-Federal applicants the PCN must include the name(s) of those endangered or threatened species that might be affected by the proposed work or utilize the designated critical habitat that may be affected by the proposed work. Federal applicants must provide documentation demonstrating compliance with the Endangered Species Act; and
(7) For an activity that may affect a historic property listed on, determined to be eligible for listing on, or potentially eligible for listing on, the National Register of Historic Places, for non-Federal applicants the PCN must state which historic property may be affected by the proposed work or include a vicinity map indicating the location of the historic property. Federal applicants must provide documentation demonstrating compliance with Section 106 of the National Historic Preservation Act.
(c) Form of Pre-Construction

Notification: The standard individual permit application form (Form ENG 4345) may be used, but the completed application form must clearly indicate that it is a PCN and must include all of the information required in paragraphs (b)(1) through (7) of this general condition. A letter containing the required information may also be used.
(d) Agency Coordination: (1) The district engineer will consider any comments from Federal and state agencies concerning the proposed activity’s compliance with the terms and conditions of the NWPs and the need for mitigation to reduce the project’s adverse environmental effects to a minimal level.
(2) For all NWP 48 activities requiring pre-construction notification and for other NWP activities requiring preconstruction notification to the district engineer that result in the loss of greater than 0.01 acre of waters of the United States, the district engineer will immediately provide (e.g., via facsimile transmission, overnight mail, or other expeditious manner) a copy of the PCN to the appropriate Federal or state offices (U.S. FWS, state natural resource or water quality agency, EPA, State Historic Preservation Officer (SHPO) or Tribal Historic Preservation Office (THPO), and, if appropriate, the NMFS). With the exception of NWP 37, these agencies will then have 10 calendar days from the date the material is transmitted to telephone or fax the district engineer notice that they intend to provide substantive, site-specific comments. If so contacted by an agency, the district engineer will wait an additional 15 calendar days before making a decision on the preconstruction notification. The district engineer will fully consider agency comments received within the specified time frame, but will provide no response to the resource agency, except as provided below. The district engineer will indicate in the administrative record associated with each preconstruction notification that the resource agencies’ concerns were considered. For NWP 37, the emergency watershed protection and rehabilitation activity may proceed immediately in cases where there is an unacceptable hazard to life or a significant loss of property or economic hardship will occur. The district engineer will consider any comments received to decide whether the NWP 37 authorization should be modified, suspended, or revoked in accordance with the procedures at 33 CFR 330.5.
(3) In cases of where the prospective permittee is not a Federal agency, the district engineer will provide a response to NMFS within 30 calendar days of receipt of any Essential Fish Habitat conservation recommendations, as required by Section 305(b)(4)(B) of the Magnuson-Stevens Fishery Conservation and Management Act.
(4) Applicants are encouraged to provide the Corps multiple copies of pre-construction notifications to expedite agency coordination.
(5) For NWP 48 activities that require reporting, the district engineer will provide a copy of each report within 10 calendar days of receipt to the appropriate regional office of the NMFS.
(e) District Engineer’s Decision: In reviewing the PCN for the proposed activity, the district engineer will determine whether the activity authorized by the NWP will result in more than minimal individual or cumulative adverse environmental effects or may be contrary to the public interest. If the proposed activity requires a PCN and will result in a loss of greater than 0.01 acre of wetlands, the prospective permittee should submit a mitigation proposal with the PCN. Applicants may also propose compensatory mitigation for projects with smaller impacts. The district engineer will consider any proposed compensatory mitigation the applicant has included in the proposal in determining whether the net adverse environmental effects to the aquatic environment of the proposed work are minimal. The compensatory mitigation proposal may be either conceptual or detailed. If the district engineer determines that the activity complies with the terms and conditions of the NWP and that the adverse effects on the aquatic environment are minimal, after considering mitigation, the district engineer will notify the permittee and include any conditions the district engineer deems necessary. The district engineer must approve any compensatory mitigation proposal before the permittee commences work. If the prospective permittee elects to submit a compensatory mitigation plan with the PCN, the district engineer will
expeditiously review the proposed compensatory mitigation plan. The district engineer must review the plan within 45 calendar days of receiving a complete PCN and determine whether the proposed mitigation would ensure no more than minimal adverse effects on the aquatic environment. If the net adverse effects of the project on the aquatic environment (after consideration of the compensatory mitigation proposal) are determined by the district engineer to be minimal, the district engineer will provide a timely written response to the applicant. The response will state that the project can proceed under the terms and conditions of the NWP.

If the district engineer determines that the adverse effects of the proposed work are more than minimal, then the district engineer will notify the applicant either: (1) That the project does not qualify for authorization under the NWP and instruct the applicant on the procedures to seek authorization under an individual permit; (2) that the project is authorized under the NWP subject to the applicant’s submission of a mitigation plan that would reduce the adverse effects on the aquatic environment to the minimal level; or (3) that the project is authorized under the NWP with specific modifications or conditions. Where the district engineer determines that mitigation is required to ensure no more than minimal adverse effects occur to the aquatic environment, the activity will be authorized within the 45-day PCN period. The authorization will include the necessary conceptual or specific mitigation or a requirement that the applicant submit a mitigation plan that would reduce the adverse effects on the aquatic environment to the minimal level. When mitigation is required, no work in waters of the United States may occur until the district engineer has approved a specific mitigation plan.

28. Single and Complete Project. The activity must be a single and complete project. The same NWP cannot be used more than once for the same single and complete project.
Enclosure 3

Permittee: Santa Clara Valley Transportation Authority

File Number: 26644S

Certification of Compliance for Nationwide Permit

"I hereby certify that the work authorized by the above referenced File Number and all required mitigation have been completed in accordance with the terms and conditions of this Nationwide Permit authorization."

(Permittee)   (Date)

Return to:

Bob Smith
U.S. Army Corps of Engineers
1455 Market Street, CESPN-R
San Francisco, CA 94103-1398
August 1, 2008

Ann Calnan
Santa Clara Valley Transportation Authority
3331 North First Street, Building B-2
San Jose, CA 95134-1927

1602 LAKE AND STREAMBED ALTERATION AGREEMENT

This agreement is issued by the Department of Fish and Game pursuant to Division 2, Chapter 6 of the California Fish and Game Code:

WHEREAS, the applicant Ann Calnan, Santa Clara Valley Transportation Authority, submitted a signed NOTIFICATION proposing to substantially divert or obstruct the natural flow of, or substantially change the bed, channel, or bank of, or use material from the streambed or lake of the following water: Calera Creek, Berryessa Creek, Wrigley Creek in Santa Clara County, and unnamed creeks (Line B), Scott Creek (Line A) in Alameda County, State of California; and

WHEREAS, the Department has determined that such operations may substantially adversely affect existing fish and wildlife resources including water quality, hydrology, aquatic or terrestrial plant or animal species; and

WHEREAS, the project has undergone the appropriate review under the California Environmental Quality Act; and

WHEREAS, the Operator shall undertake the project as proposed in the signed PROJECT DESCRIPTION and PROJECT CONDITIONS (attached). If the Operator changes the project from that described in the PROJECT DESCRIPTION and does not include the PROJECT CONDITIONS, this agreement is no longer valid; and

WHEREAS, the agreement shall expire on December 31, 2012, with the work to occur between April 15 and October 31, (except revegetation work and swallow nest removal work); and

WHEREAS, nothing in this agreement authorizes the Operator to trespass on any land or property, nor does it relieve the Operator of the responsibility for compliance with applicable Federal, State, or local laws or ordinances. Placement, or removal, of any material below the level of ordinary high water may come under the jurisdiction of the U. S. Army Corps of Engineers pursuant to Section 404 of the Clean Water Act;

THEREFORE, the Operator may proceed with the project as described in the PROJECT DESCRIPTION and PROJECT CONDITIONS. A copy of this agreement, with attached PROJECT DESCRIPTION and PROJECT CONDITIONS, shall be provided to contractors and subcontractors and shall be in their possession at the work site.

Failure to comply with all conditions of this agreement may result in legal action.

This agreement is approved by:

Charles Armor
Regional Manager
Bay Delta Region

cc: Dave Johnston
    Warden Grinton
    Lieutenant Nores
PROJECT DESCRIPTION and PROJECT CONDITIONS

Description

Santa Clara Valley Transportation Authority (VTA) has requested a Streambed Alteration Agreement to construct drainage improvements within the VTA and Union Pacific Railroad (UPRR) right-of-way. The drainage improvements are part of the overall project to relocate the UPRR tracks from the VTA right-of-way. The Freight Railroad Relocation/Lower Berryessa Creek Project – Drainage Improvements begins at an unnamed creek in Fremont, Alameda County, referred to as Line B by the Alameda County Flood Control and Water Conservation District (ACFCWCD), and ends at Wrigley Creek in Milpitas, Santa Clara County. The drainage improvements (box culverts) are within the VTA and UPRR right-of-way from Station 482+00 to station 353+00. The freight track relocation is described below, followed by the drainage improvements needed to accommodate the relocated tracks and meet flood control requirements.

Track Relocation

An existing freight railroad track within the VTA right-of-way will be relocated to the west approximately 45 feet by constructing a new UPRR track parallel to and 15 feet east of a second existing UPRR track. This will occur from UPRR station 463+00, just north of Kato Road, south to station 378+00, just south of Berryessa Creek. All existing freight track within the VTA right-of-way will be removed. South of Berryessa Creek, two new UPRR tracks will be constructed to connect to the existing UPRR Milpitas Yard at station 352+00. Some tracks will be shifted within this yard and an additional track will be built from station 352+00 to station 300+00. Generally, this corridor presently contains two tracks separated by 60 feet, which in the future will have two tracks separated by 15 feet. New at-grade crossings will be required at Kato Road and Dixon Landing Road alongside the existing grade crossings.
The railroad relocation associated with Berryessa Creek will include construction of a temporary shoofly track (detour) to maintain existing freight railroad operations during construction of a new Berryessa Creek multi-cell box culvert. It will require approximately a 40-foot wide construction easement on each side of the track centerline, requiring a right-of-way take of approximately 34,000 square feet. Once the freight railroad is operating on the new box culvert, the shoofly will be removed. The shoofly track will be about 800 feet long beginning approximately at station 378+00.

Access for the freight track relocation work will be from existing street crossings, Santa Clara Valley Water District (SCVWWD) maintenance roads, and longitudinally along the UPPR alignment. Staging areas will follow the progress of the work along the alignment, within the right-of-way or as negotiated with property owners and outside of the CDFG jurisdictional areas.

**Drainage Improvements**

At the five creek crossings, new culverts will be constructed. Planned improvements for each creek crossing are described below. All culvert work will involve staged construction, that in Phase I, includes diverting the live flowing creek channel and installing the pre-cast section of the culvert under the UPPR tracks while freight trains are diverted or taken out of service. Phase II includes constructing the cast-in-place section of the culvert. At the end of construction, the diversion will be abandoned in place alongside the new culvert.

**Alameda County**

**Unnamed Creek (Line B)** – Line B creek is located approximately 2,000 feet north of Kato Road in the City of Fremont along the VTA right-of-way and is accessible through railroad property or the ACFCWCD access gates off Warm Springs Boulevard and Milmont Drive. The existing drainage at Line B is provided by a 6-foot diameter, reinforced concrete pipe with a box culvert under the railroad corridor. This will be reconstructed as an 8-foot deep concrete box culvert. In addition, two non-functioning outfall stub-outs will be installed to accommodate future drainage improvements. This work is being permitted and completed at this time so that creek disturbance in jurisdictional areas is consolidated into one summer season. The new box culvert and outfalls will be a combination of pre-cast and cast-in-place construction using excavators, bulldozers, loaders, dump trucks, fork lifts, water trucks, and other heavy equipment. The flowing stream will be diverted through the work area, as described below, and the existing creek bottom outside the construction area will remain undisturbed. All temporary disturbed areas will be stabilized in accordance with the Storm Water Pollution Prevention Program (SWPPP) Best Management Practices at the completion of construction (using site appropriate measures such as hydroseed, straw, fiber rolls, etc.). Approximately 11,500 square feet of ruderal vegetation adjacent to the creek will be temporarily disturbed. Approximately 193 cubic yards of adjacent soils will be removed to accommodate the new culvert. No existing earthen channel area will be filled with concrete, so no permanent impacts to aquatic habitat are expected from completion of the new culvert.
Scott Creek (Line A) – Scott Creek is located approximately 300 feet south of Kato Road in the City of Fremont along the VTA right-of-way and is accessible through railroad property or access gates off of Milmont Drive. The existing drainage at Scott Creek within the railroad corridor is provided by an open U-wall concrete culvert with bridges. This will be reconstructed as a 10-foot wide by 8-foot deep concrete box culvert. In addition, up to four non-functioning outfall stub-outs will be installed to accommodate future drainage improvements. This work is being permitted and completed at this time so that creek disturbance in jurisdictional areas is consolidated into one summer season. The new box culvert will be a combination of pre-cast and cast-in-place construction using excavators, bulldozers, loaders, dump trucks, fork lifts, water trucks, and other heavy equipment. An 8 foot wide wooden bridge spans the existing concrete channel, and will remain in place during and after construction until the box culvert makes the bridge unnecessary. Due to weight limitations of the wooden bridge, a temporary railroad car or equivalent bridge will be installed and supported over the existing bridge to provide access across the channel for construction equipment. Temporary bridge features include: an approximately 46’ x 10’ railroad flat car or equivalent, measures installed along the sides of the bridge to prevent sediment and other materials from entering the existing channel, earthen support mounds, and earthen approach ramps. The flowing stream will be diverted through the work area, as described below, and the existing creek bottom outside the construction area will remain undisturbed. All temporarily disturbed areas will be stabilized in accordance with SWPPP Best Management Practices at the completion of construction (using site appropriate measures such as hydroteam, straw, fiber rolls, etc.). Approximately 9,385 square feet of vegetated area adjacent to the creek will be temporarily disturbed. Approximately 261 cubic yards of adjacent soils will be removed to accommodate the new culvert. No existing earthen channel area will be filled with concrete, so no permanent impacts to aquatic habitat are expected from completion of the new culvert.

Santa Clara County

Calera Creek – Calera Creek is located approximately 3,700 feet south of Dixon Landing Road in the City of Milpitas along the VTA right-of-way and is accessible through railroad property or access gates off Milmont Drive. The existing 11-foot wide by 6-foot deep double box culvert is adequate to pass flood flows through the railroad right-of-way, however, the single existing drainage outfall is not sufficient to drain the railroad corridor improvements. Therefore, the existing outfall will be replaced with two new outfalls under this project. In addition, four non-functioning outfall stub-outs will be installed to accommodate future drainage improvements. This work is being permitted and completed at this time so that creek disturbance in jurisdictional areas is consolidated into one summer season. The new outfalls will likely be pre-cast, and placed using excavators, bulldozers, loaders, fork lifts, water trucks and other heavy equipment. Approximately 11,444 square feet of ruderal vegetation adjacent to the creek will be temporarily disturbed. Construction will result in the removal of approximately 367 cubic yards of soils. No existing earthen channel area will be filled with concrete, so no permanent impacts to aquatic habitat area expected from completion of the new culvert.
Berryessa Creek – Berryessa Creek is located approximately 50 feet south of Abel Street overpass in the City of Milpitas along the VTA right-of-way and is accessible off of Hanson Court and the access gate off of San Anderas Drive or Marylinn Drive. The existing freight railroad tracks cross over the concrete-lined channel of Berryessa Creek on a bridge structure. The creek configuration at this location includes two 90-degree turns, one upstream of the railroad corridor and one downstream. The work at Berryessa Creek includes replacing the existing bridge structure and a portion of the concrete lined channel with a five-cell box culvert, and widening and realigning the creek to remove the 90 degree angles in anticipation of the planned future flood control project by the SCVWD. These drainage improvements are a joint effort by VTA and SCVWD. While the entire five-cell culvert will be constructed as part of the freight track relocation project, only three of the five cells will be operational until the future flood control project is complete. Temporary construction disturbance for access will occur within 20 feet from all permanent improvements. The flowing stream will be diverted as described below through the work area, and the existing creek bottom outside the construction area will remain undisturbed. The creek will be accessed for construction using the existing SCVWD maintenance access roads. There is alternative access via the longitudinal UPRR right-of-way, and through the public road that leads to a pump house on the north side of Berryessa Creek. There is currently no planned off-haul of excavated soils, unless contamination is encountered. Typical construction equipment will include excavators, bulldozers, vibratory hammers (for sheet piles), pile driver or drilling equipment (for related work at the Abel Street Bridge [see discussion below]), loaders, water trucks, dump trucks, fork lifts and other heavy equipment. This culvert will take two summer seasons to construct, and it is possible that the phasing described below may be modified based on the contractor’s work plan.

**Phase I Construction:** Phase I construction will construct the downstream half of the five-cell box culvert. First, sheet piles will be vibrated into place between the upstream and downstream halves of the culvert to stabilize the soils. Next, the UPRR freight railroad operations will be routed around the work area using the existing track within VTA right-of-way. Then, the creek will be diverted as described below, and excavation to build the downstream half of the five-cell box culvert will begin. The soils generated will be placed as fill in low-lying areas within the right-of-way to form an embankment for the future UPRR tracks. Concrete for the bottom/invert of the box culvert will then be poured, followed by the walls and top slab of the box. After the box is constructed, the downstream transition from the old smaller creek channel to the new widened channel will be excavated. Approximately 12,000 cubic yards of fill will be excavated to transition out of the new culvert and past the Abel Street Bridge columns (see discussion below regarding Abel Street). Some of this excavated material will be used to backfill the new box culvert, and the rest will be used as fill within the right-of-way. In addition, the existing concrete channel lining downstream of the box culvert will be removed throughout the downstream transition section. Finally, a temporary concrete retaining wall will be constructed along the northernmost (1’s) cell so that in the event of a flood, waters are directed safely downstream into the channel. This wall will remain in place until the ultimate SCVWD flood control project is built. The two southernmost cells (4th and 5th) will then be blocked to prevent unauthorized entry, using temporary bulkhead materials that would not add sediment to the creek (such as stop logs, sheet piles, crane
pads, trench plates, etc). Once the Phase I culvert work is completed, the downstream portion of the creek diversion will be removed and UPRR railroad operations will be routed on top of the new box culvert. All temporarily disturbed areas will be stabilized in accordance with SWPPP Best Management Practices at the completion of each portion of the work/prior to the rainy season (using site appropriate measures such as hydoseed, straw, fiber rolls, etc.).

**Phase II Construction:** Phase II construction will build the upstream half of the five-cell box culvert, in the same way that the first half was constructed. Construction will begin with the removal of the sheet piles placed in Phase I. The creek diversion will remain in place throughout the work area. Then, excavation to build the upstream half of the five-cell box culvert will begin. The soils generated will be placed as fill in the same areas as for Phase I. Concrete for the bottom/invert of the box culvert will then be poured, followed by the walls and top slab of the box. The upstream transition from the old smaller creek channel to the new widened channel will then be excavated. Approximately 13,000 cubic yards of fill will be excavated to transition into the new culvert. Some of this excavated material will be used to backfill the upstream portion of the box culvert, and the rest will be used as fill within the right-of-way. In addition, the existing concrete channel lining upstream of the box culvert will be removed throughout the upstream transition section. Finally, a temporary concrete retaining wall will be constructed along the center (3rd) cell so that in the event of a flood, waters are directed safely into the new culvert. This wall will remain in place until the ultimate SCVWD flood control project is built. The two southernmost cells (4th and 5th) will then be blocked to prevent unauthorized entry. The approach to the entrance of these cells may be backfilled using native soils or the entrance may be blocked as described above using temporary bulkhead materials that would not add sediment to the creek. Once all culvert work is completed, remaining stream diversion materials will be removed from downstream to upstream to minimize sedimentation of the channel. All temporarily disturbed areas will then be stabilized in accordance with SWPPP Best Management Practices at the completion of each portion of the work/prior to the rainy season (using site appropriate measures such as hydoseed, straw, fiber rolls, etc.)

**Additional Work at Berryessa Creek**

**Abel Street Bridge Footing Skirt Construction.** Widening of Berryessa Creek will expose the footings of several columns of the Abel Street Bridge. These existing footings will be protected in place in the new creek channel, which will be lined with concrete. In conjunction with the lined concrete channel, concrete skirts will be constructed around the existing footings. Excavation for the widened creek channel, construction of the concrete channel lining and the concrete skirts will occur between April 15th and October 31st.[see Condition 1]

**Abel Street Bridge Seismic Retrofit.** All of the existing Abel Street bridge columns will need to be seismically retrofitted. Seismic retrofit may occur separately or concurrently with planned culvert construction, since the columns are outside the existing
stream zone. Since there is an established swallow colony on the Abel Street Bridge, nest removals will need to be undertaken as described below. This work will include excavating to expose the existing column foundations, then installation of steel casings around the outside of the existing columns. Once the steel casings are welded in place, they will be painted and the soils adjacent to the columns will be backfilled. In addition, some seismic retrofitting of the deck may be required.

Swallow Nest Removal. To avoid impacts to the existing swallow colony on the Abel Street Bridge, empty swallow nests will be removed by February 15th of each construction season where work is planned on the Abel Street Bridge or on the Berryessa culvert. No new nest starts will be permitted to establish in the work area. The contractor is required to do this either by netting the bridge to exclude birds, or scraping incomplete nests down. If washing or scraping is employed, nest starts will be removed before nests are half-way complete (typically every other day during the migratory bird nesting season from February 15 to August 31st). The methodology for removal needs to be approved by UPRR, as there will still be active freight trains going under the bridge during FRR/LBC construction.

Wetland species at Berryessa Creek include cattail species (Typha latifolia, Typha angustifolia), California bulrush (Scirpus californicus) and water-primrose (Ludwigia peploides). Other common sub-dominant species include knotweed (Polygonum persicaria, Polygonum hydropiper), and watercress (Rorippa nasturtium-aquaticum). Approximately 97,800 square feet of ruderal vegetation adjacent to the creek will be temporarily disturbed. Approximately 25,000 cubic yards of soils will be removed from adjacent to the existing Berryessa Creek to widen the channel. Soils will be placed outside the stream zone within the right-of-way. No existing earthen channel area will be filled with concrete, so no permanent impacts to aquatic habitat area expected from completion of the new culvert.

Wrigley Creek – Wrigley Creek is located approximately 1,200 feet north of East Calaveras Boulevard overpass in the City of Milpitas along the VTA right-of-way and is accessible off Railroad Avenue through private property or an access gate and road off Beresford Court through private property. The existing drainage at Wrigley Creek is provided by three corrugated metal pipes and a concrete lined channel with a double box culvert. This will be reconstructed as two 12-foot wide by 6-foot deep cells. In addition, one non-functioning outfall stub-out will be installed to accommodate future drainage improvements. This work is being permitted and completed at this time so that creek disturbance in jurisdictional areas is minimized. The new double box culvert and outfalls will be a combination of pre-cast and cast-in-place construction using excavators, bulldozers, loaders, dump trucks, fork lifts, water trucks and other heavy equipment. This creek culvert will also take two summer seasons to construct. The flowing stream will be diverted as described below through the work area, and the existing creek bottom outside the construction area will remain undisturbed. All temporarily disturbed areas will then be stabilized in accordance with SWPPP Best Management Practices at the completion of each portion of the work/prior to the rainy season (using site appropriate measures such as hydoseed, straw, fiber rolls, etc.). Wetland species at this location include cattail species (Typha latifolia, Typha angustifolia), California bulrush (Scirpus californicus) and
water-primrose (*Ludwigia peploides*). Other common sub-dominant species include knotweed (*Polygonum persicaria, Polygonum hydropiper*), and watercress (*Rorippa nasturtium-aquaticum*). Approximately 12,012 square feet of ruderal vegetation adjacent to the creek will be temporarily disturbed. The existing concrete channel will be removed, and replaced with a new, extended culvert that will require the placement of approximately 13 cubic yards of concrete fill within the existing earthen channel adjacent to the existing crossing. The 13 cubic yards of permanent impacts will impact 83 square feet (0.002 acres) of aquatic habitat.

**Creek Diversions during Construction**

For Calera Creek where the existing culvert will remain, refer to the Calera Creek discussion above, as this channel may have alternative means of diverting the live flow.

For all creek crossings where new culverts/crossings will be constructed, flow will be diverted throughout the entire work area so that no equipment is operated in the live, flowing stream channel. Since the channels are concrete lined at each location, the diversions will be constructed using non-sedimenting materials such as sandbags and/or K-rail wrapped in visqueen to re-route the water into a pipe that bypasses the existing drainage structures. In accordance with the fish friendly design guidelines, typically diversions that are open topped are preferred to covered pipes. However, for these culverts, placing the creek flow in a covered pipe and allowing gravity flow through the construction area will protect the creek from sedimentation inside the work limits, permit fish passage (where possible given low summer flows), and allow UPRR trains to continually operate over the diverted water in the bypass pipe, as required by the railroad. The pipes will be sized based on stream flow at the time of construction, expected to be minimal during the summer dry season.

Diversion placement will begin by excavating and placing the diversion pipe alongside the existing culvert and/or to the end of the disturbance area. Then the downstream end of the pipe will be connected to the existing creek just outside of the work area. Next, the diversion will be connected to the creek on the upstream end of the work limits. Finally, non-sedimenting flow barriers such as sandbags and/or K-rail wrapped in visqueen will be placed to direct creek flow into the diversion pipe. Depending on site specific conditions, after water travels through the culvert limits in a pipe, the diversion may continue to the end of the temporary disturbance area using a pipe or a line of non-sedimenting flow barriers (if it is possible to keep the flow on the far side of the channel from the work area). In the event that culvert work requires the diversion to be relocated from one side of the new culvert to the other, water will be moved into a second pipe by rearranging the flow barriers. At the completion of construction, the diversion pipe will be abandoned in place alongside the new culvert. Where culvert construction is phased, the new culvert may be utilized in lieu of diversion pipe after the concrete has completely cured.

At the Wrigley and Berryessa creek culverts where construction is anticipated to take two seasons, flow will be transitioned between the new culvert and existing culvert for the interim winter. The diversion placement will proceed the following year only through the active work areas or where necessary to avoid sediment impacts to the flow.
Conditions

Work periods
1. Work within the stream zone shall be confined to the period of April 15 to October 31. Revegetation work is not confined to this time period but must be completed in the same calendar year as the construction. Because there is an established swallow colony on the Abel Street Bridge, nesting removal will occur prior to February 15th of each calendar year where Abel Street Bridge or Berryessa culvert work is planned. Nesting prevention activities will then continue during the migratory bird nesting season (between February 15th and August 31st) of those years, or until work completion makes these efforts unnecessary.

Work extensions
2. If the Applicant needs more time to complete the authorized activity, the work period may be extended on a day-to-day basis by Dave Johnston at DJohnston@dfg.ca.gov or the Yountville office at (707) 944-5520.

DFG inspections
3. Department personnel or its agents may inspect the work site at any time.

Work according to plans
4. All work shall be done according to the plans prepared by the Applicant and their agents and submitted to the Department with the project Notification, with the exception of specific measures proposed in the Project Conditions that follow.

Other agency regulations
5. In the event that the project scope, nature, or environmental impact is altered by the imposition of subsequent permit conditions by any local, state or federal regulatory authority, the Applicant shall notify the Department of any imposed project modifications that interfere with compliance to Department conditions.

Agreement onsite
6. A copy of this agreement must be provided to the contractor and all subcontractors who work within the stream zone and must be in their possession at the work site.

Submittals
7. Any information the Applicant must submit to the Department under this Agreement shall be mailed to the following address:

Department of Fish and Game
Bay Delta Region
P.O. Box 47
Yountville, California 94599
Attn: 1600 Program (2008-0266/Santa Clara County/Alameda County)
Compliance liability

8. The Applicant is liable for compliance with the terms of this Agreement, including violations committed by the contractors and/or subcontractors. The Department reserves the right to suspend construction activity described in this Agreement if the Department determines any of the following has occurred:
   A). Failure to comply with any of the conditions of this Agreement.
   B). Information provided in support of the Agreement is determined by the Department to be inaccurate.
   C). Information becomes available to the Department that was not known when preparing the original conditions of this Agreement (including, but not limited to, the occurrence of State or federally listed species in the area or risk to resources not previously observed).
   D). The project as described in the Agreement has changed or conditions affecting fish and wildlife resources change.

Any violation of the terms of this Agreement may result in the project being stopped, a citation being issued, or charges being filed with the District Attorney. Contractors and subcontractors may also be liable for violating the conditions of this agreement.

Property access

9. To the extent that any provisions of this Agreement provide for activities that require the Applicant to traverse another owner’s property, such provisions are agreed to with the understanding that the Applicant possesses the legal right to so traverse. In the absence of such right, any such provision is void.

Work during dry weather only

10. The work period for completing the work within the stream zone, shall be restricted to periods of low or no stream flow and dry weather. No construction shall be conducted during rain events. Weekly forecasts shall be kept on record and submitted to the Department upon request.

Environmental training

11. The Applicant’s Biological Monitor shall provide a Supervisors Environmental Training prior to the start of construction to ensure protection of all stream zones and resources. The Supervisors Environmental Training will be developed to include environmental protection subject matter approved by the Department. A list of all personnel who received environmental training shall be made available upon request by the Department or its agents.

Biologist spot-check construction activities

12. The Applicant shall have a Biological Monitor spot-check construction activities to ensure no impacts occur to the adjacent (species) habitat. If a threatened or endangered listed species is encountered, all work shall stop immediately and Dave Johnston, CDFG...
Environmental Scientist, (831) 466-0234, shall be contacted by the Applicant or authorized agent for direction.

**Storage of equipment and materials**

13. Building materials and/or construction equipment shall not be stockpiled or stored where they could be washed into the water or where they will cover aquatic or riparian vegetation.

**Contamination Prevention**

14. Debris, soil, silt, bark, rubbish, creosote-treated wood, raw cement/concrete or washings thereof, asphalt, paint or other coating material, oil or other petroleum products, or any other substances which could be hazardous to aquatic life, resulting from project related activities, shall be prevented from contaminating the soil and/or entering the waters of the State. Any of these materials, placed within or where they may enter a stream or lake, by Applicant or any party working under contract, or with the permission of the Applicant, shall be removed immediately.

**Litter**

15. The contractor shall not dump any litter or construction debris within the riparian/stream zone. All such debris and waste shall be picked up daily and properly disposed of at an appropriate site.

**Congdon’s tarplant**

16. Santa Clara VTA will design all facilities to avoid temporary and permanent impacts to Congdon’s tarplant habitat to the maximum extent practicable. If avoidance is not feasible, a focused botanical survey will be conducted by a qualified plant biologist to ascertain the presence or absence of the species in the Freight Railroad/Lower Berryessa Creek Project area during the initial blooming period (August) that occurs prior to the construction. The survey shall include a determination by the botanist as to whether conditions in potential tarplant habitat are such that the plant could germinate. If habitat is present and if conditions in the habitat are such that germination is unlikely, VTA will consult with CDFG on what measures to take before proceeding. During construction, areas where Congdon’s tarplant are known to occur adjacent to the construction zone, will be marked as Environmentally Sensitive Areas with no access permitted during construction.

17. VTA will mitigate the permanent loss of Congdon’s tarplants at a minimum ratio of 1:1 (replacement plants: lost plant), or at a ratio determined in consultation with resource agency personnel. Santa Clara VTA will also mitigate in accordance with the California Native Plant Society’s recommended measures for mitigating impacts to Congdon’s tarplant, as follows:

a. To replace plants, seeds from plants within the area of impact will be collected and stored during the month of August or September prior to construction beginning. As the blooming period lasts until November, the affect of pruning
flowering heads to obtain seed will allow the plant to repeat flower and seed production before the end of the blooming period and thereby lessen or avoid a temporal loss before Project work and reseeding occurs.
b. The seed will be applied as a component of the revegetation mix within the impact area for any temporary impacts and within a proposed replacement area for permanent impacts. The replacement area will be determined in consultation with resource agency personnel. Revegetation should be accomplished by hydro seeding prior to the start of the rainy season in disturbed areas.
c. The success of the reseeding will be monitored during the blooming period in the year following revegetation. The criteria for reseeding success will be that the species is found to be occurring throughout the reseeded areas. If unsuccessful, seed will be collected and sown in the unsuccessful areas prior to the rainy season that year after consulting with CDFG to determine the reason(s) for the failure.
d. The success of the reseeding will also be monitored during the blooming period in the second year following revegetation. If seeding of previously unoccupied habitat is successful, mitigation will be deemed successful and no additional monitoring will be required. If unsuccessful, the area will be deemed as unsuitable habitat due to an apparent subtle difference in soil characteristics. In this case, revegetation of additional areas, determined in consultation with resource agency personnel, and an additional two years of monitoring will be conducted.
e. If mowing of any revegetation area is proposed, it should be conducted prior to May 15 in order to allow sufficient time for flowering and seed set. Mowing should not be lower than six inches in order to minimize removal of tarplant foliage prior to flowering.

Wetlands
18. VTA will mitigate the permanent loss of wetlands at a minimum of 2:1 ratio (replacement area: loss area) and the temporary loss of wetlands at a minimum 1:1 ratio, or at higher ratios determined in consultation with resource agency personnel. Permanent and temporary impacts to waters of the United States will be mitigated at minimum 1:1 ratio, or at a higher ratio determined in consultation with resource agency personnel. Mitigation will be on-site and in-kind to the maximum extent practicable. If mitigation cannot be accommodated entirely on-site, VTA will investigate other mitigation opportunities in coordination with resource agency personnel within the impacted watershed, if possible. A qualified biologist, in coordination with resource agency personnel, will prepare a mitigation and monitoring plan for impacts to wetlands and waters of the United States and waters of the State due to the Freight Railroad Relocation/Lower Berryessa Creek Project. Alternatively, VTA may purchase credits in an approved mitigation bank.

Nesting birds
19. If work takes place from February 1 to August 31, a qualified biologist shall conduct a survey for nesting birds within five days prior to construction, and ensure no nesting
birds shall be impacted by the project. These surveys shall include the areas within 300 feet of the edge of the proposed impact area(s). If active nests are found, consultation with CDFG shall occur prior to commencing any activity within the 300 foot area.

Special Status Species
20. The project location identified in this Streambed Alteration Notification has been identified as an area that is potentially utilized by the following special status species for breeding: bank swallow, Cooper’s hawk, loggerhead shrike, Northern harrier, Western burrowing owl, white-tailed kite, yellow-breasted chat, and yellow warbler. Special status species that may use the project area for migration, dispersal, or foraging include: Ferruginous hawk, little willow flycatcher, long-billed curlew, sharp-shinned hawk, and short-eared owl. The Applicant is required to comply with all applicable state and federal laws, including the California and Federal Endangered Species Acts. This agreement does not authorize the take of any state or federally listed species. Liability for any take or incidental take of such listed species remains the responsibility of the Applicant for the duration of the project. Any unauthorized take of such listed species may result in prosecution and nullification of the agreement.

Notification to the California Natural Diversity Database
21. If any special status species are observed in project surveys or during project implementation, the Applicant shall submit California Natural Diversity Data Base (CNDDB) forms to the CNDDB within five working days of the sightings, and provide DFG Region 3 with copies of the CNDDB forms and survey maps.

Erosion controls
22. Erosion control measures shall be utilized throughout all phases of operation where sediment runoff from exposed slopes threatens to enter waters of the State. At no time shall silt laden runoff be allowed to enter the stream or directed to where it may enter the stream.

Invasive plants
23. Landscaping and erosion control for the project will not use any species listed on the State’s noxious weed list. In addition, to help reduce the spread of invasive species of plants, all construction equipment will be delivered to the site only following removal of dirt and seed from other job sites. All equipment will be cleaned before leaving the job site to also help reduce the spread of invasive plants.

Concrete curing
24. Poured concrete shall be excluded from the wetted channel for a period of 30 days after it is poured. During that time the poured concrete shall be kept moist and runoff from the concrete shall not be allowed to enter a live stream. Commercial sealants may be applied to the poured concrete surface where difficulty in excluding water flow for a long period may occur. If sealant is used, water shall be excluded from the site until the sealant is dry.

Amendments and Extensions
The Applicant shall notify the Department before any modifications are made in the project plans submitted to the Department. Project modifications may require an amendment or a new notification.

This Agreement is transferable to subsequent owners of the project property by requesting an amendment.

To extend the Agreement beyond the expiration date, a written request or completed “Request to Extend Lake or Streambed Alteration Agreement” form, with an appropriate fee, must be submitted to the Department (1600 Program, Post Office Box 47, Yountville, California 94599) for consideration at least 30 days before the Agreement expiration date. An extension requires a fee. The Fee Schedule and Extension form can be obtained at www.dfg.ca.gov/1600 or by phone at (707) 944-5520. Extensions of the original Agreement are issued at the discretion of the Department.

To modify the project, a written request for an amendment or a completed “Request to Amend Lake or Streambed Alteration Agreement” form, with an appropriate fee, must be submitted to the Department (1600 Program, Post Office Box 47, Yountville, California 94599). An amendment requires a fee. The Fee Schedule and Amendment form can be obtained at www.dfg.ca.gov/1600 or by phone at (707) 944-5520. Amendments to the original Agreement are issued at the discretion of the Department.

Please note that you may not proceed with construction until your proposed project has undergone CEQA review and the Department signs the Agreement.

I, the undersigned, state that the above is the final description of the project I am submitting to the Department for CEQA review, leading to an Agreement, and agree to implement the conditions above required by the Department as part of that project. I will not proceed with this project until the Department signs the Agreement. I also understand that the CEQA review may result in the addition of measures to the project to avoid, minimize, or compensate for significant environmental impacts:

Applicant’s name (print): ANN CALIFAN

Applicant’s signature: _____________________________

Signed the ____ day of ___ , 2008

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Date prepared: 5/4/08

Applicant’s initials
Notification Number 1600-2008-0266-3
June 26, 2009
Site No. 02-43-C0589 (bkw)
CIWQS Place No. 737976
ACOE File No. 26644S

Sent via electronic mail: No hardcopy to follow

Santa Clara Valley Transportation Authority
3331 North First Street, Building B
San Jose, CA 95134-1927

Attn: Ann Calnan, Senior Environmental Planner, Freight Railroad Relocation Extension Project (Ann.Calnan@vta.org)

Subject: Water Quality Certification for the Valley Transportation Authority’s Freight Railroad Relocation / Lower Berryessa Creek Project in the City of Fremont in Alameda County and the City of Milpitas in Santa Clara County

Dear Ms. Calnan:

San Francisco Bay Regional Water Quality Control Board (Water Board) staff have reviewed the application materials submitted by the Santa Clara Valley Transportation Authority (VTA or the Applicant) for the project to relocate freight railroad lines and make improvements to drainage systems that are necessary to clear the VTA’s right-of-way (ROW) of all freight railroad facilities in the City of Fremont in Alameda County and the City of Milpitas in Santa Clara County (Project). On November 18, 2008, you were informed by the U.S. Army Corps of Engineers (ACOE) that the Project was authorized under a Clean Water Act (CWA) Section 404 Nationwide Permit Number 14 (Linear Transportation Projects) (ACOE File No. 26644S). You have applied to the Water Board for Clean Water Act Section 401 water quality certification that the Project will not violate State water quality standards.

Project Description: The following description is summarized from application materials received on August 20, 2008, and supplemental information received on March 10, 2009, April 16, 2009, and June 2, 2009. The purpose of the Project is to clear the VTA’s ROW corridor of all Union Pacific Railroad (UPRR) facilities by relocating UPRR tracks. The Project will also minimize flooding risks along the ROW corridor by reconfiguring channels and culverts that carry the tracks over several creeks. Project work will occur in the cities of Fremont and Milpitas in Alameda and Santa Clara Counties.

The Freight Railroad Relocation/Lower Berryessa Creek Project begins at an unnamed creek in Fremont, Alameda County, referred to as Line B by the Alameda County Flood Control and Water Conservation District (ACFCD), and ends at Wrigley Creek in Milpitas, Santa Clara County. Culvert modifications will be performed within the VTA and UPRR ROW from Station 482+00 to station 353+00 to accommodate the relocated tracks and meet flood control
requirements. At the five creek crossings, new culverts will be constructed in two phases. At the start of Phase I, any flow present during Project construction will be diverted through the work area so that no equipment is operated in a live, flowing stream channel. Flow diversions will be constructed using non-sediment generating materials, such as sandbags and/or K-rails wrapped in visqueen. Where feasible, diverted creek flow will be routed into plastic pipes and allowed to gravity flow around the construction area. If gravity flow is not feasible, pumps will be used to direct flow into diversion pipes. Diversion pipes and pumps will be sized based on predicted stream flow at the time of construction.

At the downstream end of each flow diversion, the diversion will either: 1) continue to the end of the temporary disturbance area in a pipe; or 2) diverted flow will be discharged to a temporary channel formed by a row of non-sediment generating flow barriers (e.g., k-rails) that will leave one half of the channel dewatered. At the completion of construction, diversion pipes will be removed from the stream area and sediment control best management practices will be placed on areas of bare soil. Where culvert construction is phased, the new culvert may be utilized in lieu of a diversion pipe, after the concrete has completely cured. Following flow diversion, pre-cast sections of the new culvert will be installed under the UPRR tracks, while freight trains are diverted or taken out of service. In Phase II, cast-in-place sections of the culverts will be installed.

The Project crosses the following waters of the State, including several channels that are maintained by the ACFCD, in addition to jurisdictional wetlands identified within the corridor:

- Unnamed Creek (ACFCD Line B), in Alameda County
- Scott Creek (ACFCD Line A), in Alameda County
- Calera Creek, in Santa Clara County
- Berryessa Creek, in Santa Clara County
- Wrigley Creek, in Santa Clara County

Project location maps are included in Attachment A to this certification.

**Unnamed Creek (ACFCD Line B).** Line B creek is located about 2,000 feet north of Kato Road in the City of Fremont, along the VTA ROW. Existing flow conveyance at Line B is provided by a 6-foot diameter, reinforced concrete pipe under the railroad corridor. This culvert will be reconstructed as a 12-foot wide by 6-foot deep concrete box culvert. In addition, two non-functioning outfall stub-outs will be installed in the new culvert sidewalls to accommodate future drainage improvements in the ROW. The stub outs are being installed as part of the Project to avoid disturbing the creek a second time when the drainage improvements are constructed. About 11,500 square feet of ruderal vegetation adjacent to the creek will be temporarily disturbed and about 193 cubic yards of adjacent soils will be removed to accommodate the new culvert. No existing segments of earthen channel will be permanently impacted at Line B. Permanent impacts at Line B will consist of 14 linear feet of box culvert that will be converted to an open channel that is concrete-lined on three sides. About 237 linear feet of concrete-lined channel will be temporarily impacted by the Project at Line B.
Scott Creek (ACFCD Line A). Scott Creek is located about 300 feet south of Kato Road in the City of Fremont along the VTA ROW. Existing flow conveyance for Scott Creek within the railroad corridor is provided by an open, U-wall concrete channel with bridges. This conveyance will be reconstructed as a 10-foot wide by 8-foot deep concrete box culvert. In addition, up to four non-functioning outfall stub-outs will be installed to accommodate future drainage improvements. An 8-foot wide wooden bridge spans the existing concrete channel, and will remain in place until the box culvert makes the bridge unnecessary. Due to weight limitations of the wooden bridge, a temporary railroad car bridge, or equivalent bridge, will be installed and supported over the existing bridge to provide access across the channel for construction equipment. Temporary bridge features include: an approximately 46-foot by 10-foot railroad flat car or equivalent; measures installed along the sides of the bridge to prevent sediment and other materials from entering the existing channel; earthen support mounds; and earthen approach ramps. About 9,385 square feet of ruderal vegetation adjacent to the creek will be temporarily disturbed and about 261 cubic yards of adjacent soils will be removed to accommodate the new culvert. No existing segments of earthen channel will be permanently impacted at Line A. Permanent impacts at Line A will consist of 128 linear feet of channel that are currently concrete-lined on three sides that will be placed in the new box culvert. About 182 linear feet of concrete-lined channel will be temporarily impacted by the Project at Line A.

Calera Creek. Calera Creek is located about 3,700 feet south of Dixon Landing Road in the City of Milpitas, along the VTA ROW. The existing 11-foot wide by 6-foot deep double box culvert is adequate to pass flood flows through the railroad ROW. However, the single existing drainage outfall is not sufficient to drain the railroad corridor improvements. Therefore, the existing outfall will be replaced with two new outfalls. In addition, four non-functioning outfall stub-outs will be installed to accommodate future drainage improvements. About 11,444 square feet of ruderal vegetation adjacent to the creek will be temporarily disturbed and about 367 cubic yards of soils will be removed to construct the new outfalls. No existing earthen channel area will be filled with concrete. Therefore, this component of the Project will have no permanent impacts to waters of the State. About 45 linear feet of concrete-lined channel will be temporarily impacted by the Project.

Berryessa Creek. Berryessa Creek is located about 50 feet south of the Abel Street overpass in the City of Milpitas, along the VTA ROW. The existing freight railroad tracks cross over the concrete-lined channel of Berryessa Creek on a bridge. The creek configuration at this location includes two 90-degree turns, one upstream of the railroad corridor and one downstream of the corridor. Work at Berryessa Creek includes replacing the existing bridge structure and a portion of the concrete-lined channel with a five-cell box culvert, and widening and realigning the creek to remove the 90 degree angles in anticipation of the future flood control project by the Santa Clara Valley Water District (SCVWD). Drainage improvements at Berryessa Creek are a joint VTA and SCVWD project. While the entire five-cell culvert will be constructed as part of the freight track relocation project, only three of the five cells will be operational until the future flood control project is completed. Temporary construction disturbance for access will occur within 20 feet of the permanent improvements. Existing SCVWD maintenance access roads will be used for construction access. Construction of the new culverts will place 160 linear feet of the realigned creek channel into concrete culverts. At the upstream entrance to the culvert, concrete bank armoring will be removed from about 160 linear feet of the left (west) bank of the
The channel will be reconfigured from the existing trapezoidal channel to a channel with a narrow, low flow channel for sediment transport and a wider high flow channel. About 275 linear feet of the left bank of the new low flow channel will be armored with rock riprap. Above the low flow channel, the banks of the high flow channel will consist of vegetated earth. Since the high flow channel is less sinuous than the low flow channel, the new earthen bank on the left bank will be about 182 feet long. About 180 linear feet of earthen channel and 707 linear feet of concrete channel will be temporarily impacted by the Project.

At the downstream outlet of the Project reach, the concrete-lined left (west) bank of the creek will be left unchanged by the Project, while the right bank will be moved eastward to accommodate the widened channel cross section. The existing concrete lining of the right bank will be replaced with a new concrete wing wall at the outlet of the new culverts. At the downstream exit of the new culverts, earthen channel will be created in the widened portion of the streambed, resulting in about 7,700 square feet (0.177 acres) of new earthen channel. The existing concrete lining of the channel bed downstream of the original 2-cell culvert will remain in place.

Wetland species at Berryessa Creek include cattail species (*Typha latifolia, Typha angustifolia*), California bulrush (*Scirpus californicus*) and water-primrose (*Ludwigia peploides*). Other common sub-dominant species include knotweed (*Polygonum persicaria, Polygonum hydropiper*), and watercress (*Rorippa nasturtium-acquaticum*). About 97,800 square feet of ruderal vegetation adjacent to the creek will be temporarily disturbed. Approximately 25,000 cubic yards of soil will be excavated to widen the channel of Berryessa Creek to accommodate the five-cell culvert. Excavated soils will be placed outside the stream zone, within the railroad ROW.

Construction of the new culverts may extend over two summer work seasons. Proposed phasing of the work is described below, but actual implementation may vary somewhat.

**Berryessa Phase I Construction:** Phase I construction will consist of constructing the downstream half of the five-cell box culvert. Sheet piles will be vibrated into place between the upstream and downstream halves of the culvert to stabilize the soils and UPRR freight railroad operations will be routed around the work area using the existing track within the VTA ROW. Live flow in the creek will be diverted, as described above, and soil will be excavated for the construction of the downstream half of the five-cell box culvert. Excavated soils will be placed as fill in low-lying areas within the ROW to form an embankment for the future UPRR tracks. Concrete for the bottom/invert of the box culvert will then be poured, followed by the walls and top slab of the box. After the box is constructed, the downstream transition from the old smaller creek channel to the new widened channel will be excavated. About 12,000 cubic yards of soil will be excavated to transition out of the new culvert and past the Abel Street Bridge columns (see discussion below regarding the Abel Street Bridge work). Some of this excavated material will be used to backfill the new box culvert, and the rest will be used as fill within the ROW. Finally, a temporary concrete retaining wall will be constructed along the northernmost cell (Cell 1) of the new culverts so that, in the event of a flood, waters are directed safely downstream into the channel. This wall will remain in place until the ultimate SCVWD flood control project is built. The two southernmost cells (Cell 4 and Cell 5) will then be blocked to prevent unauthorized entry, using temporary bulkhead materials that would not add sediment to the creek.
(e.g., stop logs, sheet piles, crane pads, trench plates, etc). After the Phase I culvert work is completed, UPRR railroad operations will be routed on top of the new box culvert, and the downstream portion of the creek diversion may be removed.

**Berryessa Phase II Construction:** The upstream half of the five-cell box culvert will be constructed in Phase II, using the same construction methods described above for Phase I. The creek diversion installed in Phase I will remain in place throughout the Phase II work area. Construction will begin with the removal of the sheet piles placed in Phase I, followed by excavation to build the upstream half of the five-cell box culvert. Concrete for the bottom/invert of the box culvert will then be poured, followed by the walls and top slab of the box. About 13,000 cubic yards of soil will excavated to create the upstream transition from the old smaller creek channel to the new widened channel. Some of this excavated material will be used to backfill the upstream portion of the box culvert, and the rest will be used as fill within the ROW. In addition, 160 linear feet of the existing concrete channel lining of the left (west) bank, upstream of the box culvert, will be removed throughout the upstream transition section. Along this same reach of the left bank, the left bank of the low flow channel, which will follow the same alignment as the current channel alignment, will be armored with rock riprap for a length of about 274 linear feet. Due to the more sinuous path of the low flow channel, the 182 linear feet of earth-lined upper channel and the 274 linear feet of riprapped low flow channel will start at the same point upstream of the new culverts and both end at the inlet to the culverts (See the figure labeled Berryessa Creek Crossing in Attachment A to this certification). Finally, a temporary concrete retaining wall will be constructed along the center cell (Cell 3) so that, in the event of a flood, waters are directed safely into the new culvert. This wall will remain in place until the SCVWD flood control project is built. The two southernmost cells (Cell 4 and Cell 5) will then be blocked to prevent unauthorized entry. The approach to the entrance of these cells may be backfilled using native soils or the entrance may be blocked as described above using temporary bulkhead materials that would not add sediment to the creek. Once all culvert work is completed, remaining stream diversion materials will be removed, working from downstream to upstream to minimize the discharge of sediment to the channel.

**Additional Work at Berryessa Creek**

**Abel Street Bridge Footing Skirt Construction.** Widening Berryessa Creek will expose the footings of several columns of the Abel Street Bridge at the downstream terminus of the new culverts. The existing footings coincide with a section of the modified channel that will have an earthen bottom. These existing footings will be protected in place in the new creek channel by constructing new concrete skirts around the existing footings. These concrete skirts will have no impacts to current waters of the State.

**Abel Street Bridge Seismic Retrofit.** The existing Abel Street bridge columns will be retrofitted to meet current seismic standards. Seismic retrofit may occur separately or concurrently with planned culvert construction, since the columns are outside of the existing stream zone. This work will include excavation to expose the existing column foundations and the installation of steel casings around the outside of the existing columns. Once the steel casings are welded in place, they will be painted and the soils adjacent to the columns will be backfilled. This work will have no impacts to current waters of the State.
Wrigley Creek. Wrigley Creek is located about 1,200 feet north of the East Calaveras Boulevard overpass in the City of Milpitas, along the VTA ROW. The existing flow conveyance at Wrigley Creek is provided by three corrugated metal pipes and a concrete-lined channel with a double box culvert. The conveyance beneath the ROW will be reconstructed as two 12-foot wide by 6-foot deep box culvert cells. Two outfalls will be installed to drain the currently non-functioning ditches to the creek channel. In addition, one non-functioning outfall stub-out will be installed to accommodate future drainage improvements. Construction of this culvert will take two summer seasons. Wetland species at this location include cattail species (*Typha latifolia*, *Typha angustifolia*), California bulrush (*Scirpus californicus*) and water-primrose (*Ludwigia peploides*). Other common sub-dominant species include knotweed (*Polygonum persicaria*, *Polygonum hydropiper*), and watercress (*Rorippa nasturtium-acquaticum*). About 12,012 square feet of ruderal vegetation adjacent to the creek will be temporarily disturbed. The existing concrete channel will be removed, and replaced with a new, extended culvert that will require the placement of approximately 23 cubic yards of concrete fill within the existing earthen channel adjacent to the existing crossing. The new concrete will permanently impact 350 square feet (0.008 acres) of aquatic habitat, extending over 16 linear feet of earthen channel that will be placed into a new concrete culvert. In addition, 78 linear feet of existing concrete-lined channel will be enclosed in the new concrete box culvert. About 25 linear feet of earthen channel and 45 linear feet of concrete channel will be temporarily impacted by the Project.

Wrigley Creek Drainage Ditches. Drainage Improvements at Wrigley Creek will also affect 0.48 acres of poorly functioning drainage ditches (identified as DW-3, DW-4a, and DW-4b and illustrated in the last two figures in Attachment A), north of the Wrigley Creek crossing of the ROW that, under current conditions, support wetland hydrology and habitat characteristics. After the drainage improvements are constructed, these ditches will drain as originally intended and will not support wetland hydrology. Wetland species in these ditches include cattail, tall flatsedge (*Cyperus eragrostis*), curly dock (*Rumex crispus*), bristly ox-tongue (*Picris echioides*), and barnyard grass (*Echinochloa crus-galli*).

Impacts: The Project will impact the following waters of the State: ACFCD Line B, Scott Creek (ACFCD Line A), Calera Creek, Berryessa Creek, Wrigley Creek, and wetlands tributary to Wrigley Creek. Projects impacts are summarized in Table 1:
Table 1: Summary of Project Impacts to Waters of the State and Proposed Mitigation

<table>
<thead>
<tr>
<th>IMPACTS</th>
<th>Permanent conversion of earthen channel to concrete channel</th>
<th>Permanent conversion of earthen channel to concrete culvert</th>
<th>Permanent conversion of concrete channel to enclosed culvert</th>
<th>Temporary Impacts to Earthen Channel</th>
<th>Temporary Impacts to Concrete Channel</th>
<th>Impacts to Wetlands</th>
</tr>
</thead>
<tbody>
<tr>
<td>Line B</td>
<td>n/a</td>
<td>n/a</td>
<td>-14 lf</td>
<td>n/a</td>
<td>237 lf</td>
<td></td>
</tr>
<tr>
<td>Scott Creek (Line A)</td>
<td>n/a</td>
<td>n/a</td>
<td>128 lf</td>
<td>n/a</td>
<td>182 lf</td>
<td></td>
</tr>
<tr>
<td>Calera Creek</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>45 lf</td>
<td></td>
</tr>
<tr>
<td>Berryessa Creek</td>
<td>n/a</td>
<td>n/a</td>
<td>160 lf</td>
<td>180 lf</td>
<td>707 lf</td>
<td></td>
</tr>
<tr>
<td>Wrigley Creek</td>
<td>n/a</td>
<td>16 lf</td>
<td>78 lf</td>
<td>25 lf</td>
<td>45 lf</td>
<td></td>
</tr>
<tr>
<td>Wrigley Creek</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tributaries</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.48 acre</td>
</tr>
<tr>
<td>TOTAL</td>
<td>-80 lf</td>
<td>16 lf</td>
<td>352 lf</td>
<td>205 lf</td>
<td>1216 lf</td>
<td>0.48 acre</td>
</tr>
</tbody>
</table>

| MITIGATION                                   | Length of Enhanced Floodplain Plantings 4                 | Increase in Low Flow Channel Length                        | Implementatio n Date                                       | Created Wetlands                     |
| Wrigley Creek Mitigation Project             |                                                           |                                                            |                                                            |                                     |                                     |
|                                              | 1642 lf                                                   | 339 lf                                                     | Summer 2010                                                | 1.0 acre                            |
| TOTAL                                        | 1642 lf                                                   | 339 lf                                                     |                                                            |                                      | 1.0 acre                            |

1 About 7,700 square feet (0.177 acres) of new earthen channel bed to be created by widening of the channel at the downstream end of the new Berryessa Culverts.
2 Length of net new earth bank from removal of concrete banks, averaged over both banks.
3 Temporary impacts to concrete channels are less significant than temporary impacts to earthen channels because minimal habitat is present in these channels and they will be returned to pre-project conditions at the completion of construction.
4 Overlaps length of increased low flow meander length and also includes surface area of mitigation for wetland impacts.
The Project will permanently impact about 0.48 acres of wetlands, by eliminating wetland hydrology, about 16 linear feet of earthen channel, by placing the channel in a concrete culvert, and about 352 linear feet of concrete-lined channel, by placing the channel into a concrete culvert. The Project will temporarily impact 205 linear feet of earthen channels and 1,216 linear feet of concrete channels. Temporary impacts to concrete channels will be less than significant, because the channel will be concrete-lined before and after disturbance. Since the new culverts will be wider than the existing culverts and concrete-lined channels, there will be a net increase in the surface area of the channels.

**Mitigation:** Mitigation for the Project’s temporary impacts to waters of the State will be provided by restoring impact sites to their pre-impact topography and vegetation. Disturbed areas of ruderal vegetation will be seeded with an erosion control seed mix to stabilize disturbed soils and reduce the input of sediment to the channels.

Mitigation for the Project’s permanent impacts to waters of the State will be provided at the Wrigley Creek Improvement Project site, in the City of Milpitas (See figures in Attachment B to this certification). The Wrigley Creek Improvement Project includes the relocation and revegetation of a portion of Wrigley Creek and revegetation of adjacent uplands, located upstream of Calaveras Boulevard in the City of Milpitas. Project components include the relocation of 1,642 linear feet of Wrigley Creek, the creation of an additional 339 linear feet of Wrigley Creek due to the incorporation of meanders in the design of the relocated creek, and the creation of 1.0 acres (43,560 square feet) of seasonal floodplain wetlands. Streamside, floodplain, and upland areas will be vegetated with native riparian woody and herbaceous vegetation, including Congdon’s tarplant (see Table 2). Construction of the Wrigley Creek Improvement Project will commence in the summer 2010.

Wrigley Creek collects stormwater runoff from a 0.60 square mile urbanized watershed and merges with Ford Creek to form Wrigley-Ford Creek on the west side of the railroad corridor. Wrigley-Ford Creek is pumped into Berryessa Creek, which eventually discharges to the South San Francisco Bay. Wrigley Creek consists of 0.98 miles of earthen channel with more than 2 miles of underground pipe and storm drains contributing flow to the earthen channel. Although many of the creeks and floodways in the Santa Clara Valley are owned and maintained by the Santa Clara Valley Water District (SCVWD), Wrigley Creek and its entire storm drain network are maintained via easement by the City of Milpitas. The creek area is owned by adjacent private property owners. Uplands at the site are owned by VTA and private property owners.

Historically, the mitigation project area was a saltgrass-alkali meadow, characterized by native grasses and wetland plants adapted to alkaline soils. Native soils are characterized as sandy/silty clays to a depth of 2 or 3 feet below ground surface, transitioning to black, moderately plastic clays at depths greater than 3 feet below ground surface. Clay-rich soils can withstand flow energies associated with flood conditions, provided that the channel geometries afford optimal energy expenditure conditions in the presence of generally high suspended sediment loads, and low bedload loads. The lower-most segment of the mitigation project reach provides the lateral room necessary to accommodate a stable channel environment within a clay dominated system. Field evidence and soil surveys suggest these soils have high salinity or alkalinity. Potentially toxic levels of boron in the local soils limit the variety of species included in the planting palette.
and may limit the success of woody vegetation. However, existing vegetation at the site includes willow species and coyote brush.

Vegetation found in and along the streamside in the Wrigley Creek Improvement Project area is dominated by native cattails (*Typha latifolia* and/or *T. angustifolia*) and California bulrush (*Scirpus californicus*). Echinochloa (*Echinochloa crus-galli*), a non-native annual grass, is an occasional dominant species. Associated species include the native floating water-primrose (*Ludwigia peploides*) and watercress (*Nasturtium officinale*). Sparse woody vegetation is found at the top of banks adjacent to the creek, including native coyote brush (*Baccharis pilularis*) and willow species (*Salix* spp.) and non-native fan palms (*Washingtonia* spp.) and pepper trees (*Schinus* spp.).

The floodplain and uplands areas are primarily dominated by non-native annual grasses and an assortment of non-native forbs. These species include wild oats (*Avena barbata*), Italian ryegrass (*Lolium multiflorum*), bristly ox-tongue (*Picris echioides*), poison hemlock (*Conium maculatum*), yellow star-thistle (*Centaurea solstitialis*), and wild radish (*Raphinus sativus*). The upland area also includes Congdon’s tarplant, a native species listed as fairly endangered by the California Native Plant Society.

Detailed 65% revegetation plans, including grading and planting plans, will be developed by August 30, 2009. The conceptual planting plan is shown in Figures 3A and 3B in Attachment B to this certification. The proposed planting palette for the Wrigley Creek Improvement Project is presented in Table 2. The goal in the planting zones is to eradicate existing non-native species and revegetate with a native planting palette. Willows and California rose will be planted on the low edge of the streamside planting zone, in close proximity to the Wrigley Creek low-flow channel. Coast live oak, coyote brush, blue elderberry, and California rose will be planted in the upland planting zone. Soils will be ripped and disked to loosen compacted soils and promote the establishment of plantings.

Congdon’s tarplant seed collected from the site will be added as a component of the native seed mix in the Congdon’s tarplant planting area only (See Figure 3A in Attachment B to this certification). No woody vegetation will be planted in this area. (Note: Mitigation for impacts to Congdon’s tarplant is required by Condition 17 of the CDFG Streambed Alteration Agreement for the Project, Notification No. 1600-2008-0266-3. Because impacts to Congdon’s tarplant are not subject to the jurisdiction of the Water Board, the conditions of certification do not include success criteria for Congdon’s tarplant mitigation. However, the performance criterion for eradication of non-native plants may be relaxed in the Congdon’s tarplant planting area if CDFG concurs that the presence of non-native plants is conducive to the success of Congdon’s tarplant plantings.)
## Table 2. Planting Palette for the Wrigley Creek Improvement Project

<table>
<thead>
<tr>
<th>Planting Area and Species Name</th>
<th>Common Name</th>
<th>Rate (lbs./acre)</th>
<th>Plant Spacing</th>
<th>Propagule</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Streamside Planting Zone</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Salix lasiolepis</em></td>
<td>Arroyo willow</td>
<td>-</td>
<td>12’</td>
<td>cutting or container</td>
</tr>
<tr>
<td><em>Salix laevigata</em></td>
<td>Red willow</td>
<td>-</td>
<td>12’</td>
<td>cutting or container</td>
</tr>
<tr>
<td><em>Rosa californica</em></td>
<td>California rose</td>
<td>-</td>
<td>3’</td>
<td>1 gallon</td>
</tr>
<tr>
<td><em>Native Seed Mix</em></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Achillea millefolium</em></td>
<td>yarrow</td>
<td>0.75</td>
<td>-</td>
<td>live seed</td>
</tr>
<tr>
<td><em>Artemisia douglasiana</em></td>
<td>mugwort</td>
<td>2.0</td>
<td>-</td>
<td>live seed</td>
</tr>
<tr>
<td><em>Bromus carinatus</em></td>
<td>California brome</td>
<td>8.0</td>
<td>-</td>
<td>live seed</td>
</tr>
<tr>
<td><em>Eschscholzia californica</em></td>
<td>California poppy</td>
<td>2.0</td>
<td>-</td>
<td>live seed</td>
</tr>
<tr>
<td><em>Hordeum brachyantherum</em></td>
<td>meadow barley</td>
<td>8.0</td>
<td>-</td>
<td>live seed</td>
</tr>
<tr>
<td><em>Leymus triticoides</em></td>
<td>creeping wild rye</td>
<td>4.0</td>
<td>-</td>
<td>live seed</td>
</tr>
<tr>
<td><em>Lupinus bicolor</em></td>
<td>annual lupine</td>
<td>4.0</td>
<td>-</td>
<td>live seed</td>
</tr>
<tr>
<td><em>Nassella pulchra</em></td>
<td>purple needle-grass</td>
<td>8.0</td>
<td>-</td>
<td>live seed</td>
</tr>
<tr>
<td><em>Scrophularia californica</em></td>
<td>beeplant</td>
<td>2.0</td>
<td>-</td>
<td>live seed</td>
</tr>
<tr>
<td><em>Sisyrinchium bellum</em></td>
<td>California blue-eyed grass</td>
<td>2.0</td>
<td>-</td>
<td>live seed</td>
</tr>
<tr>
<td><em>Trifolium obtusiflorum</em></td>
<td>creek clover</td>
<td>6.0</td>
<td>-</td>
<td>live seed</td>
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<tr>
<td><em>Vulpia microstachys</em></td>
<td>three-weeks fescue</td>
<td>6.0</td>
<td>-</td>
<td>live seed</td>
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<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>52.75</strong></td>
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<td><strong>Floodplain Planting Zone</strong></td>
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<tr>
<td><em>Native Seed Mix (see above)</em></td>
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<td></td>
</tr>
<tr>
<td>Planting Area and Species Name</td>
<td>Common Name</td>
<td>Rate (lbs./acre)</td>
<td>Plant Spacing</td>
<td>Propagule</td>
</tr>
<tr>
<td>--------------------------------</td>
<td>---------------------</td>
<td>-----------------</td>
<td>---------------</td>
<td>-----------</td>
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<tr>
<td><strong>Upland Planting Zone</strong></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Baccharis pilularis</td>
<td>Coyote brush</td>
<td></td>
<td>12’</td>
<td>treepot 4</td>
</tr>
<tr>
<td>Rosa californica</td>
<td>California rose</td>
<td></td>
<td>3’</td>
<td>1 gallon</td>
</tr>
<tr>
<td>Sambucus mexicana</td>
<td>Blue elderberry</td>
<td></td>
<td>12’</td>
<td>treepot 4</td>
</tr>
<tr>
<td>Quercus agrifolia</td>
<td>Coast live oak</td>
<td></td>
<td>20’</td>
<td>1 gallon</td>
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<tr>
<td>Native Seed Mix (see above)</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td><strong>Congdon’s Tarplant Planting Area</strong></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Native Seed Mix (see above)</td>
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<td></td>
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</tr>
<tr>
<td>Centromadia parryi ssp. congodonii</td>
<td>Congdon’s Tarplant</td>
<td>1.5</td>
<td>live seed 1</td>
<td></td>
</tr>
</tbody>
</table>

**Notes:**
1 Seed collected from the Wrigley Creek Improvement Project Site

Conceptual mitigation site designs and monitoring and maintenance procedures are presented in the *Wrigley Creek Improvement Project Mitigation and Monitoring Plan*, (MMP) (ICF Jones & Stokes, March 9, 2009, revised June 2, 2009). Since the MMP is a conceptual mitigation plan, the Applicant shall prepare a Final Mitigation and Monitoring Plan (Final MMP) for the Wrigley Creek Improvement Project (See Condition [12]). The Final MMP shall include the final plant palette, a planting plan for the mitigation site, and designs (e.g., grading plans, cross sections, and longitudinal profiles) for any modified topography (e.g., channel meander creation or floodplain wetland excavation).

**Monitoring, Maintenance, and Performance Standards:** The mitigation site will be monitored and maintained for a minimum of five years, until final success criteria are attained. Monitoring will include vegetation monitoring and hydrologic/geomorphic monitoring. Each type of monitoring is summarized below and described in Chapter 5 of the MMP. Color photographic documentation of the mitigation site will be used to track the progress of the mitigation site throughout the monitoring period (See Condition 18). During the initial five-year monitoring period, any replacement plantings for woody vegetation and Congdon’s tarplant that are required, based on failure to meet success criteria in Table 3, will be replaced by the Applicant. Replacement plants shall be installed according to the original plant installation methods. If, in any year during the initial five-year monitoring period, more than 15 percent of woody plants require replacement, the Applicant will extend the monitoring period to ensure that new plantings are subject to five years of monitoring. If the mitigation site fails to meet the year five success criteria, the Applicant will consult with the Water Board to evaluate the need for additional intervention or alternate site management.
Vegetative Monitoring: Table 3 summarizes the criteria that will be used to evaluate the survival of woody plantings, native grasses, and Congdon’s tarplant. Plantings will be considered successful if they meet or exceed these criteria. Overall success of the site may require accepting a mosaic balance of native and non-native vegetation, because Congdon’s tarplant commonly thrives in non-native grasslands. Therefore, transects that show lower native grass survival than required will be accepted if Congdon’s tarplant is present and meets the success criteria in Condition 17 of the CDFG Streambed Alteration Agreement for the Project (Notification No. 1600-2008-0266-3).

Woody plant survival will be tallied for every individual of all species and for the site as a whole and measured based on percent survival of all species groups combined. Survival of grassland species will be based on the percent cover of native grasses (see Table 2 for the native seed mix), as surveyed along five transects, to be randomly selected in year one of the monitoring period. At least two of these transects shall cross the Congdon’s tarplant planting area and at least one transect will cross Wrigley Creek. Transects will be a minimum of 100 feet in length.

Survival and reproduction of Congdon’s tarplant will be based on the numbers of individuals present during a November 2008 survey of the Wrigley Creek Improvement Project area (minimum 100 individuals) and will be considered successful if the population reaches 100 individuals in any two given years over the five-year monitoring period. The Congdon’s tarplant success criteria allows for the inherent variability in the population and site conditions from year to year.1

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1 A single population of 12 flowering individuals of Congdon’s tarplant was observed in the Wrigley Creek Improvement Project area in 2004. In 2005, more than 100 flowering Congdon’s tarplants were observed in the same location. In 2006, fewer living Congdon’s tarplants were observed, and dead individuals were noted in the same area as seen in 2005.
### Table 3. Survival Criteria for Plantings at the Wrigley Creek Improvement Project Site

<table>
<thead>
<tr>
<th>Year</th>
<th>Woody plantings</th>
<th>Native Grasses</th>
<th>Congdon’s tarplant</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Type of Criterion Used</td>
<td>Success Criterion</td>
<td>Type of Criterion Used</td>
</tr>
<tr>
<td>1</td>
<td>Percent of plants surviving</td>
<td>90% survival in Good or Fair condition</td>
<td>Percent Cover</td>
</tr>
<tr>
<td>2</td>
<td>80% survival in Good or Fair condition</td>
<td>60% Cover of species in native seed mix</td>
<td>Minimum 100 individuals in two of five years</td>
</tr>
<tr>
<td>3</td>
<td>75% survival in Good or Fair condition</td>
<td>50% Cover of species in native seed mix</td>
<td>Minimum 100 individuals in two of five years</td>
</tr>
<tr>
<td>4</td>
<td>70% survival in Good or Fair condition</td>
<td>40% Cover of species in native seed mix</td>
<td>Minimum 100 individuals in two of five years</td>
</tr>
<tr>
<td>5</td>
<td>70% survival in Good or Fair condition</td>
<td>35% Cover of species in native seed mix</td>
<td>Minimum 100 individuals in two of five years</td>
</tr>
</tbody>
</table>

Woody plant survivorship will be monitored for a minimum of five years after plant installation or until the success criterion has been met for two consecutive years following cessation of irrigation. The condition (vigor) of surviving plantings will be evaluated on the basis of internode length, leaf color, and leaf size, as well as the presence of browse damage, disease symptoms, and insect infestation, using the condition qualifiers defined in Chapter 5 of the MMP.

If success criteria are not attained in any year, dead plantings shall be replaced in the fall or winter following the monitoring year in which they were identified. The Applicant is responsible for identifying the appropriate species, locations, and numbers of replacement plantings, based on the restoration ecologist’s assessment of the reasons for mortality and evaluation of the site's overall development. Replacement plantings shall be installed following the procedures described for installation of plant material in Chapter 4 of the MMP. Dead plants may be replaced with a different species if the Applicant can demonstrate, on the basis of
monitoring results, that the originally specified plants are not suitable to the mitigation site. Proposed changes in the planting palette shall be submitted to the resource agencies for approval.

Hydrologic/Geomorphic Monitoring. Hydrologic function and geomorphic evolution in the modified channel of Wrigley Creek will be monitored several times each year: during at least one major storm event early in the season, during at least one major mid-season event, and following each year’s storm season. Channel monitoring will assess whether the restored channel is evolving toward a mature steady state. This assessment will depend on regular qualitative observation and evaluation of changes in channel geomorphology and function. Although some minor adjustments in channel form are to be expected following channel relocation, any of the following indicators may indicate channel instability: marked headcutting; marked channel incision or downcutting; substantial bank erosion or lateral channel migration; or excessive sedimentation or aggradation. If any of these conditions are observed, site progress will be considered unsatisfactory and additional restoration or channel stabilization measures may be needed. The success criteria for the restored channel will be five sequential years with no, or minimal, adverse channel indicators (headcutting, incision, excessive lateral migration, etc.).

If channel stability is not making satisfactory progress, additional restoration or channel stabilization measures may be needed to prevent adverse water quality impacts and degradation or loss of riparian and upland habitat. If needed, these measures would be selected, designed, and implemented by qualified creek restoration professionals, upon receiving approval from the Water Board and CDFG staff.

Hydrologic monitoring of created floodplain wetlands during the five-year monitoring period will include regular visits during and immediately following the storm season. Following the first storm of the season\(^2\), wetlands will be monitored bi-weekly until the end of the storm season, or until four sequential visits detect no ponded water or saturated soils. Hydrologic monitoring will document the extent, depth, and duration of ponding, using a staff gage installed in the deepest portion of each floodplain wetland. If ponding is absent, soil saturation will be assessed. Hydrologic function of created floodplain wetlands will be considered satisfactory if ponding occurs and persists following rainfall events, such that site soils remain saturated, consistent with the intent of the design for each site (Note: At a minimum soils should be inundated and/or saturated for at least 12.5% of the growing season), and vegetation success criteria are met. If the wetlands fail to meet these criteria, the Applicant will work with the Water Board staff to identify and implement remedial actions.

If the mitigation site fails to meet any of the success criteria, the Applicant is responsible for identifying appropriate remedial action, including but not limited to, additional bank stabilization measures, changes in floodplain wetland elevations, increased efforts to control invasive nonnative vegetation, increased controls on trespass or herbivory, or remedial seeding or planting activities.

\(^2\) The first storm of the season is defined as the 1st event after October 1 to deliver 0.25 inch of precipitation within a 24-hour period.
Site Maintenance During Monitoring Period: The Applicant is responsible for maintaining the planting area for the life of the monitoring effort to ensure that the plantings become established and the natural vegetative character of the creek corridor is maintained. Maintenance activities, at a minimum, will include: plant watering, for at least the first three years following planting; inspecting and repairing exclusion fencing; inspecting and repairing or replacing herbivore controls; weed control; removal of debris; and removal of non-native invasive species, consisting of the removal of plants included in the California Invasive Plant Council’s Invasive Plant Inventory (Cal-IPC 2006, 2007), if they affect the viability of the plantings. Additional detail on each type of activity is provided in Chapter 4 of the MMP.

Monitoring Reports: The Applicant will submit annual monitoring reports to document monitoring activities; monitoring results; overall site progress; and any remedial actions taken during the prior year (See Conditions 22 and 23). If the success criteria have not been met by year five of the initial monitoring period, the Applicant will provide the Water Board with a report analyzing the causes of failure, and will propose remedial actions for Water Board staff and CDFG staff approval. If monitoring results indicate that restoration is unlikely to be successful, contingency procedures, such as the use of alternate sites, may be considered. The Applicant is responsible for funding any mitigation contingency actions.

CEQA Compliance: Pursuant to the California Environmental Quality Act (CEQA) the Project was evaluated in the Mitigated Negative Declaration (MND) for the Freight Railroad Relocation and Lower Berryessa Creek Project (State Clearinghouse No. 2007082107). A Notice of Determination (NOD) for the MND was filed by the Applicant with the Alameda County Clerk on November 11, 2007. Subsequent to the filing of the NOD, the Applicant completed three addenda to the MND, which were signed on March 11, 2008, August 4, 2008, and February 2, 2009. These addenda covered minor changes to the Project designs that resulted in minimal changes to the Project’s impacts to the environment.

Wetland Tracker System: It has been determined through regional, state, and national studies that tracking of mitigation/restoration projects must be improved to better assess the performance of these projects, following monitoring periods that last several years. To effectively carry out the State’s No Net Loss Policy for wetlands, the State needs to closely track both wetland losses and mitigation/restoration project success. Therefore, we require that the Applicant use a standard form to provide Project information related to impacts and mitigation/restoration measures. An electronic copy of the form and instructions can be downloaded at: http://www.waterboards.ca.gov/sanfranciscobay/certs.shtml. Project information concerning impacts and mitigation/restoration will be made available at the web link: http://www.wetlandtracker.org.

Certification and General Waste Discharge Requirements: I hereby issue an order certifying that any discharge from the referenced Project will comply with the applicable provisions of sections 301 (Effluent Limitations), 302 (Water Quality Related Effluent Limitations), 303 (Water Quality Standards and Implementation Plans), 306 (National Standards of Performance), and 307 (Toxic and Pretreatment Effluent Standards) of the Clean Water Act, and with other
applicable requirements of State law. This discharge is also regulated under State Water Resources Control Board Order No. 2003-0017-DWQ, "General Waste Discharge Requirements for Dredge and Fill Discharges That Have Received State Water Quality Certification" which requires compliance with all conditions of this Water Quality Certification. The following conditions are associated with this certification:

1. No debris, rubbish, creosote-treated wood, soil, silt, sand, cement, concrete, or washings thereof, or other construction related materials or wastes, oil or petroleum products or other organic or earthen material shall be allowed to enter into, or be placed where it may be washed by rainfall or runoff into waters of the State. Any of these materials placed within or where they may enter waters of the State by the Applicant or any party working under contract, or with the permission of the Applicant shall be removed immediately. When construction is completed, any excess material shall be removed from the work area and any areas adjacent to the work area where such material may be washed into waters of the State. During construction, the contractor shall not dump any litter or construction debris within the riparian/stream zone. All such debris and waste shall be picked up daily and properly disposed of at an appropriate site;

2. The Applicant shall adhere to the terms of the Clean Water Act Section 401 Nationwide Permit Number 14 (Linear Transportation Projects) issued by the Army Corps of Engineers (ACOE File No. 26644S);

3. The Applicant shall adhere to the conditions imposed by the California Department of Fish and Game (CDFG) in the Streambed and Lake Alteration Agreement (Notification No. 1600-2008-0148-3) issued for the Project;

4. Construction in stream channels is restricted to the April 15th and October 31st dry season, or to the end of any extension granted by the CDFG;

5. No equipment shall be operated in areas of flowing or standing water; no fueling, cleaning, or maintenance of vehicles or equipment shall take place within any areas where an accidental discharge to waters of the State may occur; and construction materials and heavy equipment must be stored outside of the creek channel;

6. Prior to the start of the rainy season, the Applicant shall ensure that disturbed areas of waters of the State and disturbed areas that drain to waters of the State are protected with correctly installed erosion control measures (e.g., jute, straw, coconut fiber erosion control fabric, coir logs, etc.), and/or revegetated with propagules (seeds, cuttings, divisions) of locally collected native plants;

7. Where areas of bare soil are exposed during the rainy season, silt control measures shall be used where silt and/or earthen fill threaten to enter waters of the State. Silt control structures shall be monitored for effectiveness and shall be repaired or replaced as needed. Build up of soil behind silt fences shall be removed promptly and any breaches or undermined areas repaired at once;

8. Groundwater or accumulated stormwater removed during dewatering of excavations shall not be discharged directly to waters of the State without meeting the following
conditions: any groundwater or accumulated stormwater released to waters of the State shall not exceed 110 percent of the ambient turbidity of the receiving water, if receiving water turbidity is greater than 50 NTU, or 5 NTU above ambient turbidity if the ambient turbidity is less than or equal to 50 NTU; any groundwater discharged to waters of the State shall have a pH in the range of 6.5 to 8.5;

9. If groundwater or accumulated stormwater is discharged to waters of the State from the Project site, the Applicant shall monitor the turbidity of the discharged water once every 15 minutes during the startup phase of any turbidity reduction equipment and at two-hour intervals after the discharged turbidity achieves steady state levels that are in compliance with Condition 8. The pH of discharged water shall be measured daily. All required monitoring measurements shall be recorded, along with a daily estimate of the flow rate and volume of water discharged, and submitted to the Water Board within 7 days of the end of any month in which groundwater or accumulated stormwater is discharged from the Project site to waters of the State;

10. The Project shall be constructed in conformance with the Project description in the revised application materials received by the Water Board on April 16, 2009, and in conformance with the figures included in Attachments A and B to this certification. Any changes to these plans that may impact waters of the State must be submitted to the Water Board’s Executive Officer for review and approval before they are implemented;

11. Within 30 days of completing construction of the culverts associated with freight railroad relocation, the Applicant shall provide the Executive Officer of the Water Board with written notification that construction in waters of the State, other than construction of the Wrigley Creek Improvement Project, is complete;

12. The Applicant shall implement all mitigation measures presented in the Mitigation and Monitoring Plan, Wrigley Creek Improvement Project (MMP) (ICF Jones & Stokes, May 2009, revised June 2, 2009). The mitigation wetlands shall be designed and constructed as described in Chapter 4 of the MMP, and monitored and maintained as described in Chapters 4 and 5 of the MMP, until the performance standards and success criteria in Table 4 of the MMP (Table 3 of this certification) and Chapter 5 of the MMP are attained. The Wrigley Creek Improvement Project shall be constructed in the summer of 2010. Any changes to the MMP, including changes to the site layout, planting palette, performance standards, success criteria, or timelines, must be submitted to the Water Board’s Executive Officer for review and approval before they are implemented;

13. Since the MMP is a conceptual mitigation plan, the Applicant shall prepare a final Mitigation and Monitoring Plan (Final MMP), which shall be submitted to the Executive Officer of the Water Board for review and approval no later than August 30, 2009. The Final MMP shall include the final plant palette selected for the Wrigley Creek site, a planting plan (map) for the mitigation site, and designs (e.g., 65% or 100% designs) for the realigned creek channel and floodplain wetlands. The Final MMP shall also incorporate any modifications to the MMP that are necessitated by conditions of the ACOE, CDFG, and/or Water Board permits for the Project. The Final MMP shall have a
maintenance schedule that includes the frequency of maintenance activities and types of activities (e.g., watering, irrigation system inspection, inspection of deer browse prevention measures, invasive plant control, replanting of dead plants, removal of trash, maintenance of fences, etc.). The Final MMP shall have the same success criteria as the MMP, and shall include contingency measures to address failure to attain performance standards or success criteria, including replanting and re-initiation of the monitoring period. The Final MMP shall also describe how long-term success of the mitigation site, including long term protection of the mitigation site, will be assured. Any changes to the Final MMP, including changes to the site layout, planting palette, performance standards, success criteria, or timelines, must be submitted to the Water Board’s Executive Officer for review and approval before they are implemented;

14. Material for seeds and cuttings used at the mitigation site shall be collected from sources within the Santa Clara Valley, as close as possible to the mitigation site. A qualified restoration biologist or professional horticulturalist shall oversee the collecting and planting;

15. The Applicant shall be responsible for funding and implementing all components of the Final MMP, including contracting directly for services necessary for earthwork, site preparation, revegetation, monitoring, adaptive management, and contingency measures;

16. Following the completion of construction and planting of the Wrigley Creek Improvement Project, as-built drawings shall be prepared to document the post-restoration condition of the site. As-built drawings will depict the boundaries between existing habitat areas and the realigned area, and will include documentation at scale sufficiently detailed to show the planting zones and typical spacing. A copy of the as-built drawings shall be provided to the Water Board within 90 days of the construction and planting of the mitigation site;

17. Within 30 days following the first monitoring visit, as-built drawings shall be updated to create a set of as-maintained drawings. The as-maintained drawings shall be updated each time management actions that change the condition of the mitigation site are performed, including installation of replacement plantings. As-maintained drawing shall be submitted to the Water Board with the annual reports (See Conditions 22 and 23);

18. Photo-monitoring shall be used to track the mitigation site’s progress toward achieving success criteria, as well as problems such as vandalism or accelerated channel erosion. The Applicant shall establish permanent photo-documentation stations when the as-built plans are developed. Photo-documentation stations shall be located parallel to the stream channel, no more than 100 feet apart on each side of the stream and represent the full range of channel restoration and riparian/grassland plantings. The Applicant shall prepare site maps with the photo-documentation points clearly marked (these maps may be the as-built plans required in Condition 16). Following construction of the mitigation site, the Applicant shall photographically document the immediate post-construction condition of the site and submit the post-construction photographs and the map with the
photo-documentation points to the Water Board, along with the as-built drawings of the mitigation sites (See Condition 16);

19. The mitigation site shall be monitored for a minimum period of five years, until the success criteria in Table 3 of this certification and the Success Criteria in Chapter 5 of the MMP are achieved. If success criteria are not achieved in any year of the initial five-year monitoring period, the Applicant is responsible for implementing remedial actions and extending the monitoring period to track the success of the remedial measures, until the success criteria in Table 3 of this certification and the Success Criteria in Chapter 5 of the MMP are attained;

20. Woody plant survival will be tallied for every individual of all species and for the site as a whole and measured based on percent survival of all species groups combined. Survival of grassland will be based on the percent cover of native grasses as surveyed along five transects randomly selected in year one, a minimum two of which will cross the Congdon’s tarplant planting area and one of which will cross Wrigley Creek. Transects will be a minimum of 100 feet in length. If the success criteria are not achieved, dead plants must be replaced in kind, unless the Applicant demonstrates, on the basis of monitoring, that the mitigation site is not conducive to survival of a plant species, in which case alternate native plant species may be used, with the concurrence of the Executive Officer of the Water Board. Replacement plantings must be made within one year of survival rates failing to meet the success criteria. Replacement plants shall be monitored for a minimum of five years from the date of replanting. Replacement plants are subject to the same performance standards and success criteria as the initial plantings. Only woody plantings that have survived for at least two years without irrigation shall be used in assessing attainment of final success criteria. If native grassland species are not attaining the success criteria in Table 3, the overall success of grassland species site may be adjusted to accept a balance of native and non native vegetation grasses, if Congdon’s tarplant is performing well among non-native grasses. Transects that show lower native grass coverage than required in Table 3 will be accepted, with the concurrence of CDFG, if Congdon’s tarplant is present and meets the success criteria established in Condition 17 of the CDFG Streambed Alteration Agreement (Notification Number 1600-2008-0266-3);

21. The Applicant shall monitor the hydrology and geomorphic stability of the created channels and wetlands at the Wrigley Creek Improvement Project for a minimum of 5 years. Corrective actions shall be implemented whenever: channel banks show signs of failing; incision, headcutting, or downcutting; substantial bank erosion or lateral channel migration is observed; or sediment accumulating in the channels or wetlands reaches a level that would compromise the site’s ability to meet design criteria (e.g., duration of inundation/saturation in wetlands, hydraulic capacity of the channel, etc.). Created wetlands shall be monitored to assess whether or not they receive sufficient moisture to exhibit wetland vegetation, soils, and hydrology,
22. The Applicant shall submit annual maintenance and monitoring reports to document the prior year’s maintenance activities, monitoring activities, monitoring results, overall site progress, and any remedial actions (e.g., re-planting or bank stabilization) taken during the year. Monitoring reports are due by January 31 following each year of the initial five-year monitoring period and shall include all of information specified in the following condition. At the end of year five, a comprehensive final report shall be prepared that includes summaries of the monitoring data, representative photos, and maps. Annual reports and the comprehensive final report shall include photographs from the photo-documentation points specified in Condition 18. The final report shall document if the site meets the success criteria in Table 3 of this certification and Chapter 5 of the MMP, and shall include a delineation of jurisdictional wetlands created at the Wrigley Creek Improvement Project. If the criteria are not met, the report shall identify remedial measures to be undertaken, including extension of the monitoring period until the criteria are met. Success of the mitigation program shall be determined by Water Board staff;

23. Each monitoring report shall include the following specific components: a cover page with the Water Board Site Number; a discussion of the previous year’s management/maintenance efforts; a summary of the monitoring methods and discussion of any modifications made to the monitoring methods since the previous year; a summary and analysis of the monitoring results, including an evaluation of conditions relative to success criteria for vegetation, hydrology, and geomorphic stability; a discussion of remedial measures identified and implemented during the previous year and a summary of the effectiveness of the remedial measures that were implemented; management recommendations, including discussion of any concerns or areas of inadequate performance and a proposal for remedial actions; and a list of any references or sources consulted;

24. If the success criteria in Table 3 of this certification and Chapter 5 of the MMP have not been met by year five following restoration, the Applicant shall provide the Water Board with a report analyzing the causes of failure, and shall propose remedial actions for Water Board approval. If monitoring results indicate that restoration is unlikely to be successful, contingency procedures, such as the use of alternate mitigation sites, may be considered. The Applicant is responsible for funding any mitigation contingency actions;

25. Control of invasive vegetation to attain the success criteria in Table 3 of this certification shall be undertaken in a manner that minimizes disturbance to desirable native species and to bird and wildlife use at the mitigation site. Any revegetation plantings damaged during weed control maintenance activities shall be replaced in kind, within one year at a 1:1 ratio. Replacement plantings shall be propagated from locally native stock from the Santa Clara Valley, and shall be as similar in size to the damaged plant as possible. Control of invasive plants and any replacement plantings shall be described in the annual reports (Condition 22);

26. The Applicant shall water riparian plantings for a minimum of three years. The Applicant shall continue to water all plantings during all projected dry water years.
(defined as 75 percent of average annual rainfall) that occur during the first five years after mitigation planting. Any replacement plants (see Condition 20) shall be watered for a minimum of three years;

27. If fee title to the Wrigley Creek Improvement Project site is transferred to another party at some time in the future, the Applicant shall submit a copy of the Conservation Easement for the Wrigley Creek Improvement Project site to the Executive Officer of the Water Board for review and approval, before the transfer of fee title is completed. The language of the Conservation Easement shall follow the CDFG template for conservation easements and shall identify the third-party non-profit entity, qualified to hold a conservation easement under California Civil Code section 815.3, to whom the Easement would be granted. Transfer of fee title shall not be completed until the Executive Officer of the Water Board has approved the language of the Conservation Easement and the holder of the easement. The easement shall include provisions and responsibilities of the Applicant and the designated land trust organization, including any future transfers of the easement or fee interest that may be anticipated, and shall grant access rights to Water Board staff. The easement shall also specify the purposes for which it is established and shall include a list of prohibited activities that are inconsistent with the maintenance of the mitigation site;

28. If the long-term management of the Wrigley Creek Improvement Project site is transferred to a local agency or private entity, the Applicant shall provide the Executive Officer of the Water Board with the terms of the financial endowment fund to be established for monitoring and perpetual management and maintenance of the habitat features at the Wrigley Creek Restoration Site. The principal in the endowment shall generate sufficient revenue to cover the costs described in the Final MMP for the Wrigley Creek Restoration Site, including funding for any extended monitoring and maintenance activities, as well as contingency measures, that the Water Board’s Executive Officer may determine are necessary to meet the mitigation requirements for the Project. Transfer of long-term management of the Wrigley Creek Improvement Project site shall not occur until the Executive Officer of the Water Board has approved the amount and terms of the financial endowment for the mitigation activities;

29. The Applicant is required to use the standard form to provide project information for impact sites within 14 days from the date of this water quality certification. In addition, the Applicant is required to use the standard form to provide project information for the Wrigley Creek Improvement Project site within 14 days from the date of planting the mitigation site. An electronic copy of the form can be downloaded at: http://www.waterboards.ca.gov/sanfranciscobay/certs.htm. The completed electronic form shall be returned to wetlandtracker@waterboards.ca.gov or a hard copy to both: 1) San Francisco Bay Regional Water Quality Control Board (see letterhead for address), to the attention of Wetland Tracker, and, 2) San Francisco Estuary Institute, 7770 Pardee Lane, Oakland, CA 94621-1424, to the attention of Mike May;
30. This certification action is subject to modification or revocation upon administrative or judicial review, including review and amendment pursuant to CWC Section 13330 and 23 CCR Section 3867;

31. This certification action does not apply to any discharge from any activity involving a hydroelectric facility requiring a Federal Energy Regulatory Commission (FERC) license or an amendment to a FERC license, unless the pertinent certification application was filed pursuant to California Code of Regulations (CCR) Title 23, Subsection 3855(b) and that application specifically identified that a FERC license or amendment to a FERC license for a hydroelectric facility was being sought; and

32. Certification is conditioned upon total payment of the full fee required in State Regulations (23 CCR Section 3833). The total fee for this Project is $3897. The Water Board received payment in full on August 20, 2008.

Please be aware that any violation of water quality certification conditions is a violation of State law and subject to administrative civil liability pursuant to California Water Code (CWC) Section 13350. Failure to respond, inadequate response, late response, or failure to meet any condition of a certification or waiver may subject the Applicant to civil liability imposed by the Water Board to a maximum of $5,000 per day of violation or $10 for each gallon of waste discharged in violation of this action. Any requirement for a report made as a condition to this action (i.e., conditions 9, 11, 12, 13, 16, 17, 18, 22, 23, 24, 27, 28, and 29) is a formal requirement pursuant to CWC Section 13267, and failure or refusal to provide, or falsification of such requirement report is subject to civil liability as described in CWC Section 13268. Should new information come to our attention that indicates a water quality problem with this Project, the Water Board may issue Waste Discharge Requirements pursuant to 23 CCR Section 3857.

Please contact Brian Wines of my staff at (510) 622-5680 or bwines@waterboards.ca.gov if you have any questions. All future correspondence regarding this Project should reference the Site Number indicated at the top of this letter.

Sincerely,

Bruce H. Wolfe
Executive Director

Attachments:
A: Freight Railroad Relocation / Berryessa Creek Project, Location Maps
B: Freight Railroad Relocation / Berryessa Creek Project, Wrigley Creek Improvement Project
Cc via email:  Bill Orme, SWRCB (Stateboard401@waterboards.ca.gov)
David Smith, EPA, WTR-8 (R9-WTR8-Mailbox@epa.gov)
USACE, San Francisco District, Attn: Regulatory Branch, Robert Smith, 1455 Market Street, San Francisco, CA 94103–1398 (robert.f.smith@usace.army.mil)
(File No. 26644S)
USACE, Jane Hicks (jane.m.hicks@usace.army.mil)
USACE, Cameron Johnson (Cameron.L.Johnson@usace.army.mil)
USACE, Laurie Monarres (laurie.a.monarres@usace.army.mil)
CDFG, David Johnston, (djohnston@dfg.ca.gov) (Notification No. 1600-2008-0266-3)
CDFG, Notification No. 1600-2008-0266-3 (sbrunson@dfg.ca.gov)
VTA, Tom Fitzwater (Tom.Fitzwater@vta.org)
HNTB; Rachel Keish (RKeish@HNTB.com)
Jones & Stokes ICF; Matthew Jones (mjones@jsanet.com)
APPENDIX D – SOILS AND SEDIMENT TESTING SUMMARY
LEGEND:

SB1  Soil boring location
SB7  Sediment sampling location

FIGURE 2
Site Plan

Soil and Sediment Testing Plan
Wigley Creek Improvement Project
Milsilas, California

Project No. 1193.08
### TABLE 1
Soil Sample Analytical Results

<table>
<thead>
<tr>
<th>Analyte</th>
<th>Units</th>
<th>Soil Sample (ID and Depths Composed)</th>
<th>Stockpile Sample</th>
<th>Regulatory Standards</th>
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<tr>
<td></td>
<td></td>
<td>Comp-1 SB1-1,5,10</td>
<td>Comp-2 SB2-1,5,10</td>
<td>Comp-3 SB3-1,5,10</td>
</tr>
<tr>
<td>TPH as Gasoline</td>
<td>mg/kg</td>
<td>&lt; 0.1</td>
<td>&lt; 0.1</td>
<td>&lt; 0.1</td>
</tr>
<tr>
<td>TPH as Diesel</td>
<td>mg/kg</td>
<td>&lt; 2</td>
<td>&lt; 2</td>
<td>&lt; 2</td>
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<tr>
<td>TPH as Oil</td>
<td>mg/kg</td>
<td>&lt; 4</td>
<td>&lt; 4</td>
<td>&lt; 4</td>
</tr>
<tr>
<td><strong>Volatile Organic Compounds</strong></td>
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<td>&lt; 1</td>
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### TABLE 1
Soil Sample Analytical Results

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<th>Analyte</th>
<th>Units</th>
<th>Soil Sample (ID and Depths Composited)</th>
<th>Stockpile Sample</th>
<th>Regulatory Standards</th>
<th>Selective VTA SV</th>
<th>RWQCB ESL</th>
<th>TTLC</th>
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<td></td>
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<td>Comp-2 1,5,10</td>
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<td>Comp-11 1,2,3</td>
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<td>SB2- 1,5,10</td>
<td>SB3- 1,5,10</td>
<td>SB4- 1,5,10</td>
<td>SB5- 1,5,10</td>
<td>SP- 1,2,3</td>
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<td>ND</td>
<td>ND</td>
<td>ND</td>
<td>ND</td>
<td>ND</td>
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<td>SVOCs</td>
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<td>ND</td>
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<td>ND</td>
<td>ND</td>
<td>ND</td>
<td>ND</td>
<td>ND</td>
<td>ND</td>
</tr>
</tbody>
</table>

NOTES
- mg/kg: milligrams per kilogram (parts per million)
- µg/kg: Micrograms per kilogram (parts per billion)
- TPH: Total Petroleum Hydrocarbons
- SVOC: Semi-Volatile Organic Compound
- PCB: Polychlorinated Byphenyl
- \:< Not detected at or above the indicated laboratory method reporting limit
- ND: Not detected above the laboratory method reporting limit; limits vary by compound
- \:\: Not tested
- --: Not established
- na: Not applicable
- a: Site-specific risk assessment for residential exposure scenario value used
- VTA SV: Valley Transportation Agency Screening Value for unrestricted off-site reuse
- ESL: Tier 1 - Environmental Screening Level for shallow soil = <10 feet deep in residential land use (RWQCB, 2008 Table A-1)
- Construction Worker - soil screening level for direct exposure of construction/trench worker (RWQCB, 2008 Table K-3)
- TTLC: Total Threshold Limit Concentration for defining a waste as a hazardous waste
## TABLE 2
### Sediment Sample Analytical Results

<table>
<thead>
<tr>
<th>Analyte</th>
<th>Units</th>
<th>Comp-6</th>
<th>Comp-7</th>
<th>Comp-8</th>
<th>Comp-9</th>
<th>Comp-10</th>
<th>VTA</th>
<th>RWQCB ESL</th>
<th>TTLC</th>
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<tr>
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<td>&lt; 0.1</td>
<td>&lt; 0.1</td>
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<td>83</td>
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<td>6.89*</td>
<td>&lt; 2</td>
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<tr>
<td>Benzene</td>
<td>µg/kg</td>
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<td>&lt; 10</td>
<td>&lt; 10</td>
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<td>&lt; 10</td>
<td>&lt; 10</td>
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<td>&lt; 5</td>
<td>&lt; 5</td>
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<td>100</td>
<td>100</td>
<td>--</td>
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<td>&lt; 1</td>
<td>--</td>
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<td>32</td>
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<td>8.8</td>
<td>8</td>
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<td>55</td>
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Soil and Sediment Testing Report
Wrigley Creek Improvement Project
Milpitas, California

1 of 2

October 9, 2009
### TABLE 2
Sediment Sample Analytical Results

<table>
<thead>
<tr>
<th>Analyte</th>
<th>Units</th>
<th>Comp-6</th>
<th>Comp-7</th>
<th>Comp-8</th>
<th>Comp-9</th>
<th>Comp-10</th>
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<td></td>
<td></td>
<td></td>
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<td>&lt; 8.1</td>
<td>&lt; 8.1</td>
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<tr>
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<td>&lt; 4.8</td>
<td>6 J</td>
<td>&lt; 4.8</td>
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<td>Chlordane</td>
<td>μg/kg</td>
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<td>&lt; 100</td>
<td>&lt; 100</td>
<td>&lt; 100</td>
<td>&lt; 200</td>
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<td>&lt; 4.3</td>
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<td>ND</td>
<td>ND</td>
<td>ND</td>
<td>ND</td>
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<tr>
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<td>ND</td>
<td>ND</td>
<td>ND</td>
<td>ND</td>
<td>ND</td>
</tr>
<tr>
<td>PCBs</td>
<td>mg/kg</td>
<td>ND</td>
<td>ND</td>
<td>ND</td>
<td>ND</td>
<td>ND</td>
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<table>
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<th>Regulatory Standards</th>
<th>VTA ESV</th>
<th>RWQCB ESL</th>
<th>TTLC</th>
</tr>
</thead>
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<tr>
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<td>Tier 1</td>
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</tr>
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<td>VTA ESV</td>
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<td>1,700</td>
</tr>
<tr>
<td>RWQCB ESL</td>
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<td>1,700</td>
</tr>
<tr>
<td>TTLC</td>
<td>440</td>
<td>8,000</td>
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</tr>
</tbody>
</table>

**NOTES**

- Sample Locations: E - east, W - west, B - bottom of stream corridor
- mg/kg: milligrams per kilogram (parts per million)
- μg/kg: Micrograms per kilogram (parts per billion)
- SVOC: Semi-Volatile Organic Compound
- PCB: Polychlorinated Byphenyl
- TPH: Total Petroleum Hydrocarbons
- <: Not detected at or above the indicated laboratory method reporting limit
- ND: Not detected above the laboratory method reporting limit; limits vary by compound
- --: Not established
- na: Not applicable, as target analytes not detected above the laboratory reporting limits
- *: Sample exhibits chromatographic pattern which does not resemble laboratory standard
- J: Analyte detected >MDL but less than MRL (estimated value)
- VTA ESV: Valley Transportation Agency Ecological Screening Value
- ESL: Tier 1 - Environmental Screening Level for shallow soil = <10 feet deep in residential land use (RWQCB, 2008 Table A-1)
- Construction Worker - soil screening level for direct exposure of construction/trench worker (RWQCB, 2008 Table K-3)
- TTLC: Total Threshold Limit Concentration for designating a waste as a hazardous waste
### TABLE 3
Stockpiled Building Materials Analytical Results

<table>
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<tr>
<th>Sample</th>
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<tr>
<td>SP-8</td>
<td>ND</td>
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<tr>
<td>SP-9</td>
<td>ND</td>
<td>1.0</td>
</tr>
<tr>
<td>SP-10</td>
<td>ND</td>
<td>1.0</td>
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</tbody>
</table>

**NOTES**
- ND: Not detected above the laboratory method reporting limit
- TTLC: Total Threshold Limit Concentration for designating a waste as a hazardous waste