

## Section 3.8

# Cultural Resources

### 3.8.1 Introduction

This section provides contextual background information on cultural resources in the cultural resources study area, including the area's prehistoric, ethnographic, and historic settings; summarizes the results of previous archaeological and architectural investigations in the cultural resources study area; analyzes the Proposed Project's potential impacts on cultural resources; and identifies mitigation measures to address adverse impacts.

This section incorporates information and analysis presented in the 1992 EIR. Cultural resources in the project area are largely unchanged since preparation of the 1992 EIR. However, new information is available about cultural resources in the Proposed Project area, in particular, CA-Ala-343. In addition, as discussed in Chapter 2, the Proposed Project differs from the 1992 Adopted Project. Consequently, this section represents an update of material appearing in the 1992 EIR.

### 3.8.2 Environmental Setting

#### Methodology for Assessment of Existing Conditions

In April, May, and June 2002, Jones & Stokes conducted an investigation of historical and archaeological resources within the cultural resources study area, which comprises the Proposed Project corridor and vicinity. The investigation included a records search, Native American consultation, field surveys, and additional research. The cultural resources inventory and evaluation technical report for the Proposed Project is included as Appendix M of this SEIR (Jones & Stokes 2002). The following sections summarize the technical report's discussions of methodology.

#### Records Search

Jones & Stokes conducted a records search at the Northwest Information Center (NWIC) of the California Historical Resources Information System and additional research at local and state repositories. Jones & Stokes staff also reviewed previous results of archaeological and architectural investigations conducted within the cultural resources study area, as well as information from cultural resources investigations conducted specifically for the 1992 EIR. The following references relevant to archaeological resources were used in preparing this section.

- References addressing previous archaeological investigations of the Proposed Project alignment, particularly prehistoric site CA-Ala-343.
  - Site record of CA-Ala-343 (King 1968).
  - Report describing preliminary excavations at CA-Ala-343 (Wildensen 1968).
  - Report describing archaeological excavations at CA-Ala-343 (Holman & Associates 1996).
  - Report describing archaeological field investigation of Retention Pond site conducted for BART's Fremont Parking Lot Enlargement Project (Chavez and Holman 1974).
  - Report describing results of an archaeological subsurface testing program at CA-Ala-343 (Hall 1985).
  - Preliminary description of the cemetery complex at CA-Ala-343 (Hall et al. 1988).
  - Cultural resources technical report prepared for the 1992 EIR (Chavez et al. 1991).
  - Information provided by Andrew Galvan, a Native American representative from Archaeor, on excavation of burials from the site (Galvan pers. comm.).
- Other materials relevant to investigations in the cultural resources study area.
  - Level 3/WS07/Fremont potential unanticipated discovery and archaeological testing summary report (Chambers Group 1999).
  - Cultural resources assessment report prepared for the City of Fremont's grade separations project (William Self Associates 2002).

The following references were used in preparing the portions of this section addressing architectural resources.

- Cultural resources technical report prepared for the 1992 EIR (Chavez et al. 1991).
- The current *Fremont General Plan* (City of Fremont 1991, as amended).
- Irvington Pump Station historic resource study report (Page and Turnbull 2000).
- Osgood Road Widening Project historic property survey report (William Self Associates 2000).
- Cultural resources assessment report prepared for the City of Fremont's grade separations project (William Self Associates 2002).

## Native American Consultation

Native American consultation was conducted through letters sent to the Native American Heritage Commission (NAHC) and to individual Native American contacts. In response, the NAHC indicated that a search of their sacred lands database did not identify sacred lands listed within the Proposed Project area. Two responses were received from the individual Native Americans who were contacted, one from

Andrew Galvan and the other from Katherine Perez. Both are members of the Ohlone Tribe and are active in the Native American community and involved in Native American issues throughout the Bay Area. Native American consultation is expected to continue throughout the construction period of the Proposed Project because the Proposed Project area is sensitive and includes known cultural resources.

## Field Survey

The archaeological survey focused on previously unsurveyed portions of the cultural resources study area and zones where the ground surface was actually visible. The portion of the cultural resources study area north of Stevenson Boulevard and south of Tule Pond was one of the few areas that was not paved or developed (see the cultural resources technical report, Appendix M).

The architectural survey focused on assessing the current integrity of properties previously evaluated and on inventorying those properties that had not been previously evaluated through photography and written notes. The survey was conducted on foot.

## Existing Conditions

### Prehistoric Background

The San Francisco Bay Area has been a region of intense human occupation since far back in prehistory, long before the European explorers arrived in the eighteenth century. However, few native inhabitants remained when Kroeber (1925) and other researchers began to study the aboriginal culture of the area. In the early twentieth century, the prehistory of the region was virtually unknown aside from a small amount of ethnographic information and the discovery of a few prehistoric archaeological sites at the southern end of San Francisco Bay. Since 1972, as a result of rapid population growth and the requirements of environmental legislation, numerous prehistoric sites have been discovered in Alameda County.

Dates of occupation have been established for several sites in Alameda County, showing human occupation as far back as 4,000 years ago (Chavez et al. 1991). Information on human occupation prior to 5000 B.P. (years before present) is almost nonexistent because the natural environment is dynamic, and marked geologic and environmental changes have taken place in the past several thousand years. For example, the elevation of mean high tide in San Francisco Bay and the Pacific Ocean has risen approximately 100 meters (325 feet) since approximately 5000 B.P. due to the shallow contours of San Francisco Bay (Porcasi et al. 1999).

Results from previous archaeological investigations within the Proposed Project area and the surrounding region have shown that the San Francisco Bay Area was inhabited by mobile hunter-gatherers. Over time, the foraging strategies of local peoples became more focused on locally obtainable resources, and their lives became increasingly sedentary. Fredrickson and Bennyhoff (1969) developed a taxonomic sequence that defined the basic cultural patterns of resource use throughout the San Francisco Bay Area and interior Delta. The general patterns of resource use are the Windmill Pattern (2500 B.C.–1000 B.C.), which shifted to the Berkeley Pattern (1000 B.C.–A.D. 500), the Augustine Pattern (to about A.D. 500), and the Emergent Period (A.D. 1200–A.D. 1777) (Moratto 1984). In Alameda County, early

archaeological investigations focused on a cluster of sites near the Newark area, including CA-Ala-328, CA-Ala-13, and CA-Ala-12. These sites are now protected in Coyote Hills Regional Park (Chavez et al. 1991). They have been extensively excavated and have provided a tremendous amount of information regarding the subsistence and settlement patterns of the prehistoric inhabitants, and their culture. Artifact types, mortuary practices, and exchange routes were among the important findings from the archaeological investigations at these sites.

## Ethnographic Background

At the time of European contact, the San Francisco Bay Area was occupied by a group of Native Americans whom the ethnographers referred to as the Ohlone or Costanoans. The territory of the Ohlone people extended along the coast from the Golden Gate in the north to just beyond Carmel in the south, and as much as 60 miles inland, encompassing a lengthy coastline and several inland valleys (Levy 1978).

The Ohlone were hunter-gatherers and relied heavily on acorns and seafood. They also exploited a wide range of other foods, including various seeds (the growth of which was promoted by controlled burning), buckeye, berries, roots, land and sea mammals, waterfowl, reptiles, and insects (Bean 1994). When Pedro Fages came to Fremont in 1806, he met with Ohlone Indians at Stivers Lagoon (now Lake Elizabeth). They were hunting geese and presented Fages with several decoys, which were stuffed with straw (Bean 1994).

Seven Spanish missions were founded in Ohlone territory between 1777 and 1797. While living within the mission system, the Ohlone commingled with other groups, including the Esselen, Yokuts, Miwok, and Patwin. Mission life was devastating to the Ohlone population (Milliken 1996). It has been estimated that in 1777, when the first mission was established in Ohlone territory, the Native American population numbered around 10,000; it declined rapidly to less than 2,000 by 1832 as a result of introduced disease, harsh living conditions, and reduced birth rates.

After the secularization of the missions around 1830, Indians gradually left the missions. Many went to work as wage laborers on the ranchos, in the mines, and in domestic positions. There was a partial return to aboriginal religious practices and subsistence strategies, but the Ohlone culture was greatly diminished (Levy 1978). Today, descendants of the Ohlone still live in the Proposed Project area, and many are active in maintaining their traditions and advocating for Native American issues.

## Historic Background

### Overview

The City of Fremont, including the Proposed Project area, is located in southern Alameda County, which state officials formed in 1853 from the western and southern sections of Contra Costa County and a portion of Santa Clara County. Alvarado served as the original county seat. In 1856, the county seat moved to San Leandro before finally settling in Oakland in 1873 (Hoover et al. 1990).

As early as 1769, the Spanish explorer José Francisco Ortega led an expedition through present-day Alameda County. Seven years later, Juan Bautista de Anza and Pedro Font traveled through the region.

In the early 1800s, Spain established the Misión del Gloriosísimo Patriarca Señor San José, currently referred to as Mission San Jose, 15 miles northeast of the present-day City of San Jose. Under the direction of Father Fermín Lasuen, Mission San Jose prospered as an agricultural and educational center for the surrounding rural area (Mason 1975, William Self Associates 2000).

In 1822, Mexico gained independence from Spain and began allowing its citizens land grants throughout Alta California. During this period, Mission San Jose was secularized, and Governor Juan Alvarado distributed its property into large land tracts that included Rancho Agua Caliente (Warm Springs area), Rancho Arroyo de la Alameda (Niles/Decoto area), and Rancho Potrero de los Cerritos (Newark/Alvarado area). The land surrounding the ranchos—what is now the Mission San Jose and Irvington areas of Fremont, and the City of Newark—was commonly called Ex-Mission San Jose.

In 1848, the United States defeated Mexico in the Mexican-American War, and Mexico surrendered its Alta California land through the Treaty of Guadalupe Hidalgo. That same year, the Gold Rush brought hundreds of immigrants to the southern Alameda County region on their way to the gold fields in California. Attracted by the fertile land and mild climate of the East Bay, many chose to stay to start a new life. The area quickly became one of the leading agricultural hubs of California, with agriculture, dairy farming, and livestock grazing serving as the principal industries of the period.

After Alameda County was formed, local officials created six townships: Brooklyn, Oakland, Alameda, Eden (present-day Hayward/San Leandro area), Murray (Pleasanton/Livermore area), and Washington (present-day Fremont, Newark, and Union City). The settlements constituting Washington Township were Warm Springs, Decoto, Newark, Alvarado, Union City, Vallejo's Mills (Niles), Centerville, and Washington Corners (Irvington) (Chavez et al. 1991). In 1956, Irvington, Warm Springs, Centerville, Niles, and Mission San Jose incorporated as the City of Fremont. Within 10 years, the new city had a population of 43,700. Development and growth continued, largely encouraged by the construction of I-880, originally Highway 17. In recent years, Fremont has supported numerous industries, including wineries, nurseries, and automobile and truck manufacturing plants, as well as Silicon Valley businesses (Chavez et al. 1991).

### ***History of the Washington Corners/Irvington Area***

The Proposed Project alignment is located in an area that was developed at the crossroad of two major thoroughfares, Washington Street and San Jose Road. The settlement was originally part of the Mission San Jose landholdings and was used for cattle grazing well into the 1840s. Early settlers included John Horner, who, with his brother William Yates Horner and Elias L. Beard, formed a partnership and acquired 30,000 acres in the area to raise vegetables for the gold mining camps in the Sierra foothills. In 1851, the Horner brothers and Beard established the first steamboat ferry on San Francisco Bay to move produce to San Francisco. Three years later, the partnership constructed the first steam-driven flourmill in the United States, and, with the purchase of a combined harvester and reaper, the partnership introduced better farming methods and power-driven machinery to the state. Largely because of the financial panic of 1853, the Horners and Beard subdivided and sold off most of their agricultural landholdings in the mid-1850s. Although they no longer operated their agricultural venture, the Horner brothers continued to contribute to the area by establishing schools, such as the Washington College of Science and Industry

(located on Driscoll Road), the first institute of higher learning in the county (Chavez et al. 1991, William Self Associates 2002).

By the 1860s, Washington Corners served as the shipping and processing center for agricultural goods from the surrounding region. Crops grown in the vicinity included corn, beans, barley, potatoes, apples, plums, pears, peaches, and grain (which was replaced by grapes in the late 1800s). The construction of the San Jose branch of Western Pacific Railroad (later owned by SP and then by UP<sup>1</sup>) through town in 1869 created more trade opportunities for the settlement, and it continued to flourish. In 1884, Washington Corners changed its name to Irvington (Chavez et al. 1991, William Self Associates 2000).

During the twentieth century, Irvington continued to grow at a steady pace. In the early part of the century, the newly incorporated Western Pacific Railroad Company (not the same company as the nineteenth century Western Pacific Railroad; see following sections) laid tracks through the area, an action that furthered development. By 1950, Irvington had a population of 2,500. Irvington became a part of the City of Fremont when the city incorporated in 1956.

### ***Western Pacific Railroad***

In the 1860s and 1870s, the construction of the original Western Pacific Railroad<sup>2</sup> in southern Alameda County encouraged development of numerous settlements, including Vallejo's Mills (Niles), Newark, Decoto, and Warm Springs (originally Harrisburg Station). It also contributed to the growth of Irvington. More than 50 years later when the region was a successful agricultural hub, the newly incorporated twentieth century Western Pacific Railroad Company constructed an alignment through the Proposed Project area, which led to greater development.

The nineteenth century Western Pacific Railroad alignment operated as a branch of the Central Pacific Railroad and later as a branch of the Southern Pacific Railroad. The twentieth century Western Pacific Railroad Company operated independently for decades before it was purchased by Union Pacific Railroad in the late twentieth century (U.S. Geological Survey 1940, Cadere 1953). The Union Pacific Railroad currently operates both lines.

### **Nineteenth Century Western Pacific Railroad**

In June 1861, Collis P. Huntington, Mark Hopkins, Charles Crocker, and Leland Stanford (known as the Big Four) formed the Central Pacific Railroad and authorized the construction of a rail alignment beginning in Sacramento and traveling east over the Sierra Nevada. In 1869, the alignment met the Union Pacific alignment, which originated in the eastern U.S. and traveled west, in Promontory, Utah, creating the first transcontinental railroad in the country. That same year, the Central Pacific Railroad constructed another alignment west from Sacramento to Oakland over the Altamont Pass. This alignment was known as the

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<sup>1</sup> As stated in Chapter 1 (*Introduction*), the Proposed Project alignment is located within the UP right-of-way, which contains the former nineteenth century WP (SP) railroad tracks on the western side and the former twentieth century WP railroad tracks on the eastern side. UP currently owns both sets of tracks.

<sup>2</sup> The Western Pacific Railroad is referred to herein as the *nineteenth century Western Pacific Railroad* to avoid confusing it with the later separate and distinct Western Pacific Railroad Company, which is referred to herein as the *twentieth century Western Pacific Railroad Company*. Note that the complete names of the railroads rather than acronyms are being used in this and the next section pertaining to the railroads to provide clarity.

Western Pacific Railroad, and it operated as an independent branch of the Central Pacific Railroad. The Central Pacific Railroad constructed additional alignments of their Western Pacific line from Vallejo in the north to Oakland and toward San Jose. In 1870, the Central Pacific Railroad Company of California and the Western Pacific Railroad officially merged into one corporation under the name of the Central Pacific Railroad.

The Big Four controlled both the Southern Pacific Railroad and the Central Pacific Railroad, and eventually operated both companies as one, under the Southern Pacific Railroad name. By 1900 (after the death of the Big Four), E. H. Harriman of the Union Pacific Railroad purchased the Southern Pacific Railroad. Shortly thereafter, Harriman divested some lines and sold his Southern Pacific investments. The Southern Pacific Railroad remained in operation in California until September 12, 1996, when the Union Pacific Railroad purchased the lines, including those running through the Proposed Project area (Drury 1999).

### **Twentieth-Century Western Pacific Railroad Company**

The twentieth-century Western Pacific Railroad Company (a separate organization from the nineteenth century Western Pacific Railroad) began when the Western Pacific Railway was incorporated in 1903 in California to build a line from Salt Lake City to Sacramento by way of the Great Northern railroad line in Bieber, California. The completion of that link in 1931 made the twentieth century Western Pacific Railroad Company a major north-south carrier and added to its already established east-west service. In 1934, the twentieth century Western Pacific Railroad Company reorganized again, this time teaming with the Rio Grande and Burlington Railroads to operate the *Exposition Flyer* line between Chicago and Oakland. During the Great Depression, the twentieth century Western Pacific Railroad Company experienced a dramatic decline in freight and passenger service, which caused it to go bankrupt. An increase in wartime freight and passenger traffic throughout the system during World War II led to the twentieth century Western Pacific Railroad Company's emergence from bankruptcy in 1945. The company operated successfully for many years after inauguration of its most famous line, the *California Zephyr* in 1949. The twentieth century Western Pacific Railroad Company managed to fend off attempts at acquisition by Southern Pacific Railroad in the early 1960s, but Union Pacific Railroad successfully bought out the twentieth century Western Pacific Railroad Company in early 1980 (Drury 1999).

### ***Establishment of the Gallegos Winery***

In 1881 Juan Gallegos purchased the former Elias Beard ranch near present-day Washington Boulevard. Gallegos was born in Costa Rica and settled in the United States with his family in 1872. His wife, Donna Julia Montealegre, was the daughter of Dr. José Maria Montealegre, third president of Costa Rica.

Gallegos planted a 600-acre vineyard and constructed a large winery known as the Gallegos or Palmdale Winery on his vast Irvington property. A spur of the nearby railroad ran directly to the winery to ease distribution of wine throughout the country. The highly profitable winery operated successfully until the early 1900s when it fell victim to a bad wine economy and vine disease. The 1906 earthquake destroyed the winery complex (William Self Associates 2002).

### ***Hetch Hetchy Aqueduct***

As early as 1858, a group of investors had formed the Spring Valley Water Company to provide water for San Francisco. In a short time, the company constructed numerous pipelines and water reservoirs, such as Crystal Springs Reservoir in San Mateo County, to feed water to the city. The Spring Valley Water Company retained sole ownership of water rights in the city for more than 50 years, despite the San Francisco Water Commission's attempts to thwart the company's firm hold on the city's water supply (Page & Turnbull 2000).

In 1900, the San Francisco City Charter decreed the municipal ownership of utilities in the city. Over the next few years, city officials actively pursued water sources outside San Francisco to provide an unlimited source of water to the city. The favored choice quickly became the Tuolumne River, in what would become Yosemite National Park, because of its ability to supply water and electricity to the growing city. After several attempts (and with assistance from the Raker Act of 1913), the City of San Francisco finally purchased the Spring Valley Water Company and its rights to pipelines and water distribution systems throughout San Francisco in 1928 (Page & Turnbull 2000).

Construction on the Hetch Hetchy Aqueduct began in 1914 and lasted until 1934. Built under the direction of City Engineer Michael M. O'Shaughnessy, the aqueduct was an engineering marvel of its time because it relied solely on gravity feed. A system of downhill gradients and siphons transported water from the source to San Francisco, so no pumps were needed. The project comprised six segments that were assigned names reflecting geographic locations: Lake Eleanor and Hetch Hetchy Mountain, Priest, Moccasin, Foothill, San Joaquin, and Coast Range and Bay/Peninsula (Page & Turnbull 2000).

In 1934, engineers completed the infrastructure for the Hetch Hetchy Aqueduct in what was then Washington Township. The Hetch Hetchy Aqueduct was officially opened on October 28, 1934, when water flowed from the Sierra Nevada into Crystal Springs Reservoir on the San Francisco Peninsula.

The Irvington Portal, a critical component of the Hetch Hetchy Aqueduct, is situated in the Fremont hills above Mission Boulevard. The portal is where the Hetch Hetchy waters divide and flow through pipelines, either directly towards San Francisco or southward to San Jose and then north to San Mateo County. The pipeline traveling through the Proposed Project area to San Francisco was constructed between 1922 and 1934 and is known as the Bay/Peninsula Division of the Hetch Hetchy Aqueduct (Page & Turnbull 2000).

## **Summary of Known Archaeological and Historical Resources**

The following sections describe known archaeological and historical resources in, or directly adjacent to, the cultural resources study area.<sup>3</sup> At the time of survey conducted for this SEIR (May–June, 2002), no

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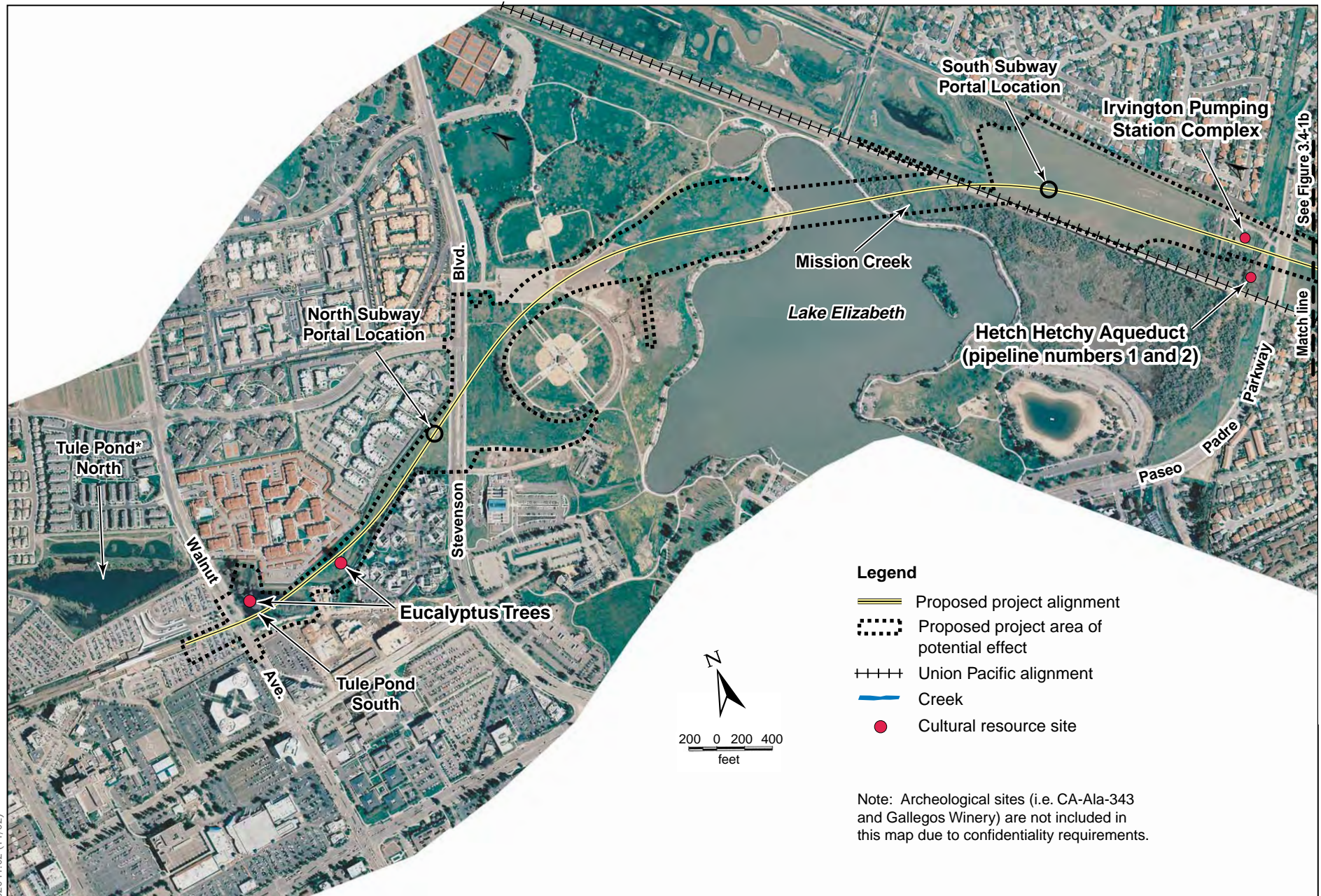
<sup>3</sup> In 1999, archaeological monitoring for fiber-optic cable installation identified several prehistoric artifacts in the backdirt in the Warm Springs Rail Yard in Fremont, an area at the southernmost portion of the Proposed Project area where several railroad tracks converge. A test excavation was conducted, and based on the degree of disturbance and the presence of modern debris mixed with archaeological materials, the excavators concluded that the archaeological deposit lacked integrity and was probably the result of transported fill materials (Chambers Group 1999). Accordingly, this deposit is not discussed further in this SEIR.



indications of archaeological deposits could be seen on the ground surface. Consequently, discussion of archaeological resources is based on the results of previous surveys and excavation work. Discussions of historical architectural resources and historic landscape features incorporate the results of new survey work conducted for this SEIR. Figure 3.8-1 shows the locations of the resources described below.

### **CA-Ala-343**

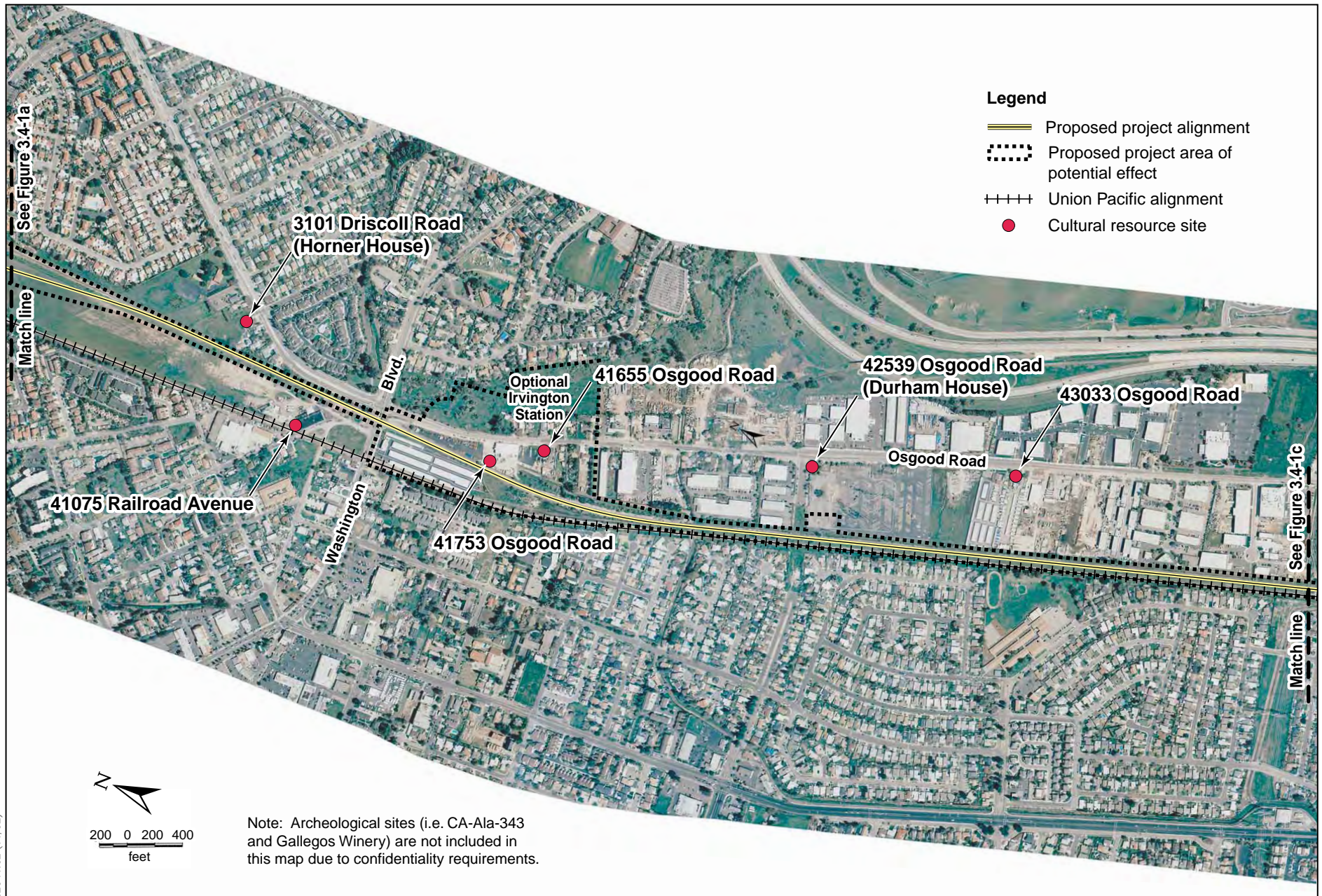
CA-Ala-343 is a large prehistoric Native American site that has been subject to numerous archaeological investigations since it was first recorded in 1968 (King 1968). Although this site is not currently listed in the National Register of Historic Places (NRHP), hundreds of Native American remains and artifacts have been discovered there. This site meets the eligibility criteria for listing in both the NRHP and the California Register of Historical Resources (CRHR) under CRHR listing criterion D (Potential to yield important information on prehistory), due to the size of the site and richness of the site both in diagnostic artifacts and burials, and in the association of burials with artifacts. It is a large village site that has the potential to yield information regarding the prehistory of the Ohlone Indians, the region, and California. CA-Ala-343 is also of importance to the public interest because of the large quantity of human remains—over 311 burials have been excavated—that have been found there.



Source: Aerial base and alignments: Parsons Brinkerhoff 2002; cultural resource sites: Jones & Stokes 2002.

**Figure 3.8-1a**  
**Locations of Cultural Resource Sites**





Source: Aerial base and alignments: Parsons Brinkerhoff 2002; cultural resource sites: Jones & Stokes 2002.

**Figure 3.8-1b**  
**Locations of Cultural Resource Sites**





Source: Aerial base and alignments: Parsons Brinkerhoff 2002; cultural resource sites: Jones & Stokes 2002.

**Figure 3.8-1c**  
**Locations of Cultural Resource Sites**

The following brief summaries of the results of investigations to date at CA-Ala-343 demonstrate the site's potential to yield information and highlight the richness of this historically significant site.

- Thomas King first recorded CA-Ala-343 in 1968. He located the site on the west side of Tule Pond (see description of Tule Pond in Section 3.3, *Hydrology and Water Quality*). In the site record he placed the southwestern boundary of the site at Civic Center Drive and the northwest boundary at Walnut Avenue (King 1968).
- Leslie Wildensen conducted an excavation program at CA-Ala-343 and mapped the western part of the site with her students. The excavation recovered numerous artifacts and identified nine features, including hearths and human bone (not associated with the hearth). Wildensen's students excavated five human burials and noted many more, particularly in the area of Walnut Avenue (Wildensen 1968).
- Miley Holman and David Chavez conducted a survey and subsequent excavation of an area north of Walnut Avenue. They did not recover any significant archaeological materials (Chavez and Holman 1974).
- Parkman re-recorded CA-Ala-343 in 1980, in response to ongoing damage to the site by the City of Fremont. Parkman placed part of the site at the intersection of Civic Center Drive and Stevenson Boulevard and included the south side of Walnut Avenue and the area west of Tule Pond. At that point, the portion of the site to the east of Tule Pond had not yet been recorded (Holman & Associates 1996).
- Archaeological Resource Service conducted a test excavation west of Tule Pond, south of Walnut Avenue and east of Civic Center drive. This study established the depth of this portion of the site, showing that cultural materials were all located in the upper 2 meters (approximately 6 feet) of soil over almost the entire area (Holman & Associates 1996).
- The Center for Anthropological Research at San Jose State University conducted extensive excavations at CA-Ala-343 in 1985. Human bone fragments in Native American burials were identified, but no midden deposits were found below 1 meter (approximately 3 feet) below the surface. Much information relevant to subsistence and religious practices was recovered, as well as data on resource acquisition and processing (Hall 1985, Holman & Associates 1996).
- Hall, Jurmain, and Nelson recovered 71 burials from the site in 1987 while monitoring construction activities west of Tule Pond, south of Walnut Avenue, and east of Civic Center Drive. Numerous artifacts associated with the burials were also uncovered (Hall et al. 1988, Holman & Associates 1996). This investigation confirmed previous suspicions that the site was much larger and more extensive than originally thought.
- Chavez, Hupman, and Woodbridge conducted the archaeological studies for the 1992 EIR, identifying CA-Ala-343 as a significant resource that would be significantly affected by the Proposed Project (Chavez et al. 1991).
- Holman & Associates conducted a series of investigations between 1989 and 1996. They performed a thorough survey of the region around CA-Ala-343 and carried out test excavations. The field investigations resulted in the identification of additional prehistoric archaeological deposits representing an extension of prehistoric site CA-Ala-343 and possibly another site including nineteenth-century

historic remains. The excavations conducted in 1994 helped to establish some dates of occupation spanning from approximately 3,370 B.P. through the Spanish and Mexican periods to the later nineteenth century (Holman & Associates 1996). Holman & Associates, who were in charge of the investigations, also identified information regarding dietary practices and settlement patterns (Holman & Associates 1996). These studies are also important because they identified significant prehistoric resources on the east side of Tule Pond.

- In June 2001, Andrew Galvan of Archaeor was involved in the excavation of 311 burials from CA-Ala-343. Archaeor is currently producing a report detailing the results of this excavation. The report was not available for use in this SEIR (Galvan pers. comm.). However, the potential for the discovery of additional Native American burials and archaeological deposits in the vicinity is believed to be high (Galvan pers. comm.).

Based on the surveys and excavations discussed above, the Proposed Project alignment does not appear to cross directly through the site as the boundaries are currently understood. However, CA-Ala-343 is an extensive site, and its boundaries remain poorly defined despite numerous field investigations to date.

### ***Gallegos Winery and Associated Ruins***

No prehistoric resources are known to exist within the vicinity of the Gallegos Winery. However, the Gallegos Winery and associated historic landscape features appear to meet the criteria for eligibility for listing in the CRHR and the NRHP and are thus a significant historical resource for CEQA purposes (Chavez et al. 1991, William Self Associates 2002). The property is also listed as a primary historical resource in the *Fremont General Plan* (City of Fremont 1991, as amended).

William Self Associates conducted an archaeological investigation for the City of Fremont in March 2002, in order to identify cultural resources and assess the impacts of the city's grade separations project. The report detailing the results of that investigation identifies the Gallegos Winery as a significant historic archaeological resource that appears to meet the criteria for listing in the CRHR and the NRHP and recommends archaeological test excavation as a mitigation measure for potential adverse effects on the historic winery (William Self Associates 2002).

Because the *Fremont General Plan's* list of historical resources was compiled more than 5 years ago, the Gallegos Winery property was reevaluated for CRHR eligibility as part of the investigation performed for this SEIR. The winery is associated both with people of importance to local history (Juan Gallegos) and events of historical importance (early agricultural history). In addition, the ruins of the winery retain a sufficient degree of integrity of design, workmanship, setting, and feeling, despite their debilitated state, to warrant eligibility for the CRHR (William Self Associates 2002). Moreover, there is a high potential for the presence of subsurface features associated with the winery that cannot be easily observed on the ground surface. Features that may remain in the subsurface include foundations, remains of the pool, and trash deposits, all of which have the potential to yield additional data to address important research questions.

### ***Hetch Hetchy Aqueduct Bay/Peninsula Division Pipelines No. 1 and 2***

A segment of the Bay/Peninsula Division of the Hetch Hetchy Aqueduct travels through the Proposed Project area immediately north of and parallel to Paseo Padre Parkway. As discussed above, the aqueduct is an important water system built between 1914 and 1934 to move water from Hetch Hetchy Reservoir to the San Francisco Bay Area. The two pipelines located in the Proposed Project area (Pipelines No. 1 and 2) retain integrity and appear to be eligible for listing in the CRHR because of their association with the Hetch Hetchy Aqueduct and early water development in the Bay Area and California.

### ***Irvington Pump Station Complex***

The Irvington Pump Station complex is located directly north of Paseo Padre Parkway between the former SP and WP railroad tracks. The buildings constituting the pump station complex were constructed between 1947 and 1955 as an improvement to the Hetch Hetchy Aqueduct. The property was previously recorded and evaluated for the NRHP in 2000 (Page & Turnbull 2000). The previous evaluation recommended that the Irvington Pump Station complex does not appear to meet NRHP criteria. The property was reevaluated for CRHR eligibility as part of this investigation. The Irvington Pump Station complex does not appear to meet the criteria for listing in the CRHR.

### ***William Y. Horner House at 3101 Driscoll Road***

The William Y. Horner House is a single-family residence constructed circa the 1850s to 1860s. According to the 1992 EIR, the building and surrounding landscape retain a high degree of integrity and are associated with William Y. Horner, an important early settler in the area. The 1992 EIR indicates that the property appears to be eligible for listing in the CRHR and may be eligible for listing in the NRHP (San Francisco Bay Area Rapid Transit District 1991). The property is also listed as a primary historical resource in the *Fremont General Plan* (City of Fremont 1991, as amended), and was recommended as eligible for the NRHP by William Self Associates (2002) in investigations conducted for the city's grade separations project.

Because the previous CRHR evaluation was completed more than 5 years ago, the property was reevaluated for CRHR eligibility as part of the investigation conducted for this SEIR. The residence retains integrity and appears to meet Criterion B of the CRHR for its association with William Y. Horner, an important early settler in the area. In addition, the historic landscape, including two palm trees and two pepper trees at the front of the residence and a black oak tree at the rear, adds to the integrity of the property.

A secondary residence (3073 Driscoll Road) is located at the rear of the parcel. This building lacks integrity and therefore does not appear to meet CRHR eligibility.

### ***Dr. J. H. Durham House at 42539 Osgood Road***

According to the 1992 EIR, the Dr. J. H. Durham House is a two-story single-family residence constructed circa 1910. The 1992 EIR concluded that because it is a common house type in the San



Francisco Bay Area, it would not be eligible for CRHR listing (San Francisco Bay Area Rapid Transit District 1991).

The 1992 EIR stated that the Durham House was located at 43078 Osgood Road. However, the name of the house was ascribed to the wrong address. The Dr. J. H. Durham House is actually located at 42539 Osgood Road. The property described in the first paragraph (43078 Osgood Road) is located outside the Proposed Project area.

The property at 42539 Osgood Road was previously recorded and evaluated for the NRHP in 2000 (William Self Associates 2000). The previous evaluation recommended that the property did not appear to meet NRHP criteria. The property was reevaluated for the CRHR as part of this investigation. The 1921 house with its surrounding landscape retains integrity and appears to be eligible for listing in the CRHR because of its association with Bay Area architect Charles M. McCall. In addition, the residence is one of a few examples of Prairie Style architecture built during the early twentieth century in Fremont.

### ***Historic Landscape Features***

Two large eucalyptus (*Eucalyptus* sp.) trees are present in the cultural resources study area near Tule Pond. One tree stands just south of Walnut Avenue and the second north of Stevenson Boulevard. The trees were analyzed as potential features of a historic landscape. The two large eucalyptus trees in the cultural resources study area were likely planted by the turn of the twentieth century as a windbreak or as shade trees for a nearby residence or structure. As isolated plantings associated only with a single former residence, the trees lack historical significance and therefore do not appear to meet the criteria for listing in the CRHR.

### ***Former Nineteenth Century Western Pacific Railroad Alignment***

Two parallel UP railroad alignments traveling north-south run through the Proposed Project area. The alignment to the west is referred to as the former nineteenth century WP alignment and the alignment to the east is referred to as the former twentieth century WP alignment. The former nineteenth century WP alignment includes two trestles, one located immediately north of Paseo Padre Parkway and the other at Mission Boulevard. As described above, the alignment was originally constructed in 1869 as a WP alignment and later became part of the SP, before its acquisition by UP in recent years. The alignment lacks integrity and therefore does not appear to meet the criteria for listing in the CRHR.

### ***Former Twentieth Century Western Pacific Railroad Alignment***

The former twentieth century WP alignment is located directly east of the former nineteenth century WP alignment and parallels it. The twentieth century WP alignment was constructed in the early twentieth century. It was originally constructed by WP and became part of the UP in the 1980s. The alignment lacks integrity and therefore does not appear to meet the criteria for listing in the CRHR.

### ***Warehouse at 41075 Railroad Avenue***

A warehouse constructed in 1938 is located at 41075 Railroad Avenue. The property has been heavily modified and lacks integrity and therefore does not appear to meet the criteria for CRHR eligibility.



***Warehouse at 41655 Osgood Road***

A warehouse is located at 41655 Osgood Road. The Alameda County Assessor's Office indicates conflicting construction dates of 1949 and 1954 for the building. The property was previously recorded and evaluated for the NRHP in 2000, and it was recommended at that time that the building did not appear to meet NRHP criteria (William Self Associates 2000). The property was reevaluated for CRHR eligibility as part of this investigation. The warehouse at 41655 Osgood Road has been heavily modified and lacks integrity and therefore does not appear to meet the criteria for CRHR eligibility.

***Residence at 43303 Osgood Road***

A residence constructed in 1950 is located at 43303 Osgood Road. The property was recorded and evaluated for the NRHP in 2000 (William Self Associates 2000). The previous evaluation recommended that the property did not appear to meet NRHP criteria. The property was reevaluated for CRHR eligibility as part of this investigation. The residence at 43303 Osgood Road does not appear to be historically or architecturally significant and therefore does not appear to meet the criteria for CRHR eligibility.

***Ford House at 41753 Osgood Road***

The Ford House is a single-family residence constructed circa 1895. Two conflicting evaluations were completed for the Ford House. The 1992 EIR states that, although the building is listed in the Fremont Secondary Historical Resources Inventory, it does not appear to be eligible for the CRHR because it is a common resource type in the San Francisco Bay Area (Chavez et al. 1991, San Francisco Bay Area Rapid Transit District 1991). A second report recommended that the property appeared to be eligible for listing in the NRHP (William Self Associates 2000).

No documentation could be located indicating a review of this resource by the State Historic Preservation Officer (SHPO). Because the previous CRHR evaluation was completed more than 5 years ago, the property was reevaluated for CRHR eligibility as part of this investigation. The Ford House was constructed in 1890 and, although it retains integrity to its construction period, it does not appear to meet the CRHR criteria because it lacks historical significance. In addition, the residence is an unremarkable example of the Queen Anne style, which is common throughout the Bay Area.

***Complex at 44960 Old Warm Springs Road***

A complex including three single-family residences, a garage, and a barn, is located at 44960 Old Warm Springs Road. A row of mature palm trees fronts the property. Alameda County Assessor's Office records indicate that one of the three residences was constructed in 1962, but no construction date is listed for the other two residences, the garage, or the barn. Based on the building materials used, the barn, the garage, and one residence were most likely constructed by the 1940s. The third residence appears to have been constructed in recent years. The 1940s residence, garage, and barn lack historical and architectural significance and therefore do not appear to meet the criteria for listing in the CRHR. The palm trees do not appear to be historically significant and therefore do not meet CRHR criteria. The remaining two residences do not meet the exceptional significance criteria established for recently constructed properties and therefore do not appear to be eligible for CRHR listing.

### **Other Buildings**

In addition to these resources, numerous recently constructed buildings are located in the cultural resources study area. These buildings are adjacent to the Proposed Project corridor, and are chiefly located between Walnut Avenue and Stevenson Boulevard, between Stevenson Boulevard and Paseo Padre Parkway, and along the eastern part of the Proposed Project corridor between Paseo Padre Parkway and Washington Boulevard. Where the Proposed Project alignment parallels Osgood Road and then Warm Springs Boulevard, several industrial warehouses and commercial buildings and a few recently constructed residences are located along the Proposed Project corridor. In addition, two modern bridges (Auto Mall Bridge and Grimmer Bridge) and a drainage ditch are located in the Proposed Project area in this vicinity. As these buildings and structures are all of recent construction, they are not considered historical resources for the purposes of the CEQA.

## **3.8.3 Regulatory Setting**

### **CEQA and Cultural Resources**

Section 15064.5 of the CEQA Guidelines requires that proponents of public and private projects financed or approved by public agencies assess the effects of the project on significant historical resources. *Historical resources* refers to buildings, sites, structures, objects, or districts that have historical, architectural, archaeological, cultural, or scientific importance. According to the CEQA Guidelines (Section 15064.5 [a]), a resource can qualify as a *significant historical resource* for the purposes of CEQA review if it meets any of the following criteria.

- It is listed in or determined eligible for listing in the CRHR.
- It is included in a local register of historical resources, as defined in Section 5020.1[k] of the California Public Resources Code, or identified as significant in a historical resource survey that meets the requirements of Section 5024.1[g] of the Public Resources Code, unless the preponderance of evidence demonstrates that it is not historically or culturally significant.
- The lead agency determines that it is significant as supported by substantial evidence in light of the whole record.

CEQA requires lead agencies to use specific criteria in evaluating the significance of historical resources potentially affected by a proposed project. The criteria required under CEQA are the same as the CRHR significance criteria discussed in the following section.

### **California Register of Historical Resources**

The CRHR was created by the California State Legislature in 1992 and is intended to serve as an authoritative listing of historical and archaeological resources in California. Additionally, the eligibility criteria for the CRHR are intended to serve as the definitive criteria for assessing the significance of historical resources for purposes of CEQA compliance, establishing a consistent set of criteria for use by all public agencies statewide.

For a historical resource to be eligible for listing in the CRHR, it must be significant at the local, state, or national level under one or more of the following criteria from CEQA Guidelines Section 15064.5(a)(3), Subsections (A)–(D).

- It is associated with events that have made a significant contribution to the broad patterns of California’s history and cultural heritage.
- It is associated with the lives of persons important in our past.
- It embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual or possesses high artistic values.
- It has yielded, or may be likely to yield, information important in prehistory or history.

Historical resources automatically listed in the CRHR include those historic properties listed in, or formally determined to be eligible for listing in, the NRHP (Public Resources Code Section 5024.1).

## **Fremont General Plan Guidance for Cultural Resources**

The *Fremont General Plan* (City of Fremont 1991, as amended) provides a list of primary resources located in the city. The *Fremont General Plan* listing meets the requirements of Public Resources Code Section 5020.1(k), which states that properties officially designated or recognized as historically significant by a local government are considered significant resources for the purposes of CEQA.

## **Regulations Concerning the Discovery of Human Remains**

According to the California Health and Safety Code, six or more human burials at one location constitute a cemetery (Section 8100), and disturbance of Native American cemeteries is a felony (Section 7052). Section 7050.5 of the Health and Safety Code requires that construction or excavation be stopped in the vicinity of discovered human remains until the coroner can determine whether the remains are those of a Native American. If the remains are determined to be Native American, the coroner must contact the NAHC. The NAHC must then attempt to notify any descendants, and arrangements for appropriate treatment of the remains must be made in consultation with the descendants.

## **3.8.4 Impact Assessment and Mitigation Measures**

The nature of the Proposed Project’s impacts on cultural resources is expected to be consistent with that described in the 1992 EIR. However, understanding of the resources potentially affected has increased since preparation of the 1992 document. In particular, the extent of CA-Ala-343 was poorly defined in 1992, and although the site’s boundaries still have not been established with certainty, knowledge of the site and of its extent has expanded considerably. Therefore, the assessment of likely impacts on cultural resources in the cultural resources study area has changed and expanded since the 1992 EIR.

This section presents updated information and current eligibility status for all resources in the cultural resources study area, including those addressed in the 1992 EIR, in order to clarify the status of properties

that were not conclusively evaluated in the 1992 EIR and properties for which further evidence was required to support previous eligibility findings. This SEIR also addresses a number of resources, such as the UP and SP tracks, that were not addressed in the 1992 EIR, and provides additional information on CA-Ala-343. In addition, several properties included in the 1992 EIR are no longer part of the Proposed Project area and are therefore not addressed in this SEIR.

This analysis focused on the Proposed Project's potential to affect resources not addressed in the 1992 EIR and resources for which new information has the potential to change conclusions reached in the 1992 document.

## Methodology for Impact Analysis

This analysis relied on standard professional practice for the assessment of project impacts on cultural resources. As discussed in 3.8.3 *Regulatory Setting*, CEQA requires project proponents to assess a project's potential effects on significant historical resources (i.e., those that are listed or eligible for listing in the CRHR or in a local register or survey that meets the requirements of Sections 5020.1[k] and 5024.1[g] of the California Public Resources Code). This entails the following steps.

1. Identify potential historical resources.
2. Evaluate the eligibility of identified historical resources.
3. Evaluate the anticipated effects of the project on all eligible historical resources.

Under CEQA, only effects on significant resources are considered potentially significant, so only these impacts need be analyzed in detail.

As described in Section 3.1, this analysis uses the term *operational impacts* to refer to long-term results of operating and maintaining all aspects of the Proposed Project, including trackways, trains, stations, parking lots, and associated equipment and facilities, and to permanent effects of construction activities related to the Proposed Project. *Construction-related impacts* refers to the temporary effects of Proposed Project construction activities such as construction laydown, site preparation, and installation of trackways and structures.

## Criteria for Determining Significance of Impacts

This analysis used criteria from CEQA Guidelines Section 15064.5(b)(1) and (2) that identify a significant impact as one with the potential to cause a substantial adverse change in the significance of a historical resource. *Substantial adverse change in the significance of a resource* means the physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of the resource would be materially impaired. The significance of a historical resource is materially impaired when a project results in the following.

- Demolition or material alteration in an adverse manner of those physical characteristics of a historical resource that convey its historical significance and that justify its inclusion in, or eligibility for inclusion in, the CRHR.
- Demolition or material alteration in an adverse manner of those physical characteristics that account for its inclusion in a local register of historical resources pursuant to Section 5020.1(k) of the Public Resources Code or its identification in a historical resources survey meeting the requirements of Section 5024.1(g) of the Public Resources Code, unless the public agency reviewing the effects of the project establishes by a preponderance of evidence that the resource is not historically or culturally significant.
- Demolition or material alteration in an adverse manner of those physical characteristics of a historical resource that convey its historical significance and that justify its eligibility for inclusion in the CRHR as determined by a lead agency for purposes of CEQA.

## Impacts and Mitigation Measures

### Impacts Related to Warm Springs Extension

The Proposed Project may result in the destruction of subsurface archaeological features and the alteration of historic settings, and may require the demolition or removal of existing buildings, structures, and linear and landscape features. A total of 12 buildings, structures, and linear and landscape features more than 50 years old have been identified and evaluated for historical significance. Three of the resources evaluated (Hetch Hetchy Aqueduct Bay/Peninsula Division Pipelines No. 1 and 2, the William Y. Horner House, and the Dr. J. H. Durham House), appear to be historically or architecturally significant. The following sections provided additional regarding impacts related on individual features.

#### ***Operational Impacts***

**Impact CR1 – Potential for damage to William Y. Horner House.** The William Y. Horner House is located close to the Proposed Project alignment, and it experiences vibration from movement of trains along the UP rail alignment. Studies conducted for the 1992 EIR indicated that no increase in vibration levels was expected to result from the Proposed Project, which led to the conclusion that no operational impacts on the William Y. Horner House were anticipated (San Francisco Bay Area Rapid Transit District 1991).

Studies conducted by Jones & Stokes for this SEIR indicate that the Proposed Project would increase vibration levels in the vicinity of Driscoll Road and Washington Road, where the Horner House is located. Groundborne vibration impacts and potential mitigation measures are discussed in detail in Section 3.10 (*Noise and Vibration*), which identifies the Horner House as one of 19 buildings in the Paseo Padre Parkway to Washington Boulevard segment of the Proposed Project corridor that would be subject to significant groundborne vibration impacts as a result of the Proposed Project. The studies conducted for this SEIR conclude that groundborne vibration levels associated with the Proposed Project can be reduced to levels not to exceed 85 VdB with implementation of Mitigation Measure N2. Because vibration levels can be reduced to levels less than 95 – 100 VdB, the level at which groundborne vibration has the potential

to cause structural and cosmetic damage to historical resources, vibration impacts on the Horner House would be less than significant. (*Less than significant with mitigation incorporated.*)

**Mitigation Measure N2 – Implement vibration-reducing measures at vibration-sensitive land uses in the Proposed Project corridor.** This mitigation measure is described in Section 3.10 (*Noise and Vibration*).

**Impact CR2 – Potential for substantial adverse change in the significance of archaeological resources: site CA-Ala-343.** As described in *Existing Conditions* above, CA-Ala-343 has been identified as a historically significant archaeological resource. Although not currently known to extend into the project area, new work conducted for this SEIR and the technical report prepared for the 1992 EIR (Chavez et al. 1991) strongly suggest that construction of the Proposed Project could result in permanent adverse impacts on unidentified portions of CA-Ala-343 south of Tule Pond. Unless it is determined that subsurface features associated with CA-Ala-343 are absent from the project area or lack integrity to contribute to the site’s significance, it is assumed that significant subsurface deposits may be present in the Proposed Project area and that construction of the elevated structures and subway for the Proposed Project would potentially destroy a portion of a historically important resource. Accordingly, impacts on CA-Ala-343 would be significant, but would be reduced to a less-than-significant level by implementation of the following mitigation measures. (*Less than significant with mitigation incorporated.*)

**Mitigation Measure CR2(a) – Conduct subsurface testing to assess and minimize potential impacts on prehistoric and historic archaeological resources at CA-Ala-343 and vicinity.** To establish the presence or absence and the integrity of CA-Ala-343 deposits in the project area, BART will ensure that a focused subsurface testing program is designed and implemented in areas south of Tule Pond and north of Stevenson Boulevard that have not previously been subject to subsurface archaeological investigations. BART will retain qualified archaeologists to conduct the investigation, which will follow standard professional practice for the evaluation of cultural resources. Before the investigation begins, a work plan will be prepared, including Native American protocols for the project, a research design, and methods of conducting the study.

Following test excavations, a technical report will be prepared to document the results of the investigation. The technical report will be submitted to BART and also placed on file at the Northwest Information Center of the California Historical Resources Information System at Sonoma State University. If significant archaeological deposits are discovered, the report will define the Proposed Project’s expected impacts and present specific recommendations for subsequent actions. Consideration will be given to preserving significant archaeological deposits in the project area by avoiding the deposits or otherwise protect them from impacts, if feasible. If preservation alternatives are not possible or feasible, the following additional mitigation measure will be required to reduce significant impacts to less than significant.

**Mitigation Measure CR2(b) – Conduct data recovery for CA-Ala-343 and vicinity.** If historically significant archaeological deposits that cannot be avoided or otherwise protected are found within the Proposed Project area, BART will ensure that

data recovery is implemented by qualified archaeologists in accordance with standard professional practices. If archaeological deposits that indicate the presence or probable likelihood of Native American human remains are discovered, the data recovery plan will be prepared and implemented in consultation with appropriate representatives of the Native American community. The objective of archaeological data recovery will be to adequately recover the scientifically consequential information from and about the historical resource. The results of the study will be deposited with the California Historical Resources Regional Information Center.

**Impact CR3 – Potential for disturbance of previously unknown cultural deposits or human remains during ground-disturbing activities.** Construction of the Proposed Project would require excavation, grading, fill placement, and other ground-disturbing activities. Excavation depths would range from 1 meter (3 feet) to as much as approximately 18 meters (60 feet) or more. As described in *Existing Conditions* above, research indicates that previously unidentified buried archaeological resources, both prehistoric and historic, are likely to be present in the Proposed Project area. As a result, construction has the potential to damage or destroy undocumented archaeological resources, possibly including human remains. This would represent a significant impact, but would be reduced to a less-than-significant level by implementation of the following mitigation measure. (*Less than significant with mitigation incorporated.*)

**Mitigation Measure CR3 – Stop work if buried cultural deposits are encountered during construction activities.**<sup>4</sup> If buried cultural resources such as chipped or ground stone, quantities of bone or shell material, or historic debris or building foundations are inadvertently discovered during ground-disturbing activities, the construction contractor will ensure that work is stopped within a 100-foot radius of the find until a qualified archaeologist can assess the significance of the find. If, after evaluation by a qualified archaeologist, an archaeological site or other find is identified as meeting the criteria for inclusion in the NRHP or the CRHR, BART will ensure that a qualified archaeologist is retained to develop and implement an adequate program for investigation, avoidance if feasible, and data recovery for the site, with Native American consultation, if appropriate.

If human skeletal remains are inadvertently encountered during construction of the Proposed Project, the contractor will contact the Alameda County Coroner immediately. If the County Coroner determines that the remains are Native American, s/he will contact the NAHC, as required by Section 7050.5[c] of the California Health and Safety Code, and the County Coordinator of Indian Affairs. A qualified archaeologist will also be contacted immediately.

**Impact CR4 – Potential for substantial adverse change in the significance of historical resources: Hetch Hetchy Aqueduct.** The portion of the Hetch Hetchy Aqueduct (Bay/Peninsula Division Pipelines No. 1 and 2) located in the cultural resources study area appears to be a significant historical resource for the purposes of CEQA. The physical loss of any segment of either of these two

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<sup>4</sup> Mitigation Measure CR3 applies to the Proposed Project area where construction is not anticipated to encounter archaeological remains and will therefore not be monitored or previously investigated by qualified archaeologists.

pipelines would impair their ability to convey significance and would constitute a significant impact on the resource. However, the Proposed Project would construct an alignment over Bay/Peninsula Division Pipelines No. 1 and 2 and thus is not expected to materially impair (i.e., demolish or adversely alter the physical characteristics of) either of the pipelines. The pipelines would continue to convey their historical significance. Consequently, no impact on these pipelines is anticipated. (*No impact.*)

**Mitigation – None required.**

**Impact CR5 – Potential for substantial adverse change in the significance of historical resources: Dr. J. H. Durham House.** The Durham House (42539 Osgood Road) appears to be a significant historical resource for the purposes of CEQA. The residence is situated at the northeast corner of a relatively large parcel (2.59 acres) near the Proposed Project alignment. Additional historic landscape features are located close to the residence. The building and historic landscape features are more than 120 meters (390 feet) from the Proposed Project alignment and are separated from the alignment by an open field. Therefore, the Proposed Project is not expected to cause the physical destruction, relocation, or alteration of the building or associated historic landscape features and therefore would not impair its ability to convey historical significance. In addition, because the residence is located more than 120 meters (390 feet) from the Proposed Project alignment, increased groundborne vibration levels are not expected to have an impact on the property. Because the property would continue to convey its historical significance, no impact on the building and/or landscape features is anticipated. (*No impact.*)

**Mitigation – None required.**

### ***Construction-Related Impacts***

As described in *Methodology for Impact Analysis*, the permanent effects of construction activities required by the Proposed Project are discussed in *Operational Impacts* above, because these effects would persist throughout the lifetime of the Proposed Project. No additional (temporary) effects on cultural resources are expected as a result of constructing the Proposed Project.

## **Impacts Specific to Optional Irvington Station**

### ***Operational Impacts***

**Impact CR6 – Potential substantial adverse change in the significance of archaeological resources as a result of Irvington Station option: Gallegos Winery.** The Gallegos Winery appears to be a significant historical resource for the purposes of CEQA. Based on the cultural resources technical report prepared for the city's grade separations project (William Self Associates 2002), construction of the optional Irvington Station, including site grading required to construct the parking facility, could physically damage significant subsurface archaeological deposits associated with the Gallegos Winery. Unless it is determined that subsurface features associated with the Gallegos Winery are absent from the project area or lack integrity to contribute to the site's significance, it is assumed that significant subsurface deposits may be present and that construction of the optional Irvington Station and parking lot facility would potentially destroy a portion of a historically important resource. In addition, the optional Irvington Station and parking facility could adversely affect the Gallegos Winery's setting as



defined by the CRHR, as well as the existing structural remains of the winery. This would constitute a significant impact on cultural resources, but would be reduced to a less-than-significant level by implementation of the following mitigation measure. (*Less than significant with mitigation incorporated.*)

**Mitigation Measure CR6(a) – Conduct subsurface archaeological testing to evaluate and minimize impacts on the Gallegos Winery if optional Irvington Station is constructed.** To establish the presence or absence and the integrity of archaeological deposits associated with the Gallegos Winery, BART will ensure that a focused subsurface testing program is designed and implemented for the Irvington Station study area (including the parking facility and a 15-foot surrounding buffer zone). BART will retain qualified archaeologists to conduct the investigation, which will follow standard professional practice for the evaluation of historical archaeological resources. Before the investigation begins, a work plan will be prepared, including a research design and methods for conducting the study, including a delineation of the anticipated extent of subsurface remains in the proposed project area.

Following test excavations, a technical report will be prepared to document the results of the investigation. The technical report will be submitted to BART and also placed on file at the Northwest Information Center of the California Historical Resources Information System at Sonoma State University. If significant archaeological deposits are discovered, the report will define the Proposed Project's expected impacts and present specific recommendations for subsequent actions. Consideration will be given to preserving significant archaeological deposits in the project area by avoiding the deposits or otherwise protect them from impacts, if feasible. If preservation alternatives are not possible or feasible, the following additional mitigation measure will be required to reduce significant impacts to a less-than-significant level.

**Mitigation Measure CR6(b) – Conduct data recovery in the Gallegos Winery study area.** If historically significant archaeological deposits that cannot be avoided or otherwise protected are found within the optional Irvington Station and parking facility area, BART will ensure that data recovery is implemented by qualified archaeologists in accordance with standard professional practices. The objective of archaeological data recovery will be to adequately recover the scientifically consequential information from and about the historical resource. The results of the study will be deposited with the California Historical Resources Regional Information Center.

### ***Construction-Related Impacts***

As described in *Methodology for Impact Analysis*, the permanent effects of construction activities required to implement the Irvington Station option are discussed in *Operational Impacts* above, because these effects would persist throughout the lifetime of the optional Irvington Station. No additional (temporary) effects on cultural resources are expected as a result of constructing the optional Irvington Station.

## Contribution to Cumulative Impacts

Table 3.1-1 and Section 3.1.6 in Section 3.1 (*Introduction to Environmental Analysis*) list approved and pending development projects in Fremont as of the date of preparation of this SEIR. The cumulative impacts assessment for cultural resources considers the potential for the Proposed Project, in combination with the projects described in Section 3.1, to have impacts to the physical environment.

## Contribution of Warm Springs Extension to Cumulative Impacts

### **Operational Contribution**

**Impact CR-Cume1 – Potential for damage to archaeological resources.** There is potential for the Proposed Project, together with other projects, to contribute to cumulative impacts on important archaeological resources. However, such contribution would be considered less than significant after implementation of the site-specific mitigation measures described above: CR2(a) (Conduct subsurface testing to assess and minimize potential impacts on prehistoric and historic archaeological resources at CA-Ala-343 and vicinity), CR2(b) (Conduct data recovery for CA-Ala-343 and vicinity), CR3 (Stop work if buried cultural deposits are encountered during construction activities), CR6(a) (Conduct subsurface archaeological testing to evaluate and minimize impacts on the Gallegos Winery if optional Irvington Station is constructed), and CR6(b) (Conduct data recovery in the Gallegos Winery study area). In general, data recovery efforts that are carried out according to professional standards are sufficient to mitigate impacts on archaeological resources. In addition, other projects will also be required to mitigate their impacts on cultural resources in accordance with professional standards. Any remaining impacts after mitigation would not be expected to be significant, and the Proposed Project's contribution would not be cumulatively considerable. (*Less than significant with mitigation incorporated.*)

### **Mitigation – No additional mitigation required.**

**Impact CR-Cume2 – Potential for damage to William Y. Horner House.** The Proposed Project has the potential to cause a significant impact on the Horner House, a historically significant building. Vibration impacts associated with operation of the Proposed Project could cause structural damage to the Horner House, which is a residential building that has been identified as a significant historical resource. However, Mitigation Measure N2 has been incorporated into the project to reduce this impact to a level of less than significant. Only one project included in the cumulative impacts assessment, the Deaf Senior Retirement Corporation housing development at Driscoll Road south of Valero Road, is in the vicinity of the Horner House (see Table 3-1.1). The housing development would not be expected to generate ongoing vibration impacts to nearby properties. Therefore, because the Proposed Project's vibration impacts to the Horner House will be mitigated and no other known projects would contribute to vibration impacts at the Horner House, the Proposed Project would not result in a significant contribution to a cumulative impact. (*Less than significant.*)

**Mitigation Measure N2 – Implement vibration-reducing measures at vibration-sensitive land uses in the Proposed Project corridor.** This mitigation measure is described in Section 3.10 (*Noise and Vibration*).

### **Construction-Related Contribution**

As described in *Methodology for Impact Analysis*, the permanent effects of construction activities required to implement the Proposed Project are considered operational impacts, because these effects would persist throughout the lifetime of the Proposed Project. Similarly, the Proposed Project's contribution to cumulative construction-related impacts is discussed above under *Operational Contribution*. The Proposed Project is not expected to contribute to additional (temporary) cumulative effects on cultural resources.

### **Contribution of Optional Irvington Station to Cumulative Impacts Operational Contribution**

Operation of the optional Irvington Station would have no significant impacts on cultural resources and would not contribute to cumulative impacts to cultural resources.

### **Construction-Related Contribution**

The optional Irvington Station's contribution to cumulative construction-related impacts is discussed above under *Operational Contribution*, because any such effects would persist throughout the lifetime of the optional Irvington Station. The Proposed Project is not expected to contribute to additional (temporary) cumulative effects on cultural resources.

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## Personal Communications

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