

Archaeological Survey Report for the Sacramento Intermodal Transportation Facility, City of
Sacramento, Sacramento County, California

03-Sac-00
PM
EA 03-965100 3ENVR
Sacramento Intermodal Transportation Facility

USGS 7.5-minute Quadrangle: Sacramento East, CA (PR1980); Sacramento West, CA (PR1980)

Size of Study Area is approximately 33 acres

Keywords: T 9 N, R 4 E, M.D.B.M.; City of Sacramento; Sacramento County; archaeological survey; P-34-1563/CA-SAC-942-H (7th Street Historic-Era Refuse Deposit); P-34-1562/CA-SAC-941-H (7th Street Railroad Trestle Bents); P-34-1561/CA-SAC-940-H (6th Street Levee); CA-SAC-478-H (Transcontinental Railroad); Ancillary Train Shed Curbs; Train Shed Curbs; Casting Shop Kilns; Pattern Storage Shop Slab Foundations; SPRR Foundry Loading Ramp; Southern Car Shops Slab Foundations; West Sutter Lake-01

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Acronyms and Abbreviations

ac	acres
ADA	Americans with Disabilities Act
ADI	area of direct impact
APE	area of potential effects
ASR	archaeological survey report
B.P.	before present
Caltrans	California Department of Transportation
CCTS	Central California Taxonomic System
CHRIS	California Historical Resources Information System
City	City of Sacramento
CPRR	Central Pacific Railroad
CRHR	California Register of Historical Resources
DNA	Downtown-Natomas-Airport
EIR	environmental impact report
FHWA	Federal Highway Administration
FRA	Federal Railroad Administration
FSTIP	Federal Statewide Transportation Improvement Program
ft	feet
GPS	global positioning system
HRER	historic resources evaluation report
HRI	historic resources inventory
mi	mile
NAHC	Native American Heritage Commission
NCIC	North Central information Center
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act
NRHP	National Register of Historic Places
PA	January 1, 2004, <i>Programmatic Agreement among the Federal Highway Administration, the Advisory Council on Historic Preservation, the California</i>

*State Historic Preservation Officer, and the
California Department of Transportation*

RSP	Sacramento Railyards Specific Plan
RT	Regional Transit
SACOG	Sacramento Area Council of Government
SITF	Sacramento Intermodal Transportation Facility
SPRR	Southern Pacific Railroad
Station	Sacramento Valley Station
UPRR	Union Pacific Railroad

Chapter 1. Summary of Findings

The Federal Highway Administration (FHWA) and the California Department of Transportation (Caltrans), in conjunction with the City of Sacramento (City), propose to expand the existing Sacramento Valley Station (Station) to meet current needs and to establish a state-of-the-art regional transportation center to meet future needs of rail and bus transit passengers and service operators in the Sacramento region through the year 2025 and beyond. The proposed project requires federal funding from the FHWA and possibly the Federal Transit Administration and Federal Railroad Administration. The purpose of this study is to evaluate the potential for the project to affect archaeological sites eligible for listing in the National Register of Historic Places (NRHP). This archaeological survey report (ASR) is intended to document compliance with Section 106 of the National Historic Preservation Act (NHPA) of 1966, as amended, whose regulations pertain to federally funded undertakings and their impacts on historic properties. More specifically, this report was prepared in accordance with the January 1, 2004, *Programmatic Agreement among the Federal Highway Administration, the Advisory Council on Historic Preservation, the California State Historic Preservation Officer, and the California Department of Transportation (PA)*. This report documents the results of an archaeological records search at the North Central Information Center (NCIC) California Historical Resources Information System (CHRIS) and literature review, as well as the results of an archaeological reconnaissance of the direct area of potential effects (APE) conducted on June 27, 2008, by ICF Jones & Stokes (formerly Jones & Stokes) professional archaeologist Gabriel Roark.

The records search, literature review, and archaeological reconnaissance of the direct APE resulted in the identification of 16 cultural resources, 12 of which constitute archaeological resources. These are:

- 7th Street Historic-Era Refuse Deposit (P-34-1563/CA-SAC-942-H),
- 7th Street Railroad Trestle Bents (P-34-1562/CA-SAC-941-H),
- 6th Street Levee (P-34-1561/CA-SAC-940-H),
- Transcontinental Railroad (CA-SAC-478-H),
- Ancillary Train Shed Curbs,
- Train Shed Curbs,
- Casting Shop Kilns,
- Pattern Storage Shop Slab Foundations,
- SPRR [Southern Pacific Railroad] Foundry Loading Ramp,
- Redwood Railroad Ties,
- Southern Car Shops Slab Foundations, and
- West Sutter Lake-01 (historic artifacts, railroad refuse, and prehistoric isolate).

Four archaeological resources are located in the Phase 1 area of direct impact (ADI): 7th Street Railroad Trestle Bents (P-34-1562/CA-SAC-941-H), 6th Street Levee (P-34-1561/CA-SAC-940-H), Train Shed Curbs, and Southern Car Shops Slab Foundations. All identified archaeological resources are evaluated in the project historic resources evaluation report (HRER) (ICF Jones & Stokes 2008).

The ASR also identifies the need for the preparation of a late discovery plan to ensure the appropriate treatment of any inadvertent archaeological discoveries that may occur during project construction.

It is Caltrans' policy to avoid cultural resources whenever possible. If cultural resources cannot be avoided, additional work may be necessary. If buried cultural materials are encountered during construction, it is Caltrans' policy that work in that area must halt until a qualified archaeologist can evaluate the nature and significance of the find (California Department of Transportation 2001). Additional archaeological survey will be needed if the project limits are extended beyond the present survey limits.

Chapter 2. Introduction

PROJECT DESCRIPTION AND LOCATION

The City proposes to expand the existing Station to meet current needs and to establish a state-of-the-art regional transportation center to meet future needs of rail and bus transit passengers and service operators in the Sacramento region through the year 2025 and beyond. Developed in phases, the Sacramento Intermodal Transportation Facility (SITF) (proposed project) would encompass a realignment of existing mainline rail tracks (Phase 1), improvements to the existing Station (Phase 2), and eventual transformation of the Station into a multimodal transportation center (Phase 3).

The proposed project would provide a centralized transfer point for regional passenger rail, light rail, and bus services (Figure 1). In the near term, the City proposes to implement Phase 1, relocating the existing rail and passenger tracks and facilities. In subsequent phases, the City proposes to improve the existing Station, expand the facility, and provide new uses to meet projected service levels and passenger growth.

The proposed project site consists of approximately 33 acres (ac), including the existing Station facilities that are owned by the City. The City is in the process of acquiring land for the project immediately north of the Station, which contains the approximately 3,300-foot-long Union Pacific Railroad (UPRR) rail corridor (current alignment and proposed realignment) (Figures 2 and 3).

For passenger rail and freight rail service, Phase 1 of the project would upgrade existing track and related facilities, eliminate a bottleneck, and reduce conflicts among transportation modes to result in increased capacity, more operational flexibility, and service improvements. In Phase 2, the City would implement minor improvements to the existing Station. Phase 3 would encompass further facility expansion and new uses to meet projected service levels and passenger growth.

Funding for the SITF project is included in the fiscal year 2007 Federal Statewide Transportation Improvement Program (FSTIP). This project also is included in the Sacramento Area Council of Government's (SACOG's) 2005/07 Metropolitan Transportation Improvement Program and 2006 *Metropolitan Transportation Plan* (I.D. SAC20350).

PHASE DESCRIPTIONS

There are two build alternatives in addition to the no-build alternative: Alternative 1, "Don't Move the Depot"; and Alternative 2, "Move the Depot." The build alternatives are identical in design for Phase 1 and Phase 2 and differ only in the design of the ultimate SITF in Phase 3. The improvements proposed in Phase 1 and Phase 2 are independent of the future

decision of whether or not to move the Depot. The Phase 1 track relocation activities do not depend on the implementation of Phase 2, nor do the Phase 1 improvements foreclose alternatives (location and size) of the Phase 2 improvements. Similarly, neither the Phase 1 nor Phase 2 improvements depend on or foreclose the alternatives for the future implementation of Phase 3, irrespective of the future decision to relocate the Depot.

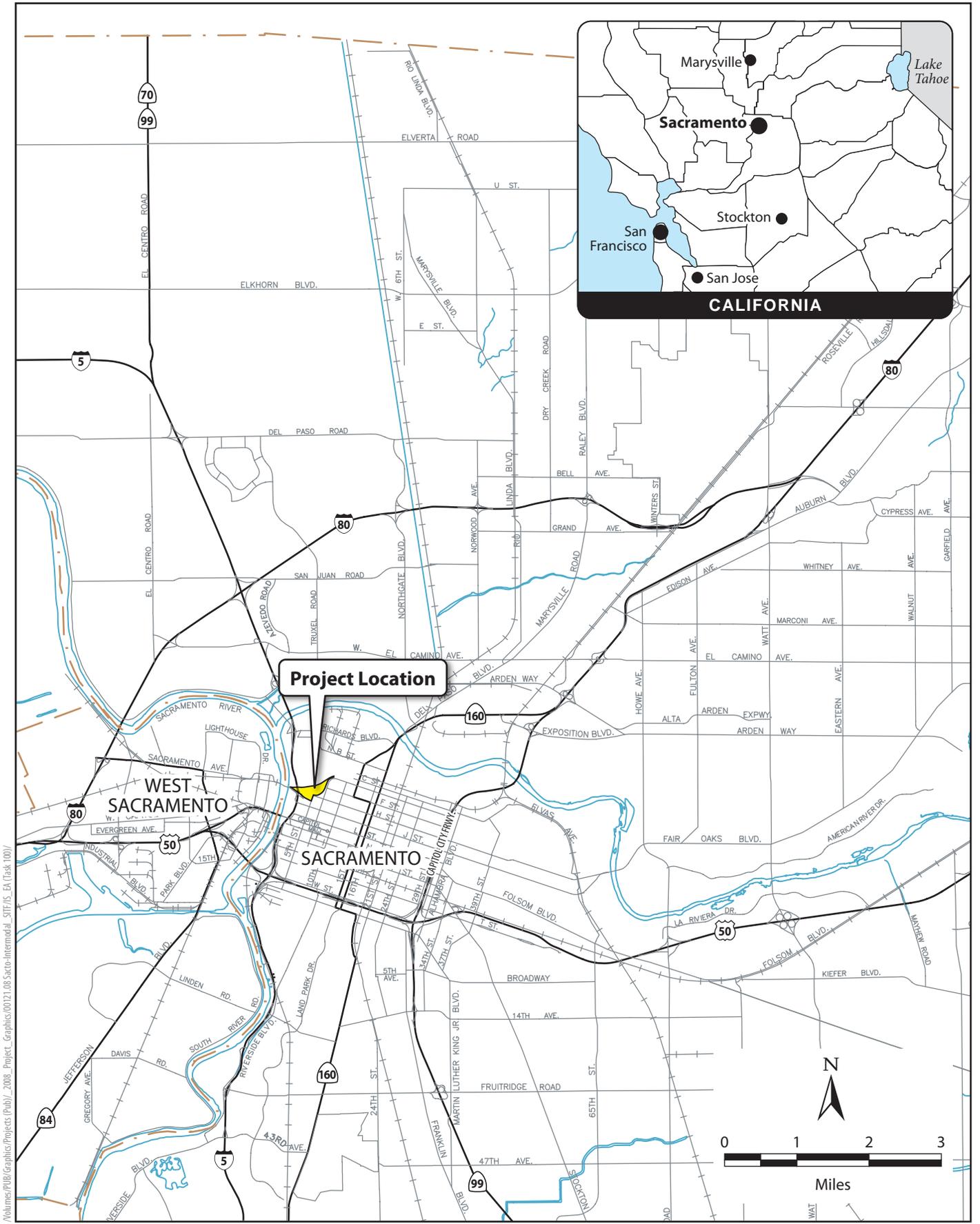
For all phases, construction staging, equipment lay down, and access and material storage for all work would occur within the project footprint or on existing access roads. Track installation materials would be brought in by rail. Phase 1 would be constructed and fully operational in 2010. Phase 2 would be able to start construction in the first quarter of 2011, after the completion of Phase 1, and would have an approximately 3-year construction duration. Phase 3 would start construction and proceed depending on the alternative selected and the availability of funding.

Phase 1—Track Relocation

Phase 1 consists of the following components, which are identical for both build alternatives (Figure 3). (The build alternatives are discussed below.)

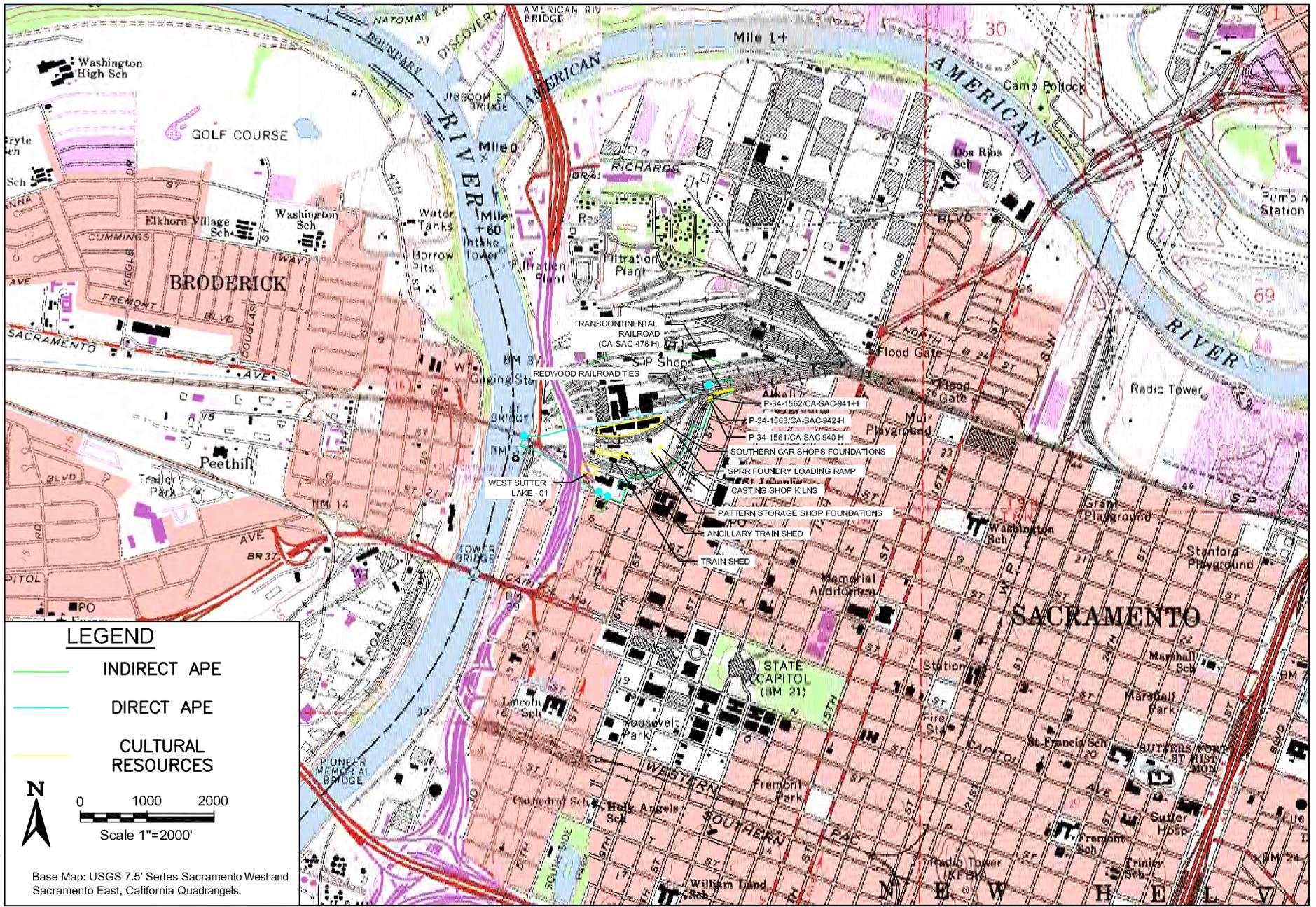
- Preparing the new alignment for relocation of the existing mainline freight and passenger tracks.
- Installing new freight tracks, new passenger tracks, and associated equipment within the platform area.
- Constructing new double-sided passenger platforms.
- Constructing a new passenger platform tunnel under the relocated tracks.
- Constructing a pedestrian/bicycle walkway from the passenger platform tunnel to the Depot building on the south side of the rail corridor.
- Constructing the pedestrian ramp and staircase from the passenger platform tunnel to the north side of the rail corridor opening into the north side of the rail corridor.
- Constructing a service access pathway from the Depot to the proposed new passenger tracks, consisting of an at-grade crossing of the tracks on the west side of the platforms, the service roadway between the platforms, and the paved drive between the Depot and the at-grade crossing.
- Removing the existing mainline tracks and passenger platforms behind the Depot once the new track alignment is operational. The ramps to the platform that are part of the existing pedestrian tunnel at the Depot would be subsequently connected to the new at-grade walkway.

The *Sacramento Railyards Specific Plan* (RSP) environmental impact report (EIR) previously evaluated the Phase 1 components at a project level of detail (PBS&J 2007; PBS&J/EIP 2007). The City is currently using federal funding for preliminary engineering for Phase 1. The City is securing state funding for relocating the tracks and the other improvements and is pursuing federal funding for Phase 1 from the Federal Railroad Administration (FRA),



Volume/PUB/Graphics/Projects (Pub)/_2008_Project_Graphics/01021_08.Sacro-Intermodal_STE/IS_EA (Task 1001/

Figure 1
Project Vicinity



00121.08 (7/08)

Figure 2
Project Location

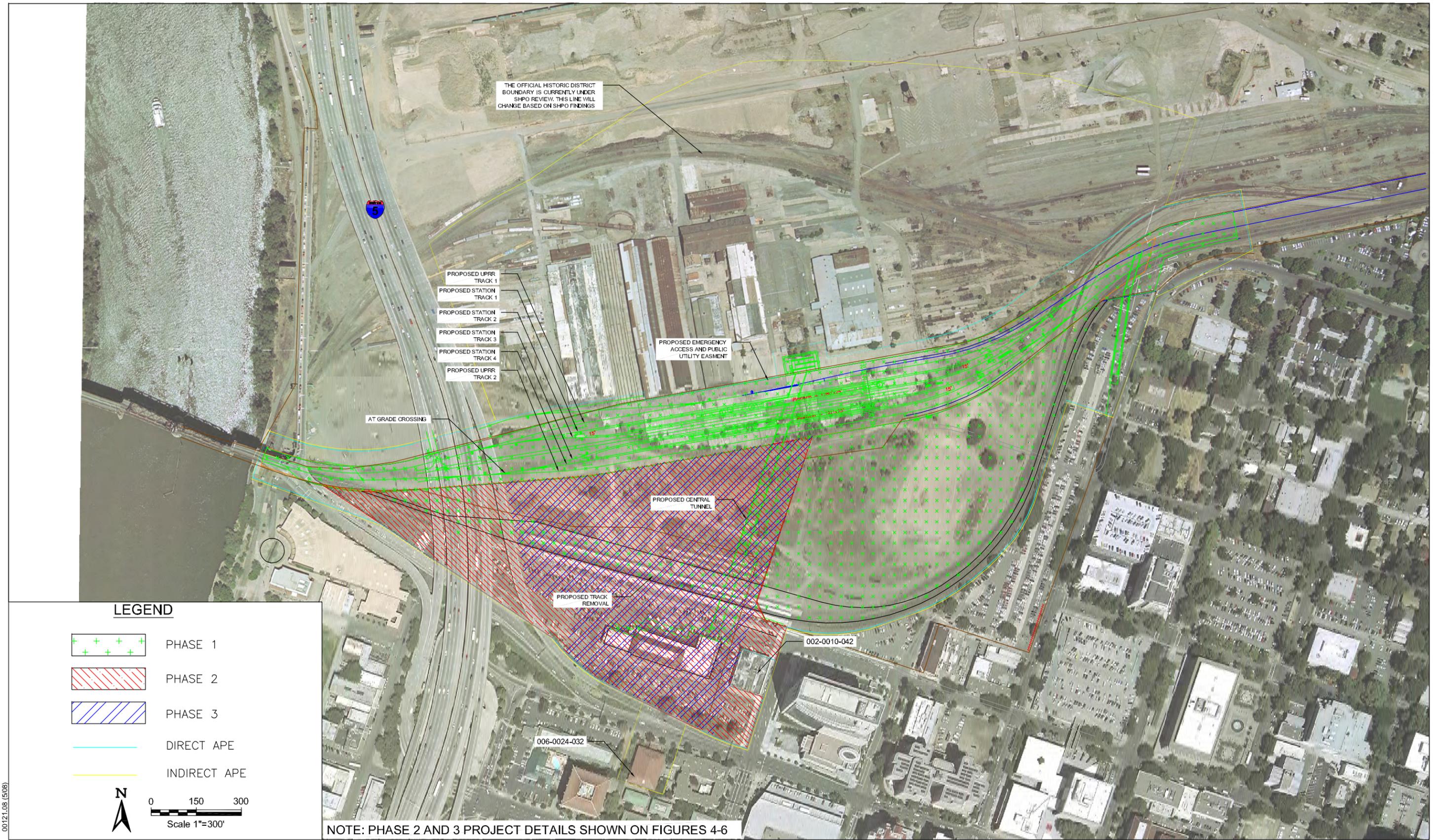


Figure 3
Project Detail

00121.08 (5/08)

pending completion of the environmental documentation for National Environmental Policy Act (NEPA) compliance. Following NEPA approval, the City would commence construction in late 2009–early 2010.

Phase 1 Components

The draft engineering conceptual submittal contains a detailed description of the track work details and the components of the passenger platform facilities. A general description of the Phase 1 work is provided below.

Track Work

New tracks, switches, and equipment would be installed within the relocated UPRR alignment for a distance of approximately 0.75 mile (mi), as shown in Figure 3. The relocated tracks would be installed approximately 600 feet (ft) north of the current tracks at the Station. Freight tracks would be installed on the outer north and south sides of the alignment, and the passenger tracks would be located within the interior of the track corridor. Excavation to install the new trackage would be 3 ft below the present ground surface. The width of excavation would be 5 ft from either side of the track centerline. Measured from the outside excavation offset for the northernmost and southernmost tracks, the maximum width of excavation (immediately south of the Central Shops) would be 162.5 ft. After the new tracks were operational, the existing tracks would be removed, soil remediation would be undertaken as needed, and the ground level would be restored to grade. Excavation for track removal also would not extend deeper than 3 ft below ground surface and also would include a 5-ft-wide offset from the centerline of existing trackage. The depth of excavation required for soil remediation is unknown, depending entirely upon the results of contaminant testing. The realigned tracks on the west portion of the corridor would be designed to accommodate the California State Railroad Museum's need for a continued rail connection between its sites in Old Sacramento and the Central Shops buildings that are used for locomotive maintenance and repair.

Utilities

An existing underground utility easement is located on the north side of the track realignment within the UPRR right-of-way. The existing storm drain and water systems would be upgraded and relocated to this utility corridor. The project is expected to possibly include some relocation of wet and dry utilities that serve the existing Shops buildings and existing Depot building, so that these facilities can remain in use. Where possible, existing utilities would be left in place until new replacement facilities could be built. New wet and dry utilities to serve the relocated platforms are included as part of this project. The project also would include provisions for utility corridors for utilities that need to pass through the footprint of the track relocation project. New utilities associated with this project are envisioned as underground utilities. Abandoned utilities buried more than 3 ft below ground surface would be left in place.

Utilities buried up to 3 ft deep would be removed. Design and depth of excavation for placement of new and relocated utilities are not complete at this time.

New Platforms and Passenger Platform Tunnel Connections

Two new, straight, double-sided passenger platforms would be constructed adjacent to the relocated passenger tracks. The platforms would range from 1,200 to 1,600 ft in length and would be approximately 25 ft wide, which is much wider than the existing platforms, to accommodate more passengers and baggage and to improve accessibility for disabled passengers. In comparison, the existing platforms vary in length and width; the longest is about 960 ft long, and the width ranges from approximately 10 to 15 ft. The new, 323-ft-long passenger tunnel underneath the relocated platforms would include ramps and possibly stairs on the north side of the corridor that would connect at grade in the adjacent Railyards development. The ramp on the south side would connect to grade and to a pedestrian walkway leading to the Depot. The tunnel, ramps, and pedestrian walkway would comply with the Americans with Disabilities Act (ADA). The asphalt walkway would have no cover or landscaping as part of Phase 1. The new passenger platform tunnel ramps may be configured to accommodate baggage carts. Baggage service between the Depot and the new platforms would be by carts that travel at grade from the Depot and cross the tracks along the west side of the site. Baggage carts also would use the pedestrian tunnel. Amtrak prefers to have both options for its baggage service; secondary baggage access from the central tunnel to the ramps would be equivalent to the existing tunnel and could accommodate only carts with a maximum of two trailers. These carts also would carry disabled passengers who are unable to walk to the passenger platforms, consistent with current operations, using either the west side crossing or the passenger platform tunnel. Excavation for construction of the new passenger platforms would not exceed 5 ft in depth. Excavation for the new passenger tunnel would be 20 ft deep and 40 ft wide.

Phase 2—Sacramento Valley Station Improvements

Phase 2 would consist of improvements to the existing Station that would upgrade its facilities and relocate transportation uses for more efficient operations, including improvements to the existing Depot. The Phase 2 improvements are needed currently, have independent utility, and would contribute to the transportation goals of the overall project over their lifespan. Phase 2 consists of the following components (Figures 3–4).

- Relocating, reconfiguring, and repaving/restriping the existing Regional Transit (RT) and Amtrak bus berths.
- Relocating the existing light rail transit station to a north-south alignment on the eastern edge of the site as planned by RT, which would create better internal site circulation and proximity to the bus berths and to the long-distance passenger rail service from light rail trains.
- Providing enhanced passenger connections, including walkway upgrades (e.g., street furniture, a shade/weather covering, landscaping/lighting) from the new



Figure 4. Phase 2 - Sacramento Valley Station Improvements
 For more information see the Project Description in the Environmental Documents

July 2008



Source: SMWM/Arup



passenger platforms to the Depot and a tunnel extension that connects the existing Depot tunnel and the new passenger platform tunnel constructed in Phase 1.

- Relocating and reconfiguring passenger vehicle and bicycle parking to accommodate existing parking demand and to improve the drop-off area in front of the Depot.
- Upgrading the electrical system at the station and within the Depot that meets functional needs and requirements.
- Providing a transit way along the north side of the site connecting the west side access point to the extension of F Street to facilitate bus circulation on site and provide shortcuts separate from congested city streets.

Phase 2 Components

Regional Transit and Amtrak Bus Berths

The existing RT and Amtrak bus berths would be relocated and reconfigured from their current east-west orientation on the north side of the Depot to a north-south orientation west of the relocated light rail station to improve passenger access from the passenger rail platforms, the at-grade walkway, and the light rail station. The bus area would be a combination of front-in and platform-sided berths and would provide a similar number of spaces as are currently available. Permanent structures providing weather protection for the buses, passenger benches and shade structures, lighting, and similar enhancements would be incorporated into the relocated bus loading area. The bus berths would consist of paving and striping.

Light Rail Station Relocation

The existing light rail station would be relocated as planned by RT to improve internal circulation and proximity to the bus berths and the rail platforms. Currently, the Gold Line of the light rail terminates at a station located immediately north of the Depot along the H Street alignment. RT long has planned to relocate this existing station to accommodate its planned Downtown-Natomas-Airport (DNA) project routing through the proposed project site. The tracks and shelters at the light rail station were designed to be relocated. RT's draft program EIR (Sacramento Regional Transit 2007) for the DNA project assumed relocation of the tracks and light rail station as necessary for the DNA project's viability, and the City and RT have entered into an agreement already to provide for such a relocation.

This light rail station would be a major station and transfer point along the DNA line. In this area, from south to north, its ultimate routing would extend generally from H Street north along an alignment west of 5th Street to the future extension of F Street planned for in the RSP. Then light rail trains would travel east on F Street to 7th Street. To accommodate RT's future project, the existing light rail station would be rebuilt to orient in a north-south alignment on the east side of the proposed project area. The Phase 2 improvements would consist of the construction of a single light rail side platform and a single track and removal of the existing

station and tracks after relocation of light rail operations to the new station. RT would construct a second track and platform at this light rail station in the future as part of its DNA project.

Enhanced Passenger Connections

Enhancements, such as benches, street furniture, a shade/weather covering, landscaping, and lighting, would be provided for the at-grade walkway. These improvements also would serve as the bus waiting area upon relocation of the bus berths. The existing tunnel north of the Depot (that now connects to the existing passenger platforms) would be extended to the new passenger platform tunnel constructed during Phase 1. This tunnel also would be used for baggage carts and “Red-Cap Service,” which provides passenger carts to transport mobility-challenged passengers to the trains, consistent with ADA requirements. The ramp access to the north from the central tunnel would not handle baggage carts, but the access to the south toward the Depot would handle baggage carts.

Passenger Parking and Site Access

The existing parking facilities would be relocated and reconfigured to accommodate existing parking demand and to expand the size of the drop-off area in front of the Depot, including the work described below.

- Reconfiguration of the existing parking lot under Interstate 5 and creation of new parking between the former track alignment and the relocated tracks, to provide approximately 180 parking spaces.
- Provision of temporary access from 2nd Street for this reconfigured parking lot under the freeway.
- Construction of an interim surface parking lot in the area north of the existing Depot and the new rail corridor to provide approximately 400–450 spaces. This parking would replace the spaces currently located in front of the Depot and the two lots along H Street and along 7th Street next to the existing tracks, which are privately owned and scheduled for redevelopment in the RSP, after implementation of Phase 1 of the proposed project.
- Provision of a bicycle service area, such as a bicycle station, offering services and secured bicycle storage for cyclists, on site.

Depot Rehabilitation

During Phase 2, the Depot building would be rehabilitated to upgrade core building systems and infrastructure. Rehabilitation would focus on replacing the station’s existing electrical system, which is worn, outdated, and beyond repair and cannot accommodate any additional loads. The proposed work includes:

- providing an electrical room with new transformers, switchboards, panels, and related equipment in accordance with codes and recommended practices;
- providing subpanels, conduits, and distribution systems throughout the station to supply localized power and lighting; and
- rehabilitating the Depot in accordance with the Secretary of the Interior’s standards for rehabilitation.

Phase 3—Intermodal Improvements

Phase 3 consists of the transformation of the existing Station into a regional intermodal transportation center. Completed in 1926, the existing historic Depot building is a three-story facility with approximately 57,000 square ft consisting of passenger facilities and offices, an attic, and a basement. The Depot serves as the Station for Amtrak, Capitol Corridor, and San Joaquin Corridor passenger rail service; local bus and light rail service by RT; and parking managed by the City of Sacramento Department of Transportation. Although this facility is listed on the NRHP and is a cherished Sacramento landmark, as a rail station it is deficient in program space for operators and in amenities for passengers.

The ultimate SITF in Phase 3 would include a new terminal building to accommodate projected service providers and passengers. The approximate sizes of the terminal improvements are shown in Table 1, below, which provides the program space needs and approximate square footages for a typical intermodal facility plan, as proposed by the current transit operators at the Station. The joint development square footage ranges from 27,000 to 73,000 square feet.

Table 1. Assumptions for the SITF Terminal Program

Program Use	Square Footage
Ticketing	2,660
Baggage	5,758
Waiting area	25,146
Passenger amenities	10,553
Administration and employee uses	60,632
Joint development	22,762
Total	127,511

SMWM/Arup and Associated Consultants 2004.

Phase 3 Components

Common Components to Both Build Alternatives

The following features are common to both build alternatives considered for Phase 3 (Figure 5 and 6).

- Both build alternatives would include a new terminal building with passenger waiting areas, baggage drop-off and pickup, ticketing, and other passenger services to accommodate additional service providers (such as local and regional bus operators, Greyhound, trolley service, regional rail service, and high-speed rail). The new terminal also would provide for unmet travel-related passenger needs (such as food and services purveyors) and the needs of service providers (office lessees). Additional passenger ticketing and waiting areas would be needed to serve expansion and transit ridership growth for current operators (such as increased Capitol Corridor service), as well as new operators (such as regional rail).
- Upgraded connections, including a possible pedestrian overcrossing linking the new terminal building, passenger platforms, and Central Shops area, to supplement the tunnel connections constructed in earlier phases.
- State-of-the-art baggage services and ticketing for passenger rail and regional bus operators.
- Improved site access points and circulation, including west-side access, an extension of the H Street alignment, and other on-site roadways.
- Renovation of the historic Depot in accordance with the Secretary of the Interior's standards for rehabilitation, including relocating the ticket counter to its original location, restoring openings and building features, and other measures to enable areas to be functional.
- Upgraded bicycle access and storage facilities and passenger drop-off areas.
- On-site parking structures to meet future needs for additional parking, particularly for long-distance travelers and those who need to park close to their destinations.
- Passenger amenities focusing on Amtrak, RT, and possibly Greyhound customers (such as restrooms, telephones, food and vending service, custodial service, and an internal circulation system).
- Expanded local bus berths and waiting areas.
- Administrative operations and employee office areas.
- Plazas, public open spaces, passenger amenities, landscaping, and pedestrian connections.
- Way-finding, signage, and information systems.
- Public services and infrastructure as required for the facility.

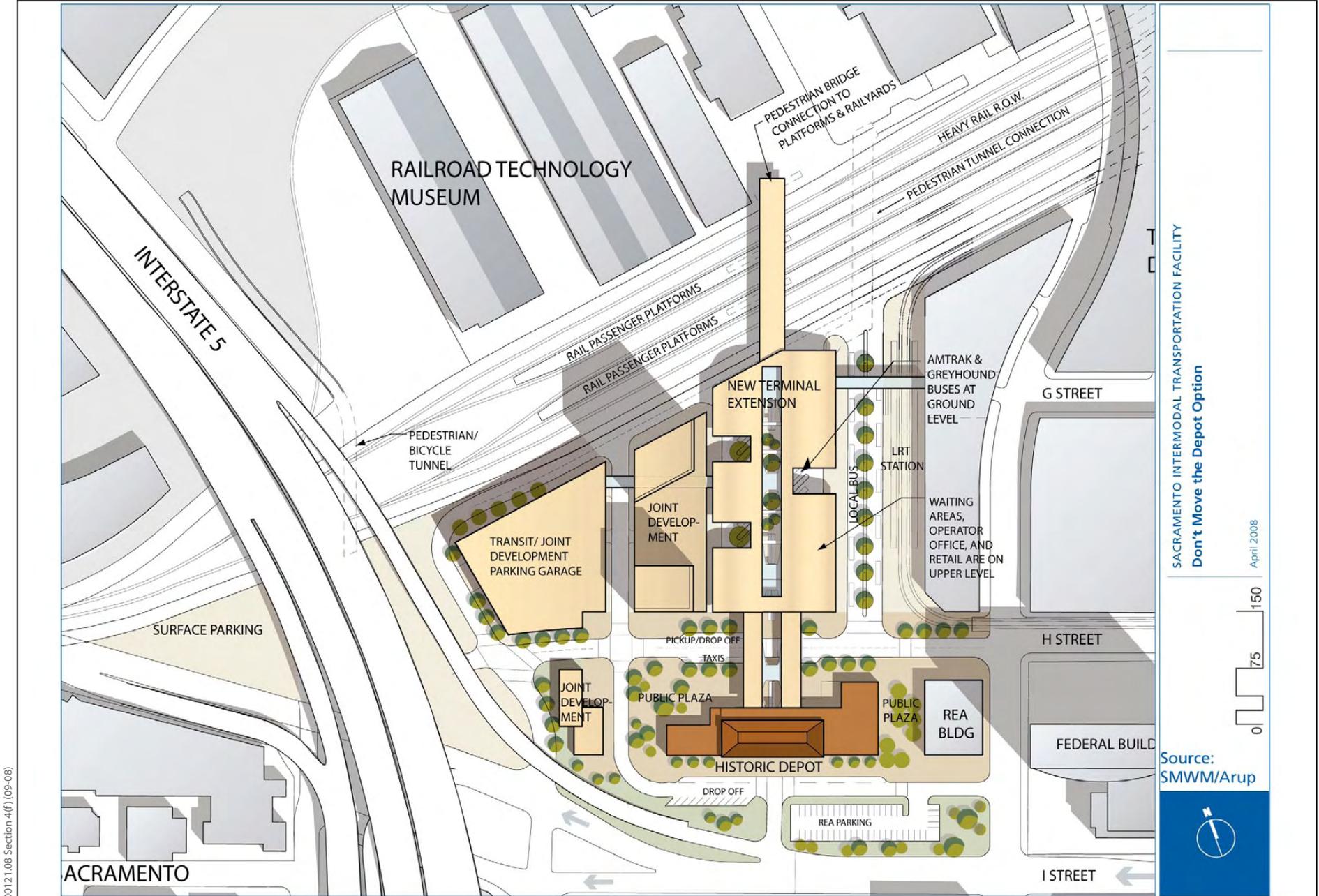
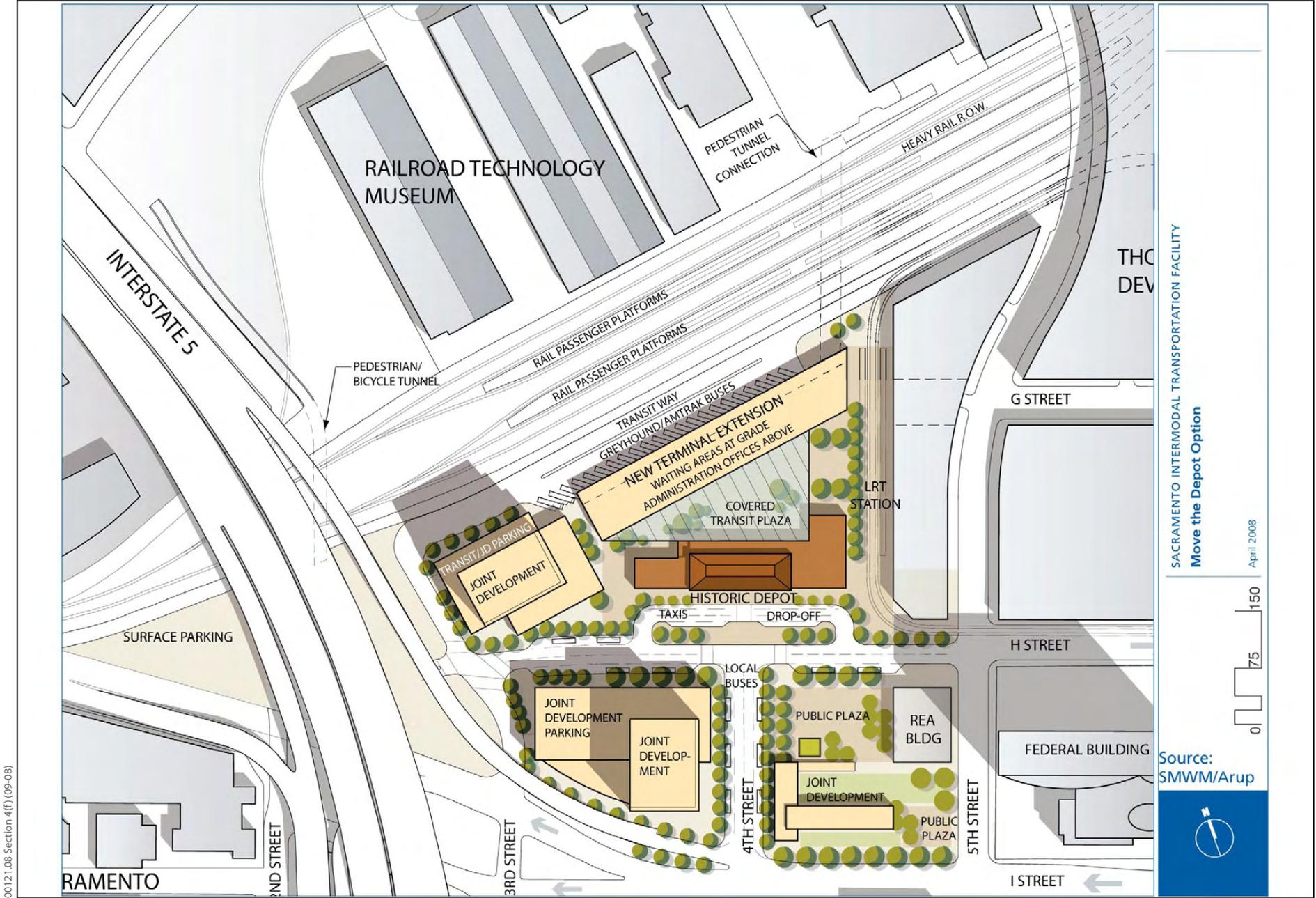


Figure 5
Phase 3 - Don't Move the Depot Option



00121.08 Section 4(f) (09-08)

SACRAMENTO INTERMODAL TRANSPORTATION FACILITY
Move the Depot Option
 April 2008

0 75 150

Source: SMWM/Arup

Figure 6
Phase 3 - Move the Depot Option

- Access to and from the surface parking areas for users and to and from the bus area for transit would be reconfigured to match Phase 3 site development.

Components Specific to the “Don’t Move the Depot” Alternative (Alternative 1)

In Alternative 1 (Figure 5), additional major features in Phase 3 would consist of those listed below.

- Expanded regional bus (Greyhound) and Amtrak bus facilities in a multilevel concourse north of the existing Depot that would contain ticketing, administrative and waiting areas, leased support areas, and direct vertical connections to the bus boarding.
- A concourse with skywalk (upper level) connections to the second floor of the existing Depot, to commercial development to the east, and to future joint development and parking structures to the west.
- A bridge overcrossing extending from the concourse level across the rail corridor to the passenger platforms and to the Central Shops.
- Multilevel terminal areas with overlooks, open and enclosed roof areas, landscape planters extending through levels, passenger walkways, way-finding measures, and other user-friendly features.
- Modifications to the local bus area developed in Phase 2 to accommodate increased berths.
- Upgrades and adjustments to the location of the passenger walkway between the Depot and the passenger rail platforms immediately to the west of its existing location, including improved cover, landscaping, and urban design features.
- On-site building pads for a parking structure used for transit passenger parking.

Alternative 2: “Move the Depot”

Under Alternative 2 (Figure 6), the Depot would be relocated to the north adjacent to the realigned tracks, convenient to multiple modes of transportation. Moving the Depot would ensure that it would become the anchor for the new Depot District and generally would shorten the connections between passenger modes. The new Depot District plan would enhance and emphasize the stature of the Depot by making it the centerpiece of the development, creating an open public entrance plaza oriented to I Street, and framing it with joint development. The joint development would visually buffer the project’s public spaces from Interstate 5 to the west.

The new transit facility would be composed of two distinct building elements: the rehabilitated Depot and a new terminal extension. Although the majority of the operator-requested program would be retained inside the Depot building, the terminal extension would provide pre-boarding waiting rooms for bus and rail passengers and other transit-related program elements, as well as spaces for joint development. An underground ramp would provide

passenger access from the terminal extension to the rail platforms. A covered open-air landscaped plaza would connect the terminal extension and the historic Depot.

The multiple modes of transit would be organized in two broad categories: Local city-level connections, such as light rail and local buses, would be located adjacent to pedestrian plazas and streets, while regional transit such as intercity (Greyhound) bus and passenger rail (Amtrak) would be grouped together adjacent to the rail tracks and bus arrival/departure zones for ease of passenger connection and efficiency for the operators. The arrangement of transit operations would allow for convenient transfers among all operators within minimal walking distance.

Alternative 2 would be implemented in three phases, as described below.

Phase 1: Track Relocation

The improvements for Phase 1 under this alternative would be the same as those described above for Alternative 1 (Figure 3).

Phase 2: Sacramento Valley Station Improvements

The improvements for Phase 2 under this alternative would be the same as those described above for Alternative 1 (Figure 4).

Phase 3: Intermodal Improvements

Under Alternative 2, Phase 3 consists of components similar to those described for Alternative 1, but in a different design (Figure 6).

- Converting the existing Station into a large, multimodal regional transportation facility that integrates a classic transportation building and a new terminal.
- Expanding bus bays.
- Expanding baggage facilities.
- Constructing multiple waiting areas.
- Expanding site features that serve passengers and providers.
- Meeting sustainable design objectives.

The ultimate intermodal facility in Phase 3 would include a new terminal building to accommodate projected service providers and passengers. The approximate size of the terminal

improvements are shown in the Table 1, which provides the program space needs and approximate square footages for a typical intermodal facility plan, as proposed by the current transit operators at the Station. The joint development square footage ranges from 27,000 to 73,000 square feet.

Components Common to Both Build Alternatives

See the description of components common to both alternatives described above under Alternative 1.

Components Specific to Alternative 2

Under Alternative 2 (Figure 6), additional major features constructed in Phase 3 would consist of the following.

- Relocation of the existing Depot building approximately 650 ft to the north; the building would be jacked and rolled onto a new foundation—see SMWM/Arup and Associated Consultants (2008) in Appendix A for an explanation of the building relocation procedure.
- Construction of a new terminal building for Amtrak and Greyhound buses, baggage, and administrative and leased support areas situated across a plaza from the newly relocated historic Depot.
- A modified passenger/baggage tunnel between the terminal/Depot and the passenger platform tunnel.
- Transit parking on the former Depot site.
- Modification of certain Phase 2 improvements, such as in the parking on-site and areas south of the original station location and between the old and new station sites, as required.
- Relocation of the local bus area to on-street bus berths south of the terminal area.

AREA OF POTENTIAL EFFECTS

The APE is indicated in Figure 7. The APE for this undertaking was established by Caltrans in accordance with Stipulations VI.B.7 and VIII.A of the PA. Most relevant to this report, the direct APE follows the maximum possible area of direct impact resulting from the proposed project, including all new construction, easements, and staging areas. An ADI for Phase 1 also is delineated in Figure 7 because much of the direct APE would not be excavated during Phase 1.

The horizontal and vertical limits of the ADI were defined in consultation with TranSystems, the project engineering firm, and via examination of 30-percent design plans (TranSystems 2008a, 2008b). The horizontal limits are depicted in Figure 7, whereas the vertical limits of the ADI are described below.

- Track removal: Excavation would not exceed 3 ft below present grade.
- New track construction: Excavation to prepare surface for trackage would not exceed 3 ft below present grade.
- Pedestrian tunnel construction: Excavation would be 20 ft below present grade within a 40-ft-wide corridor. The tunnel would extend from its northern terminus at the Central Shops to a point 323 ft south, at which point excavation would not exceed 3 ft in depth to accommodate the Depot–tunnel pedestrian walkway.
- Buried utilities: Excavation to remove buried utilities would not exceed 3 ft below current grade. Utilities buried deeper than 3 ft would be abandoned in place.

In consideration of the two proposed build alternatives under consideration for Phase 3 of the SITF, the APE for potential indirect effects (e.g., visual, auditory, and vibratory) includes parcels adjacent to the direct APE that contain buildings, structures, or objects of sufficient age to warrant evaluation for listing in the NRHP (see the project HRER [ICF Jones & Stokes 2008]). Because of the extended lead time for construction of Phase 3, the project HRER considers any building constructed in or prior to 1972.

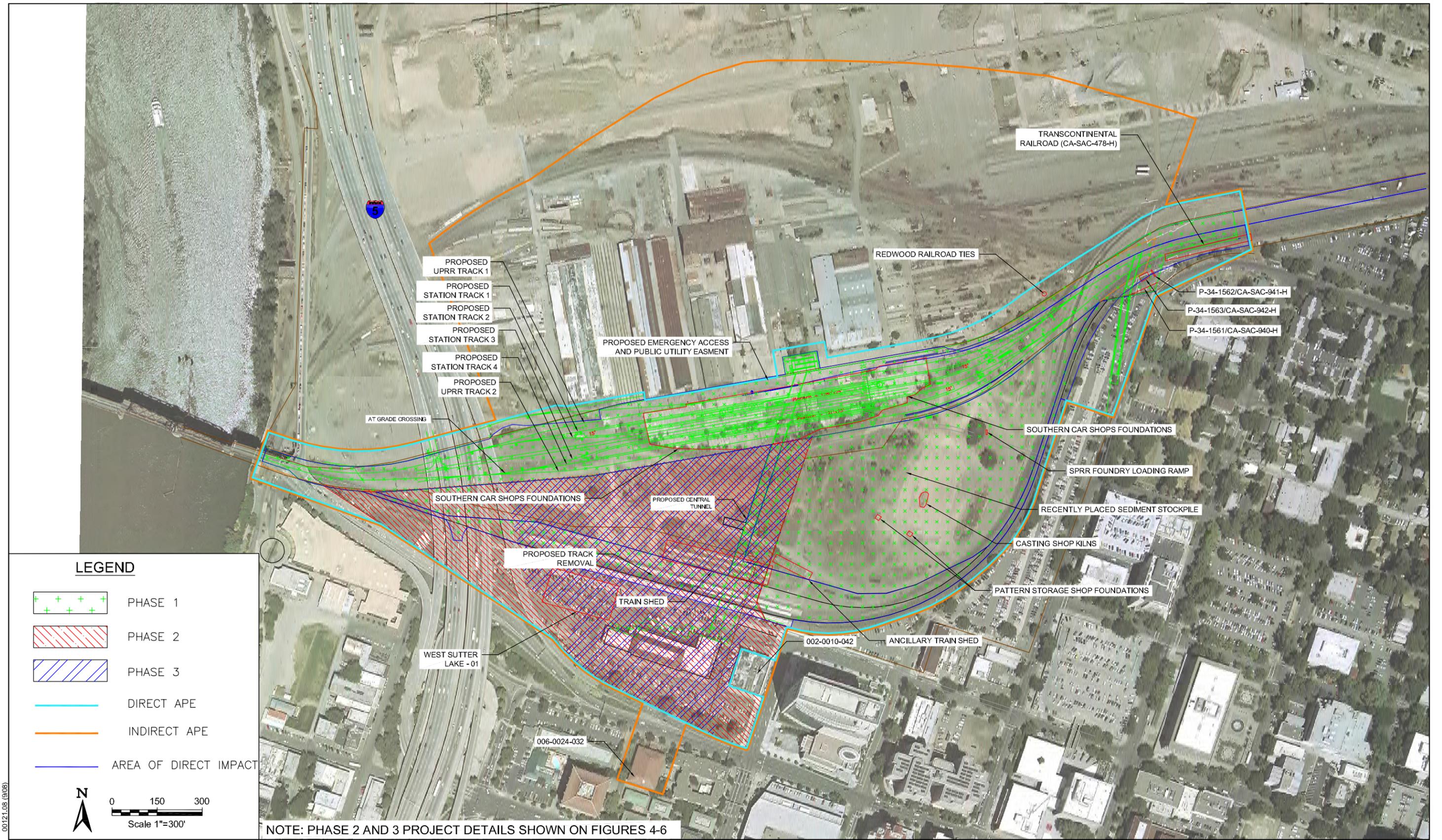
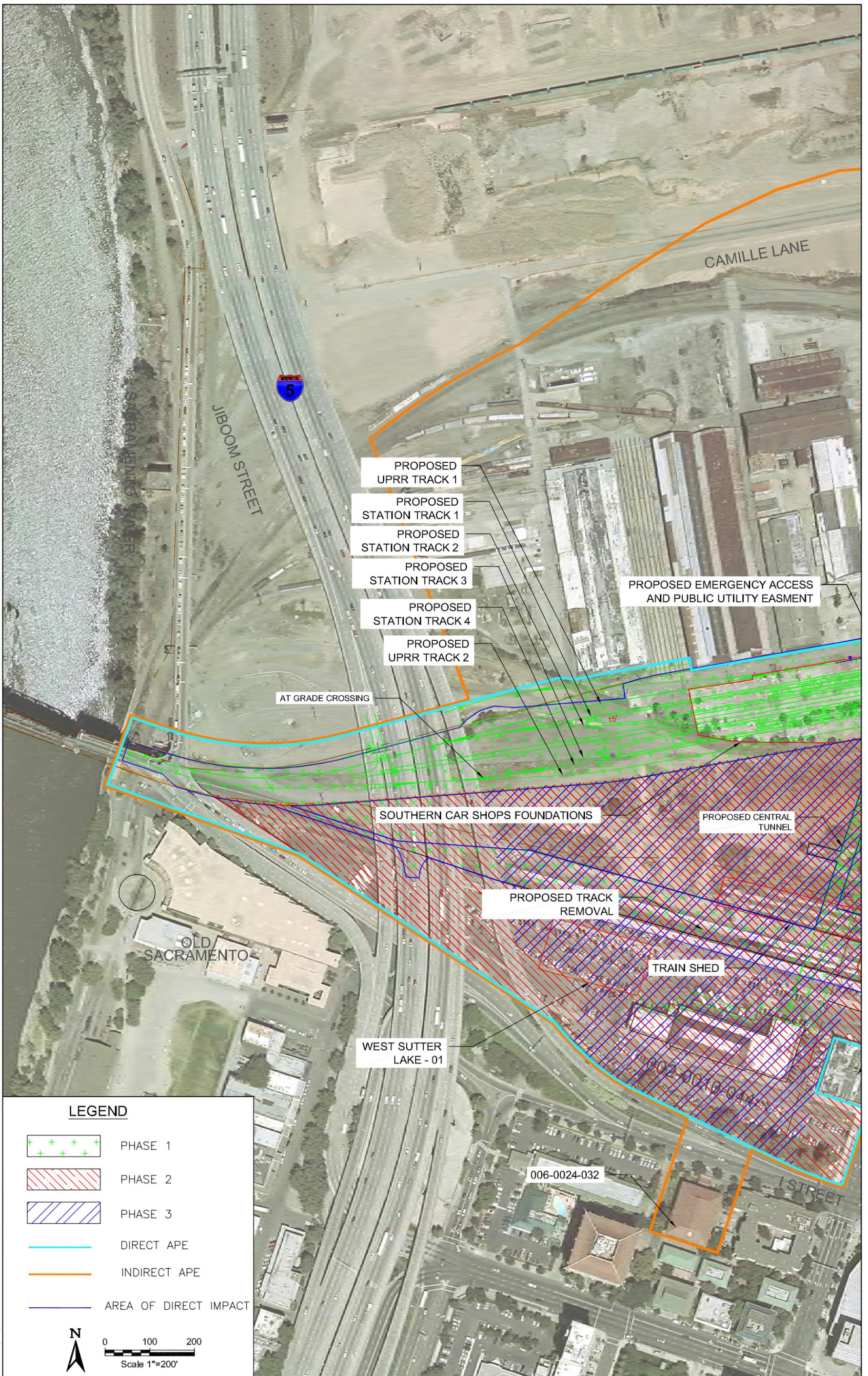


Figure 7a
Archaeological Survey Coverage and Known Cultural Resources

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Figure 7b
Archaeological Survey Coverage and Known Cultural Resources

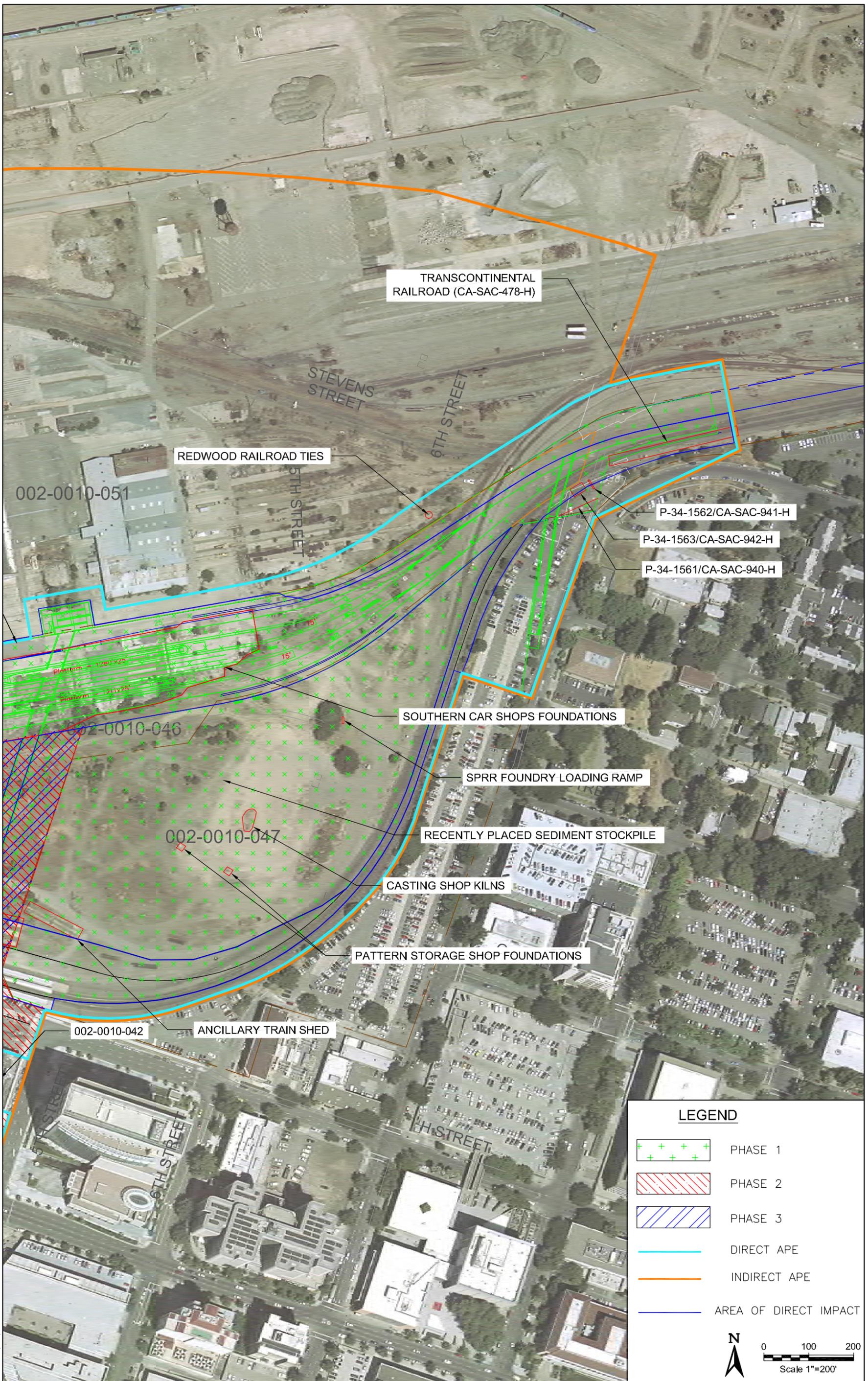


Figure 7c
Archaeological Survey Coverage and Known Cultural Resources

Chapter 3. Sources Consulted

RECORDS SEARCH AND LITERATURE REVIEW

On May 28, 2008, ICF Jones & Stokes archaeologist Dylan Stapleton conducted a records search at the NCIC of the California Historical Resources Information System (Record Search Number SAC-08-73; see Appendix B). The records search was conducted for the APE as well as a 0.25-mi buffer surrounding the APE. Sources consulted included base maps marked with the locations of previous cultural resource studies and known cultural resources. In addition, the following sources were consulted:

- *California Inventory of Historic Resources* (California Department of Parks and Recreation 1976 and updates),
- *California Points of Historical Interest* (California Department of Parks and Recreation 1992 and updates),
- *California Historical Landmarks* (California Department of Parks and Recreation 1996 and updates),
- *Survey of Surveys* (Office of Historic Preservation 1989)
- *Gold Districts of California* (Clark 1970),
- *California Gold Camps* (Gudde 1975),
- *California Place Names* (Gudde 1996),
- *Historic Spots in California* (Hoover et al. 1966; Hoover et al. 1990),
- *Official Register Containing Structures of Architectural or Historical Significance* (City of Sacramento 1983),
- *Directory of Properties for Sacramento County* (Office of Historic Preservation 2008:33–56),
- the NRHP (National Park Service 2008),
- the California Register of Historical Resources (CRHR) (2008),
- Caltrans Local Agency Bridges and State Bridges Inventories (1987 and 2000), and
- historic maps (Sacramento Archives and Museum Collection Center 2002).

In addition to the records search, ICF Jones & Stokes consulted historic maps, photographs, and lithographs of the APE and vicinity (Baker 1854; Elliott 1890; Fire Department of the City of Sacramento 1857; Koch 1870; Ray 1873; Sanborn Map Co. 1915:Sheets 3–6, Sanborn Map Co. 1951; Sanborn-Perris Map Co. 1895:Sheets 4a–6b; Southern Pacific 1920).

The records search indicates that 40 previous cultural resource studies have been conducted in and adjacent to the APE (Table 2).

Table 2. Previous Cultural Resource Studies in and adjacent to the APE

Author/Reference	Location with Respect to APE	Title/Type of Study	Notes
Henley 1974	In APE	NRHP nomination	Southern Pacific Railroad Company's Sacramento Depot
McGowan et al. 1979a	Adjacent (HI56 Block)	Literature review of historic block development	Cited in A. Praetzellis and M. Praetzellis 1990a:2
McGowan et al. 1979b	In APE (HI34 Block)	Literature review of historic block development	Cited in A. Praetzellis and M. Praetzellis 1990a:2
McGowan et al. 1979c	In APE (HI45 Block)	Literature review of historic block development	Cited in A. Praetzellis and M. Praetzellis 1990a:2
Brienes, West and Schulz 1981a ^a	Adjacent (HI56 Block)	Archaeological research design	Cited in A. Praetzellis and M. Praetzellis 1990a:2
Brienes, West and Schulz 1981b ^a	In APE (HI34 and HI45 blocks)	Archaeological research design	Cited in A. Praetzellis and M. Praetzellis 1990a:2
Brienes, West and Schulz 1981c ^a	Adjacent (IJ56 and IJ67 blocks)	Archaeological research design	Cited in A. Praetzellis and M. Praetzellis 1990a:2
City of Sacramento Planning Department and Sacramento Old City Association ^b	In APE (Central Shops)	Citywide historic inventory (1981)	Referenced in Office of Historic Preservation 1989:40
M. Praetzellis and A. Praetzellis 1982	Adjacent (HI56 Block)	Historic archaeological excavation	
A. Praetzellis and M. Praetzellis 1989	In APE (the Station)	Cultural resource assessment (literature-based)	
A. Praetzellis and M. Praetzellis 1990a	In APE (Central Pacific Railroad [CPRR]/SPRR Railyards)	Records search, historical research, and cursory survey	Negative archaeological survey
A. Praetzellis and M. Praetzellis 1990b	In APE (CPRR/SPRR Railyards)	Records search, historical research, and survey	Negative archaeological survey
Linda Peirce Associates 1990 ^a	In APE	Historic architectural survey	Cited in JRP Historical Consulting 2007:13
Lindström 1990	In APE	Literature review and windshield survey	

Author/Reference	Location with Respect to APE	Title/Type of Study	Notes
Lindström 1991	Adjacent	Literature review and windshield survey	Surrounds APE
M. Praetzellis and A. Praetzellis 1991	In APE	Archaeological research design	
Praetzellis et al. 1993	Adjacent (federal courthouse and 5th and H Street extensions)	Archaeological research design	
Historic Environment Consultants 1998	In APE (CPRR/SPRR Railyards)	Historic architectural inventory	
JRP Historical Consulting Services and Far Western Anthropological Research Group 1999	In APE (the Station)	Cultural resource inventory	No archaeological survey in APE
Gross 2000	In APE (CPRR/SPRR Railyards)	Cultural resources assessment for the Railyards soil remediation	Records search, literature review, monitoring plan
Historic Environment Consultants 2000	In APE (CPRR/SPRR Railyards)	Historic architectural inventory	
Ziesing 2001; Carey & Co. 2001; Praetzellis et al. 2000	In APE (7th Street Extension Project)	Cultural resources inventory	
Baker and Dougherty 2001	In APE (linear survey along western margin of APE)	Cultural resource inventory	Negative archaeological survey
Dougherty et al. 2002	In APE (Central Shops)	Historic American Engineering Record study	
Boghosian 2002	In APE (REA building)	Historic American Buildings Survey study	Cited in EIP Associates 2004:6.2-2
Parsons 2002	In APE (the Station)	Cultural resources inventory	No archaeological survey
Carey & Co. 2003	In APE (REA building)	Cultural resources inventory and evaluation	Cited in EIP Associates 2004:6.2-1
Gross 2004	In APE	Archaeological monitoring	
Hope 2004a	In APE (bridge overcrossings in western portion of APE)	Historic bridge inventory	
Architectural Resources Group 2006	In APE	Central Shops adaptive reuse study	
Carper 2006 ^a	In and adjacent to APE (the Station and northwest corner of H Street/6th Street intersection)	Archaeological discovery response and excavation	Cited in Walker et al. 2006:G-6, G-23

Author/Reference	Location with Respect to APE	Title/Type of Study	Notes
Tremaine and Nelson 2006	In APE (7th Street Extension Project)	Archaeological testing (presence/absence and evaluative) and monitoring	
Walker et al. 2006	In APE	Program-level sensitivity assessment for Railyards	Records search, historical research
JRP Historical Consulting 2007	In APE	Historic architectural inventory	
Rich and Valpey 2007	In APE (Central Shops)	City of Sacramento historical nomination	
Walker et al. 2007	In APE (CPRR/SPRR Railyards)	Records search, literature review	
Wyatt 2007	In APE (Central Shops)	NRHP nomination of Central Shops	
Tremaine & Associates 2008	In APE (the Station)	Archaeological monitoring	Construction monitoring, presence/absence excavation

^a This source was not found during the NCIC records search.

^b This citywide inventory of historic buildings and structures did not result in a formal report, but a series of individual historic resources inventory (HRI) forms; the HRI forms covering the Central Shops are included in ICF Jones & Stokes 2008.

These previous studies vary in scope and purpose, falling into nine general types of study:

- historic contexts and overviews;
- archaeological research designs, typically concerning historic archaeological resources;
- historical archaeological excavations;
- cultural resource/archaeological sensitivity assessments;
- cultural resource assessments with limited field studies (cursory level, windshield survey);
- construction monitoring and archaeological discovery response;
- intensive cultural resource inventories;
- historic structure inventories; and
- historic resource nominations and mitigation studies.

Table 2 shows that numerous previous studies discussed the cultural resources potential of all or a portion of the former CPRR/SPRR Railyards, with the emphasis typically being the

Central Shops buildings and structures. Archaeological studies within the APE were conducted for projects related to the Railyards as well as unrelated projects. Most previous archaeological assessments have been primarily literature-based reviews; only A. Praetzellis and M. Praetzellis (1990a, 1990b) have conducted an archaeological survey of the entire direct APE as defined for the present undertaking. No archaeological resources have been recorded in the APE as a result of previous pedestrian surveys.

Tremaine and Nelson (2006), on the other hand, through electromagnetic surveying, map research, presence/absence testing, and construction monitoring, recorded four archaeological resources in the direct APE:

- 7th Street Historic-Era Refuse Deposit (P-34-1563/CA-SAC-942-H);
- 7th Street Railroad Trestle Bents (P-34-1562/CA-SAC-941-H);
- 6th Street Levee (P-34-1561/CA-SAC-940-H); and
- Chinese artifacts, railroad refuse, and prehistoric isolate (West Sutter Lake-01).

In 2006, Tremaine & Associates documented a noteworthy Nisenan archaeological site adjacent to the direct APE, at the northwestern corner of the H Street–6th Street intersection. The site was discovered while an RT construction crew excavated a trench eastward through Sutter Lake fill along H Street. At approximately 9 ft below the ground surface and corresponding with the eastern margin of Sutter Lake (beneath modern and historic street fill placed in the nineteenth century for flood protection), two Native American burials, six cremations, and human bone in isolated and disturbed contexts were identified, along with a large house pit—possibly a dance house. The house pit contained well-preserved grass matting, which appears to be part of the structure’s collapsed roof. A ¹⁴C assay obtained from the house pit yielded an age estimate of 340±20 B.P. East of the house pit, construction monitoring resulted in the identification of hearth features nearer to the present street level. The hearths are found closer to street level because as one heads east on H Street, the elevation increases slightly, and the blocks east of the H Street/6th Street intersection were not raised to 9 ft above the original ground surface. It should be noted that these archaeological manifestations were identified within a utility trench where surrounding pavement precluded the determination of site boundaries beyond the trench. Therefore, archaeological materials associated with this site may extend into the southeastern corner of the direct APE. (Kim Tremaine, personal communication 2008.) Given the shallow depth (3 ft) of excavation involved in the track relocation relative to the depth of fill in the southeastern corner of the direct APE, however, this archaeological site (at 9 ft below ground surface) does not extend into the ADI.

In total, previous cultural resource studies resulted in the recordation of nine cultural resources in the APE, the majority of which are historic buildings, structures, and archaeological sites (Table 3). In addition, five prehistoric archaeological sites have been recorded in downtown Sacramento: CA-SAC-34, CA-SAC-36, CA-SAC-37, CA-SAC-38, and an unnumbered site at 5th and H streets (Gross 2000:Figure 4; Walker et al. 2006:G-6). The close proximity of the APE to the latter discovery and CA-SAC-38 is especially consequential to an assessment of the prehistoric archaeological sensitivity of the APE. Both sites were identified beneath 9–10 ft of historic fill (that is, 9–10 ft below the present street surface). CA-SAC-38,

once recorded as occupying the Cesar Chavez Plaza block, was found to extend north to the northern edge of H Street during excavation for the new city hall building and parking garage. Clearly, the APE has the potential to contain prehistoric archaeological deposits below the historic-period fill covering the area. High historic archaeological sensitivity for the APE is indicated, with numerous historic archaeological deposits and building foundations having been identified in the Railyards. Historic archaeological deposits and structural remnants in the Railyards are located beneath and within historic fill layers (Gross 2004; Jones & Stokes 2007a, 2007b; Tremaine & Associates 2008; Tremaine and Nelson 2006; Kim Tremaine, personal communication 2008).

NATIVE AMERICAN CONTACTS

On May 23, 2008, ICF Jones & Stokes requested (via electronic mail) a search of the Sacred Lands File and a list of local Native American contacts from the Native American Heritage Commission (NAHC). ICF Jones & Stokes followed up with a facsimile request on August 19, 2008, because no response had been received by that time. The NAHC responded by facsimile on August 20, 2008, indicating that the Sacred Lands File contained no record of Native American cultural resources in the APE. The NAHC also provided contact information for four individuals and one organization to correspond with concerning cultural resources. On August 27, 2008, ICF Jones & Stokes mailed letters, with project maps, describing the proposed undertaking and requesting direct communication about cultural resources information and project concerns. Follow-up telephone calls were placed on September 24, 2008. No responses to the letters or phone calls have been received to date. All items of correspondence with Native Americans are presented in Appendix C.

HISTORICAL SOCIETY CONTACTS

Historical society contacts are described in the HRER for this project (ICF Jones & Stokes 2008).

Table 3. Previously Recorded Cultural Resources in the APE

Resource Name	Resource No.	Location/Notes	In Phase 1 ADI?	Management Status	Reference
Sacramento Southern Pacific Railroad Company Station District/Sacramento Valley Station and Railway Espress Agency (REA) Building	P-34-1004	Amtrak Depot, 401 I Street (Railyards)	Yes	NRHP-listed	Boghosian 2002; Carey & Co. 2003; EIP Associates 2004; Gueyger 2002; Henley 1974; Historic Environment Consultants 1981, 1998, 2000; Parsons 2002
Jibboom Street Overhead	P-34-1374	Bridge 24C0006	No	Ineligible for NRHP listing; not a CEQA historical resource	Hope 2004a, 2004b
I Street Viaduct	P-34-1375	Bridge 24C0364L	No	Ineligible for NRHP listing; not a CEQA historical resource	Hope 2004a, 2004c
7th Street Historic-Era Refuse Deposit	P-34-1563 (CA-SAC-942-H)	North of 7th Street/D Street intersection	No	Recommended as ineligible for NRHP listing; destroyed during construction	Tremaine and Nelson 2006; Tremaine et al. 2002a
7th Street Railroad Trestle Bents	P-34-1562 (CA-SAC-941-H)	North of 7th Street/D Street intersection	Yes	Recommended as eligible for NRHP listing; CEQA historical resource	Tremaine and Nelson 2006; Tremaine et al. 2002b
6th Street Levee	P-34-1561 (CA-SAC-940-H)	North of 7th Street/D Street intersection	Yes	Recommended as eligible for NRHP listing; CEQA historical resource	Tremaine and Nelson 2006; Tremaine et al. 2002c
Transcontinental Railroad	CA-SAC-478-H	Unrecorded segment	No	Unrecorded segment unevaluated	
Historic artifacts, railroad refuse, and prehistoric isolate	West Sutter Lake-01	Tip of former Slater's Addition, vicinity of Station light rail tracks	No	Unknown	Carper 2006, cited in Walker et al. 2007:G-23; Tremaine & Associates 2008
Southern Pacific Railyards Historic District/Central Shops District		401 I Street	No	Meets NRHP criteria; listed on the Sacramento Register (City of Sacramento 1983)	Historic Environment Consultants 1981; Rich and Valpey 2007; Wyatt 2007

Chapter 4. Investigative Resume

ICF Jones & Stokes archaeologist Gabriel Roark prepared this ASR with the assistance of ICF Jones & Stokes archaeologist Andrea Nardin. Mr. Roark holds a B.A. in anthropology (archaeological emphasis) from California State University, Sacramento, and has 9 years of professional experience in California archaeology and cultural resources management. Mr. Roark conducted an archaeological reconnaissance of the direct APE on June 27, 2008. Mr. Roark meets Caltrans' criteria for lead archaeological surveyor. Ms. Nardin holds an M.A. in anthropology (bioarchaeological and paleopathological emphasis) from Ohio State University and a B.A. in anthropology from the University of California, Davis. Ms. Nardin has 7 years of professional experience in California archaeological and cultural resources management. She meets Caltrans' criteria for lead archaeological surveyor.

The *Depositional Environment of the APE* was written by ICF Jones & Stokes geomorphologist Jeff Peters, with assistance from the principal author. Mr. Peters holds an M.A. in geography from the University of Oregon and a B.A. in geology from Colby College. Mr. Peters has assisted ICF Jones & Stokes archaeologists with geomorphologic and geoarchaeological investigations in the Central Valley.

Chapter 5. Setting

ENVIRONMENT

Overview and Climate

The proposed undertaking is in the Sacramento Valley, the northern half of California's Central Valley. This area is primarily defined as a hydrographic unit—the contiguous watershed drained by the Sacramento River and its tributaries. This vast drainage stretches 384 mi, from the headwaters in the northern Sacramento Valley to the Sacramento–San Joaquin River Delta. These watercourses moved alluvium from the Sierra Nevada and the Coast Ranges to cover the Cenozoic nonmarine basement rocks of the valley (Schoenherr 1992:518, 520).

Before Euro-American settlement of the Sacramento Valley, the dominant native vegetation in the valley consisted of *Nassella pulchra*, or purple needlegrass (Heady 1977). This perennial grass is the distinctive and characteristic species for the Central Valley prairie. Plant succession cycles in the prairie tended toward perennial bunchgrasses, such as purple needlegrass, on all well-drained upland sites (Heady 1977). Although purple needlegrass is a quintessential and indicator species for the California prairie, the valley supported a mosaic of other plant communities. In particular, the numerous waterways bisecting the valley supported many riparian species. Common riparian species are willow (*Salix* sp.), buttonbush (*Cephalanthus occidentalis*), California sycamore (*Platanus racemosa*), and Fremont's cottonwood (*Populus fremontii*).

Native fauna in the region included pronghorn antelope (*Antilocarpa americana*), deer (*Odocoileus hemionus*), jackrabbit (*Lepus californicus*), California ground squirrel (*Spermophilus beecheyi*), kangaroo rat (*Dipodomys heermanni*), pocket gopher (*Thomomys bottae*), and tule elk (*Cervus elophus nannodes*). The development of subspecies and strains unique to the Central Valley among this fauna suggest a long association between the floristic and faunal communities (Heady 1977).

The Holocene environment of the region was characterized by a general warming trend that subsumed episodes of relatively cool climates. Most paleoclimatic reconstructions for the Central Valley are based on Ernst Antevs' (1948, 1953, 1955) three-part global climatic sequence. The sequence spans the Holocene, consisting of the moderately cool/moist Anathermal (ca. 10,000–7500 before present [B.P]), the warm and dry Altithermal (ca. 7500–4000 B.P.), and the Medithermal (ca. 4000 B.P. to present). Tree-ring growth chronologies from central eastern California, glacial chronologies, and pollen cores generally corroborate Antevs' sequence, with the caveat that California's Holocene environment exhibited regional variation (Adam 1967; Birkeland et al. 1976; Birman 1964; Curry 1969, 1970; Moratto et al. 1978; Šercelj and Adam 1975). Pollen diagrams from the Lake Tahoe and Yosemite areas indicate a vegetation shift that suggests a general increase in temperature from 9000 to 2900 B.P., although six relatively cool and moist periods, each lasting 400–1,500 years, punctuated the general warm

and dry trend (Moratto et al. 1978:150–151). Modern average temperatures vacillate between 56° and 62° Fahrenheit annually. Most precipitation occurs as rain: 5–25 inches per year.

Depositional Environment of the APE

Quaternary Evolution

The landscape in Sacramento County is the result of erosional and constructional processes acting on or affected by various geologic and constructional processes, which occurred in response to alternating changes in climate and fluctuating sea levels and were influenced by tectonic activities. In addition to periods of landscape instability during which the active processes of degradation and aggradation took place, periods of landscape stability also occurred (Shlemon 1972). The development or modification of the landscape in the area took place during the Pleistocene and Holocene epochs and was controlled by Pleistocene climate change, possibly superimposed on sediments deposited into a slowly subsiding basin (Shlemon 1972; Shlemon and Begg 1975). Along the lower American River, there is sufficient evidence to show that the region has passed through at least four cycles of landscape change within the last 600,000 years (Shlemon 1972).

Any amount of significant soil formation would have occurred only during interglacial periods, which are characterized by relatively stable landscapes (Shlemon 1972). During these periods of “landscape stability,” hydrologic variables of major rivers would have been adjusted so that terraces and interfluvies were neither significantly eroded nor aggraded. Soils would have had time to adequately form. As such, the soils and geomorphic conditions described herein would have formed since the Last Glacial Maximum, approximately 10,000 B.P.

Prehistoric Geomorphic Setting (pre-1860s)

The APE is located at the confluence of the Sacramento and American rivers (Figure 8). Both of these rivers had different geographic positions relative to their current positions—the ancestral Sacramento River was generally situated in its present position, although it was considerably wider; the ancestral American River was positioned farther south (immediately north of the Central Shops) (ERM 2002:Figure 1-5; Ray 1873). Prior to being filled, the APE contained two water bodies, specifically oxbow lakes. The northern lake was known as Willow Lake, and the southern was referred to as Sutter Lake, Sutter Slough, or China Lake. These lakes, their edges, and their associated adjacent marshlands made up what is now the APE. (Baker 1854; Elliott 1890; Fire Department of the City of Sacramento 1857; Koch 1870; Sacramento Archives and Museum Collection Center 2002; Sanborn-Perris Map Co. 1895:Sheets 4 and 5.)

In prehistoric times and the early historic period, both lakes were connected to the Sacramento and American rivers by narrow channels through which floodwaters flowed, creating lakes during high water periods and marsh-like conditions during lower water periods (Walker et al. 2006). Sutter Lake’s channels to the Sacramento and American rivers were breaches in the

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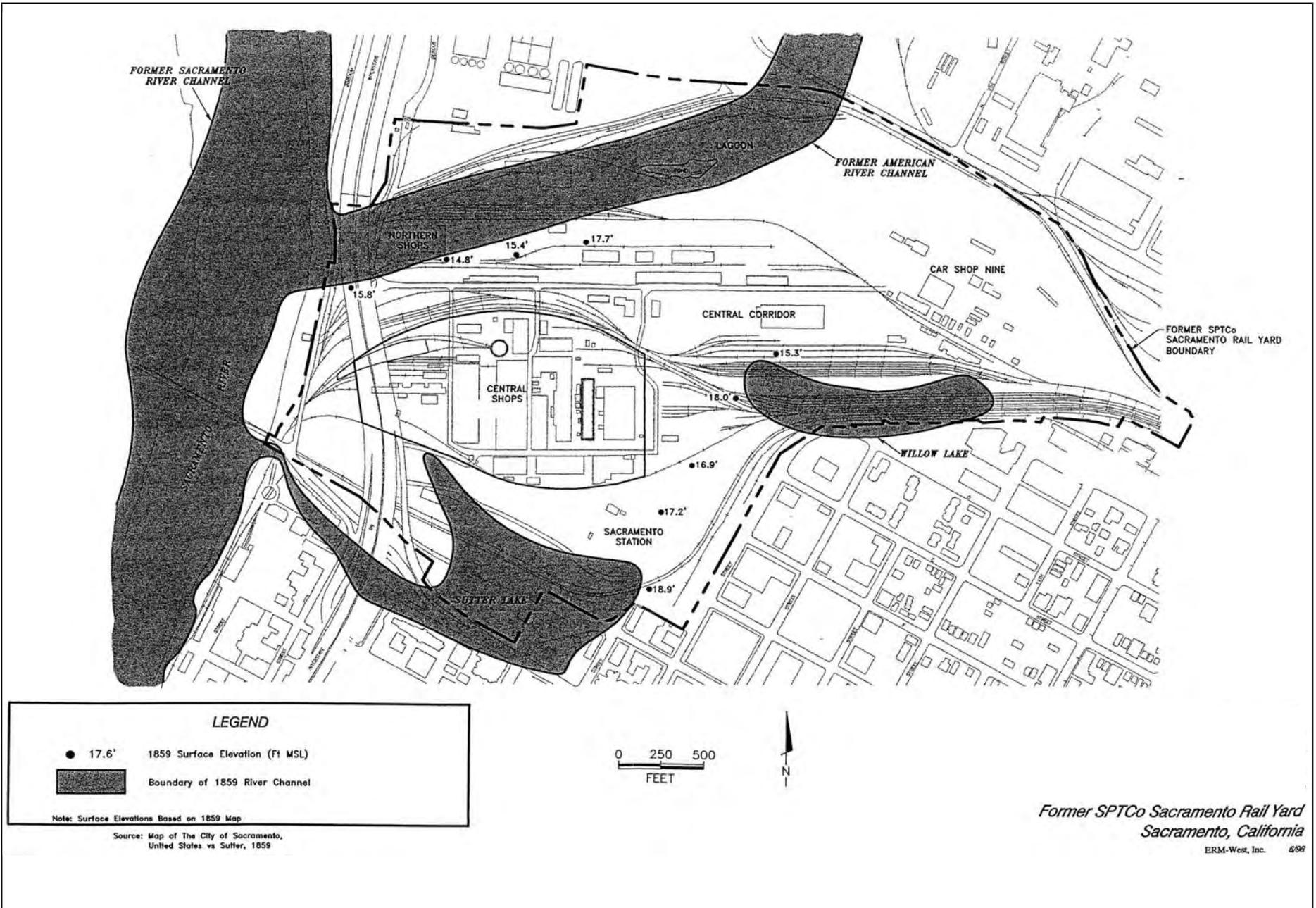


Figure 8
Former River Channel, Sutter Lake and Willow Lake Locations

natural levees along the rivers' banks (Walker et al. 2007). Low-lying marshes bordered Sutter Lake to the north, while woodlands encompassed the lakes on all other sides (Baker 1854; Elliott 1890; Fire Department of the City of Sacramento 1857; Koch 1870; Sacramento Archives and Museum Collection Center 2002; Ray 1873; Sanborn-Perris Map Co. 1895:Sheets 4 and 5). An area of high ground, which in the early historic period became Slater's Addition or the American Fork Addition, projected into the west side of Sutter Lake (Baker 1854; Fire Department of the City of Sacramento 1857; Koch 1870; Ray 1873).

According to the Rosgen Level I valley classification, the APE in prehistoric times was located in a Type X (10) valley system (Rosgen 1996). A Type X valley system indicates a very wide, alluvium-dominated river environment with an extensive floodplain containing lacustrine deposits, alluvial flats, or wetlands (or all three). Since the Last Glacial Maximum, stream gradients most likely decreased (relative to the previous glacial period) as the Sacramento and American rivers adjusted to an influx of glacial melt-water sediments (Shlemon and Begg 1975). Channel form most likely consisted of meandering and anabranching (meandering with stable island formation) rivers with slightly sinuous to sinuous planform. Based on general geomorphic principles relating to floodplain sedimentation (Schumm 1981), floodplain development in the project vicinity most likely consisted of lateral accretion of sediments on the edges of the rivers and vertical accretion of sediments farther out onto the floodplain.

As mentioned previously, in the prehistoric and early historic periods, Sutter and Willow lakes were connected to the Sacramento and American rivers by narrow channels through which floodwaters flowed, creating lakes during high water periods and marsh-like conditions during lower water periods (Walker et al. 2006). In general, inflowing channels control the physical sedimentation in lakes. Deposition of most of the sediment load is near the entry point of a lake in the form of deltas or fans. Bedload deposits are near the entry point and carry suspended load for varying distances into the lake. Although sediments fine outward into the lake, they coarsen upward as the lake fills (Davis 1983). In brief, the finest materials usually occur in the center of a lake, where the energy of deposition is lowest (Daniels and Hammer 1992). During high flow events, scour of the narrow channels and lakes would have been more pronounced. As floodwaters receded, sedimentation would have become the dominant geomorphic process.

Historic Geomorphic Setting (post-1860s)

Presently, the land surface in the APE is highly disturbed compared with prehistoric conditions. Rendering the area suitable for the Railyards and its associated buildings entailed the gradual filling of both Willow and Sutter lakes and the surrounding marshland. An impressive corpus of geotechnical tests and test logs numbering into the hundreds of individual tests (see Figures 9–12 for a portion of this work) reveals that the depth of fill deposits throughout the APE varies from 0.5 to 13 ft below ground surface.

Levees were constructed in phases starting as early as the 1850s. In 1862, the American River was rechanneled to meet the Sacramento River about 0.5 mi north of the Railyards property; the levees were strengthened; and, south and west of Sutter Lake, a decade-long effort of street-raising commenced. In some places, the streets were raised as much as 10 ft (Itogawa

1976:220–222; Lagomarsino 1976:199). Since the levee construction, the APE and surrounding area has still been subject to flooding. Flooding events have been marked primarily by deposition of overbank materials. Since 1905, the river has experienced several floods exceeding 90,000 cubic feet per second. These include flood events during the winter of 1927–1928, February 1986, and January 1997 (Redmond 2008).

Historic geomorphic river valley conditions were similar to those of prehistoric American River and Sacramento River geomorphology (Type X valley system). However, as Sutter and Willow lakes were filled, more levees were built and strengthened, and the American River was relocated to the north, the extensive floodplain sedimentation that dominated throughout the Holocene Epoch abruptly came to a halt. The APE and its surroundings became (and remain) a dry floodplain dominated by anthropogenic, not geomorphic, processes. Channel form now consists of meandering, channelized rivers with slightly sinuous planform with levees confining the channel in its position.

Topography and Surficial Geology

The alluvial deposits within the APE consist primarily of weathered and transported sedimentary, metamorphic, volcanic, and plutonic material derived from the Sierra Nevada mountain range to the east. The modern Sacramento and American rivers are incised into Pleistocene alluvium and terraces. Underlying these terraces and alluvial fans are several distinct gravel-filled channels laid down by ancestors of the present American River during the Pleistocene Epoch. (Shlemon 1972.)

The present-day, virtually flat topography of the APE is the product of land reclamation and early flood control efforts focused on Sutter Lake and the Sacramento and American rivers (Walker et al. 2007). The APE is located in one distinct geologic unit as identified by published geologic maps: Quaternary alluvium (Helley and Harwood 1985; Wagner et al. 1987).

Quaternary alluvial deposits are composed of loose to medium dense, unweathered gravel, sand, silt, and clay. These deposits form levees and floodplains east of the Sacramento River and south of the American River, respectively. It is estimated that these sediments were continuously deposited between 200 B.P. and 10,000 B.P. (Shlemon 1972.)

Soils and Stratigraphy

One distinct soil map unit as identified by the Soil Conservation Service (now called the Natural Resources Conservation Service) is present within the APE: Orthents-Urban land complex, 0 to 2 percent slopes (Tugel 1993). However, information about past depositional environments cannot be fully derived from the soil description for this soil map unit because of its anthropogenic alteration. Instead, subsurface stratigraphy provides the best insight.

The stratigraphy of the APE has been defined to a depth of approximately 250 ft below ground surface by ERM (2002:3-2 and 3-3) and subdivided into three general geologic

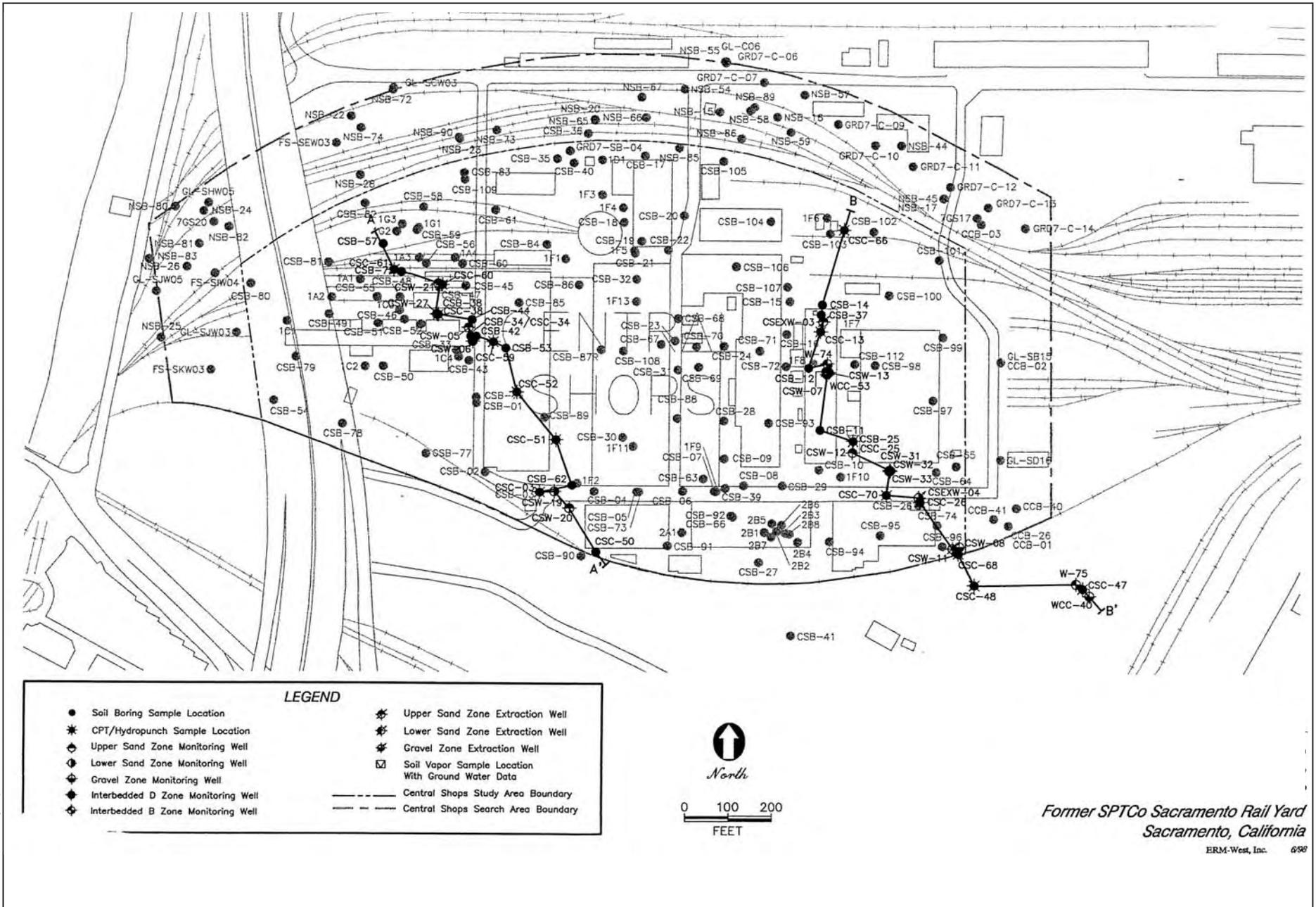


Figure 9
Geologic Cross Section Location Map

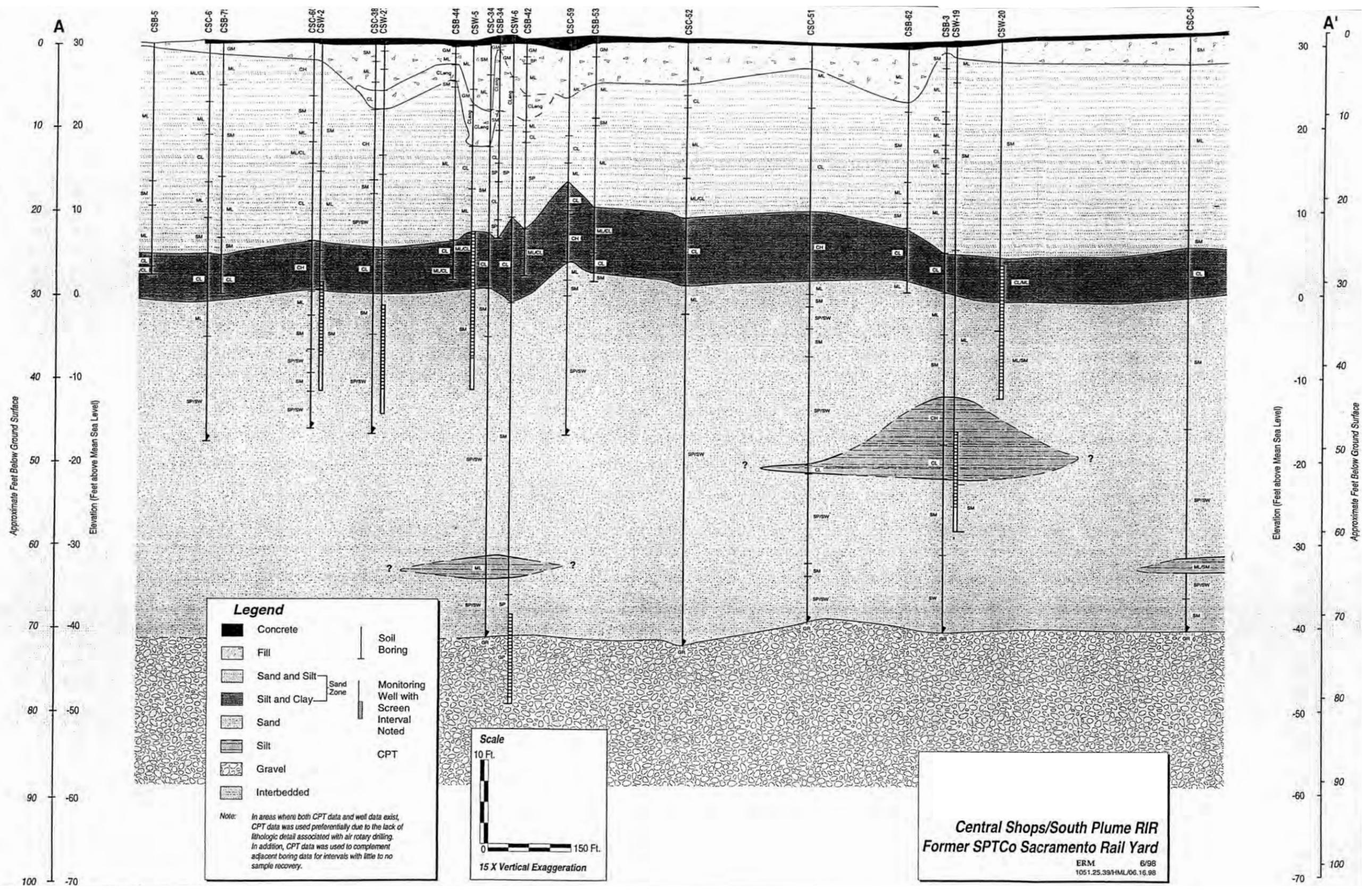


Figure 10
Geologic Cross Section A-A'

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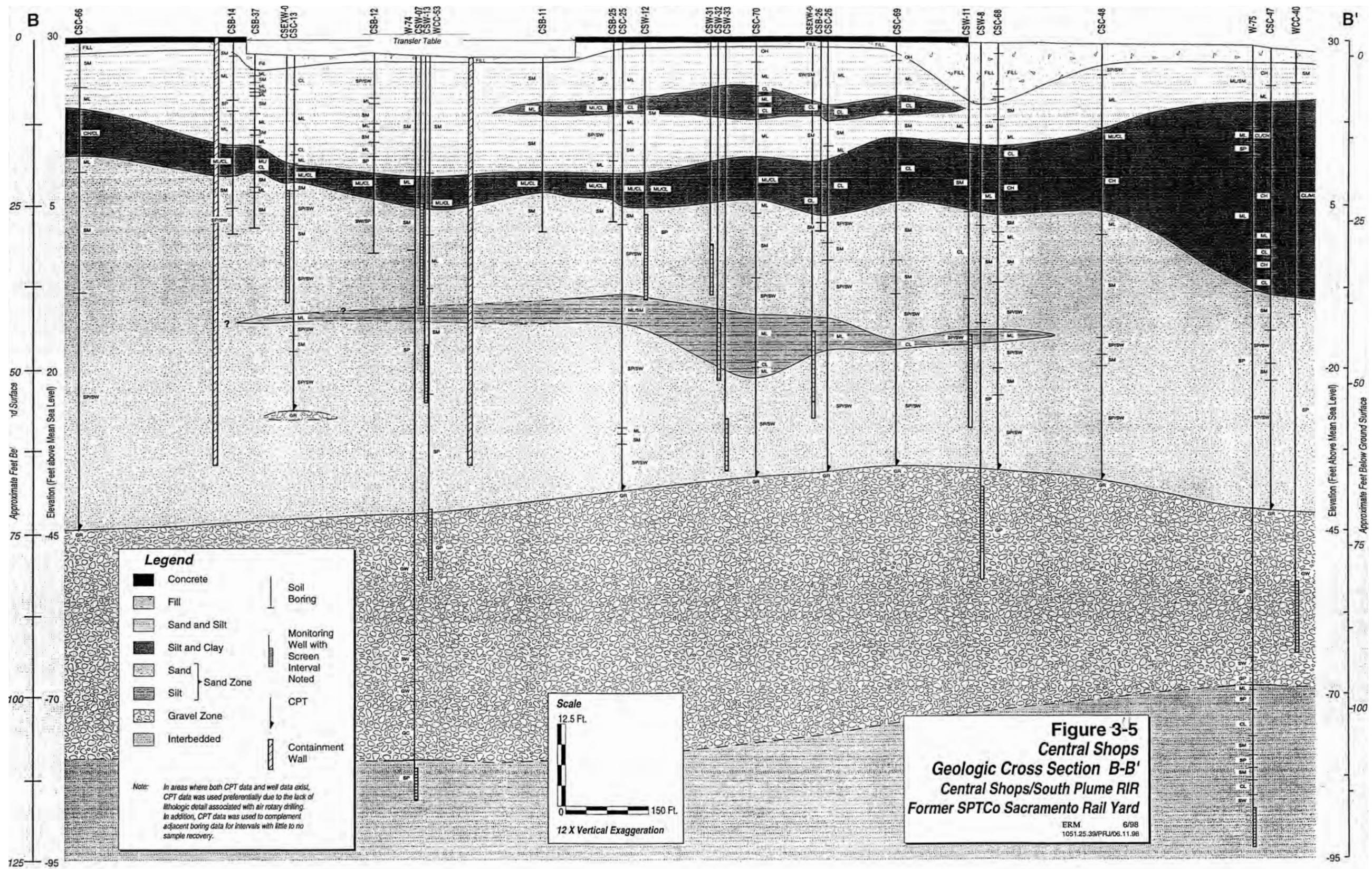
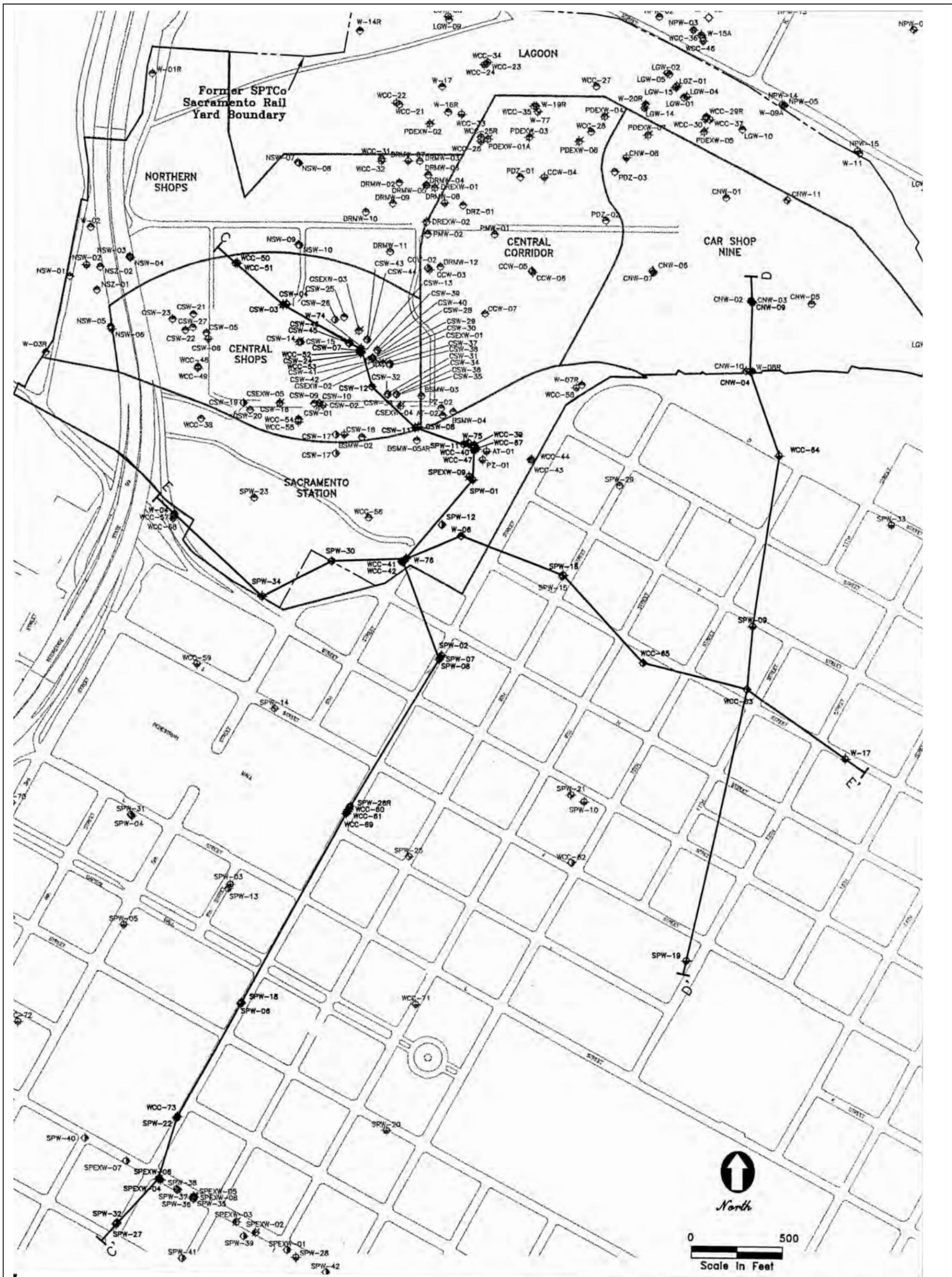


Figure 11
Geologic Cross Section B-B'



LEGEND

- SPW-32 Upper Sand Zone Monitoring Well
- SPW-41 Lower Sand Zone Monitoring Well
- SPW-38 Gravel Zone Monitoring Well
- NPW-01 Interbedded B Zone Monitoring Well
- NPW-03 Interbedded D Zone Monitoring Well

- PDEXW-04 Upper Sand Zone Extraction Well
- SPEXW-06 Lower Sand Zone Extraction Well
- SPEXW-05 Gravel Zone Extraction Well
- Former SPTCo Rail Yard Boundary
- Soil Study Area Boundary
- Geologic Cross Section Line

*Central Shops / South Plume RIR
Former SPTCo Sacramento Rail Yard
Former Sacramento, California*
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**Figure 12
Geologic Cross Section Location Map**

sequences (below the surface unit, or artificial Fill Sequence). These sequences have been further subdivided into hydrostratigraphic zones for the purposes of groundwater monitoring. In descending order, the stratigraphy encountered to a depth of 250 ft below ground surface has been broadly divided by ERM (2002:Figure 3-2) into the Fill, Fining Upward, and Interbedded sequences (Figures 10–11 and 13–15).

Fill Sequence

The Fill Sequence, originating at the ground surface, consists of imported material used to fill low-lying areas of the APE. According to historical information, the ground surface was raised prior to the construction of associated facilities in the project vicinity in 1863, and the source of the fill is believed to be primarily from the adjacent waterways—especially sand dredged during the rechannelization of the American River (Lagomarsino 1976; Severson 1973:108–111). The exact contact between the Fill Sequence and the original ground surface prior to infilling is difficult to determine and doubtlessly varies across the APE as a result of mild undulations present prior to filling. The Fill Sequence is defined by the presence of anthropogenic debris. The Fill Unit materials include gravel, sand, silt, and clay with occasional to frequent occurrences of brick fragments, wood fragments, concrete, slag, newspaper, and metal debris. Thickness of the Fill Unit ranges from 0.5 to 13 ft below ground surface. (ERM 2002:3-3 and 3-4; Figures 10–11 and 13–15.)

The stratigraphy of the Fill Sequence encountered in the soil investigation of the Central Shops area below the Fill Unit includes the Silty Sand Subunit and the Clayey Silt Subunit. The Silty Sand Subunit typically underlies the Fill Unit (described above) across the majority of the project area. It is characterized by interstratified fine sand and silt layers and locally can be clayey. The differentiation between the Fill Unit and the Silty Sand Subunit is based solely on the presence of anthropogenic debris; as such, the interface between the two units is not well-defined and is likely artificial. The thickness of the Silty Sand Subunit observed in Central Shops borings ranges from 5 to 26.5 ft. (ERM 2002:3-4; Figures 10–11 and 13–15.)

The Clayey Silt Subunit beneath the Silty Sand Subunit is composed of interstratified silts and clays and typically is found throughout the APE. The thickness of the Clayey Silt Subunit observed in Central Shops borings ranges from approximately 3 to 17 ft. Because of its occurrence at a consistent depth throughout the Project area, the Clayey Silt Subunit of the Fill Sequence is the first identifiable native soil layer. (ERM 2002:3-4; Figures 10–11 and 13–15.)

Fining Upward Sequence

The Fining Upward Sequence includes the hydrostratigraphic Sand and Gravel zones, which represent a thick sequence of saturated, unconsolidated alluvium. The hydrostratigraphic Sand Zone consists of three lithologic units that display a generally fining-upward trend from the underlying hydrostratigraphic Gravel Zone. (ERM 2002:3-5.)

In descending order, the hydrostratigraphic Sand Zone includes clay, silty sand, and sand. The upper portion of the hydrostratigraphic Sand Zone (the clay lithologic unit) is characterized by brown to grayish-green silt and clay with generally discontinuous sand intervals. This unit contains natural organic matter and root casts. The thickness of the clay unit varies considerably. The silty sand portion is characterized by silty fine to medium-textured sand. It is absent in many areas and is generally less than 20 ft thick where it does occur. The sand unit is characterized by medium to coarse sand that is occasionally gravelly and varies in thickness from approximately 10 to 40 ft thick. This unit contains dark-colored, ferromagnesium minerals and light-colored quartzo-feldspathic minerals. The contacts between the three lithologic units within the hydrostratigraphic Sand Zone are gradational. (ERM 2002:3-6.)

The underlying hydrostratigraphic Gravel Zone in the Fining Upward Sequence is characterized by sandy gravel and gravelly sand that are generally coarsest in the middle of the zone. Gravels appear as lenses in some areas. The gravel ranges from pea-size to cobble up to approximately 6 inches in diameter and is typically sub-rounded to rounded. The hydrostratigraphic Gravel Zone is composed of igneous and metamorphic alluvium with minor sedimentary clasts that were derived from the Sierra Nevada to the east. Sand in the hydrostratigraphic Gravel Zone varies from fine to very coarse, although it is predominantly coarse to very coarse. The hydrostratigraphic Gravel Zone varies in thickness from approximately 20 to 35 ft. The contact with the overlying hydrostratigraphic Sand Zone is gradational. (ERM 2002:3-6 and 3-8.)

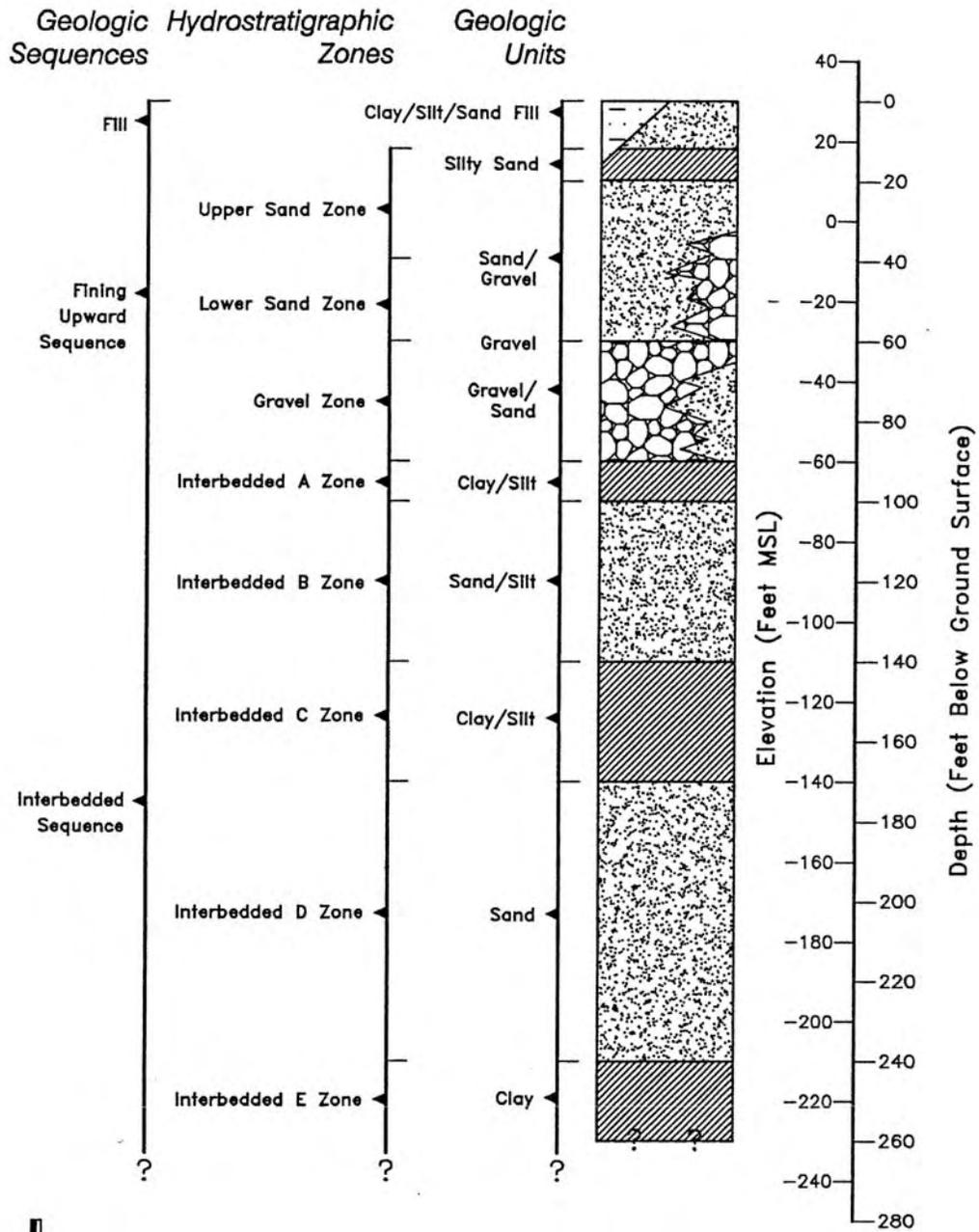
Interbedded Sequence(s)

The Interbedded Sequence comprises alternating layers of unconsolidated alluvial clay, silt, and sand layers that are identified as hydrostratigraphic zones A through E (ERM 2002:3-7 and 3-8).

The Interbedded A Zone is found directly beneath the hydrostratigraphic Gravel Zone. The Interbedded A Zone consists of tan to gray clay that typically contains an indurated (i.e., claypan or hardpan) interval. The Interbedded A Zone is typically silty, sometimes contains sandy intervals, and varies considerably in composition. It occasionally contains minor natural organic material and root casts. The contact with the overlying hydrostratigraphic Gravel Zone is sharp. The Interbedded A Zone varies from approximately 5 ft to 10 ft thick. (ERM 2002:3-7.)

The Interbedded B Zone is characterized by two tan, very fine to medium sand intervals separated by a layer of silt or clay (or both). Occasionally, the Interbedded B Zone contains only one distinct sand interval. The upper contact of the Interbedded B Zone is gradational and indistinct. It varies from approximately 25 to 40 ft thick. (ERM 2002:3-7 and 3-8.)

The Interbedded C Zone is characterized by fine-grained material consisting of grayish-green silt and clay (infrequently brown), with occasional thin layers of brown, silty fine to medium sand. The clay is typically dense and occasionally indurated. Thickness of the



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Sacramento, California*

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Figure 13
Legend for Geologic Cross Section C-C' through E-E'

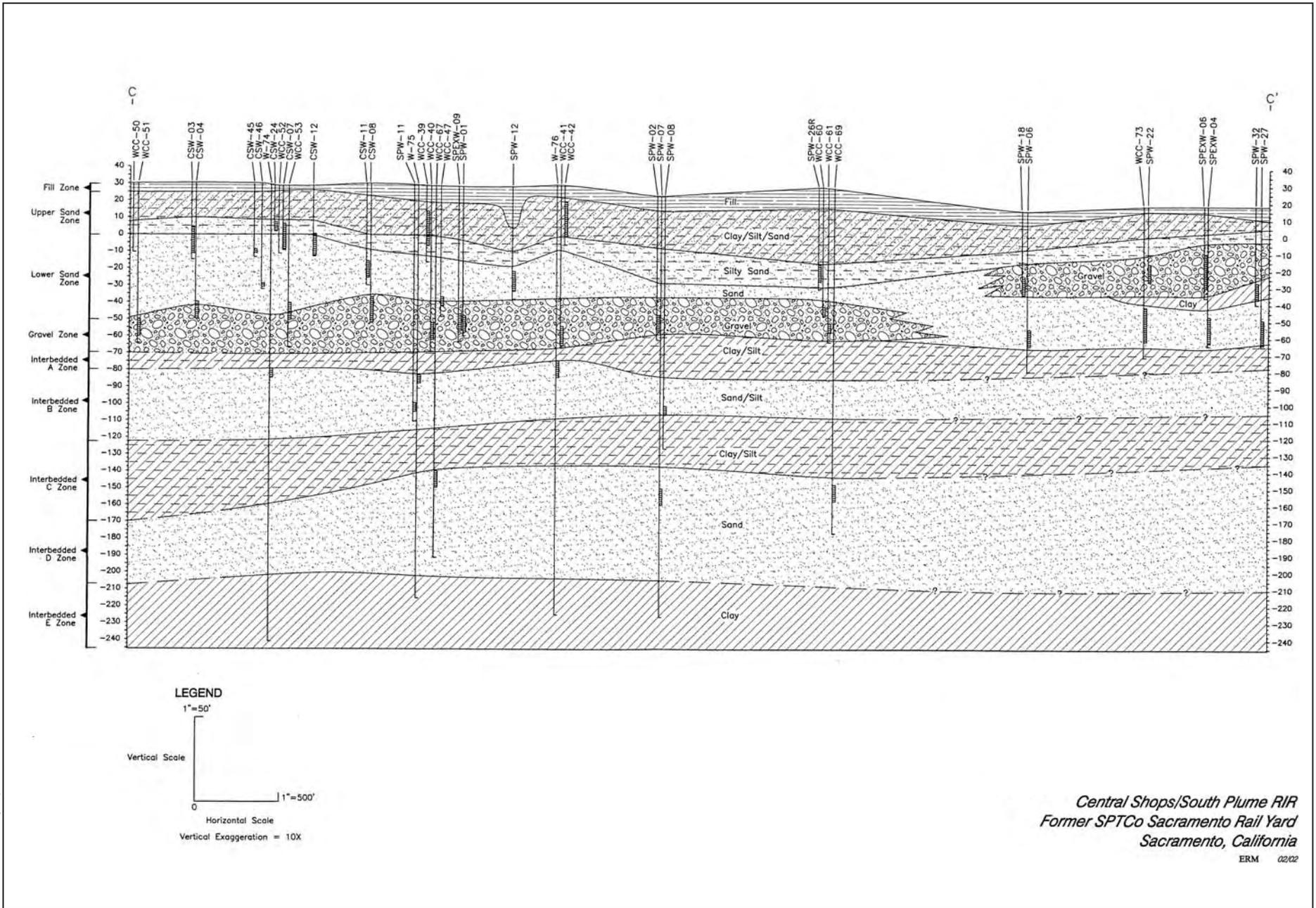


Figure 14
Geologic Cross Section C-C'

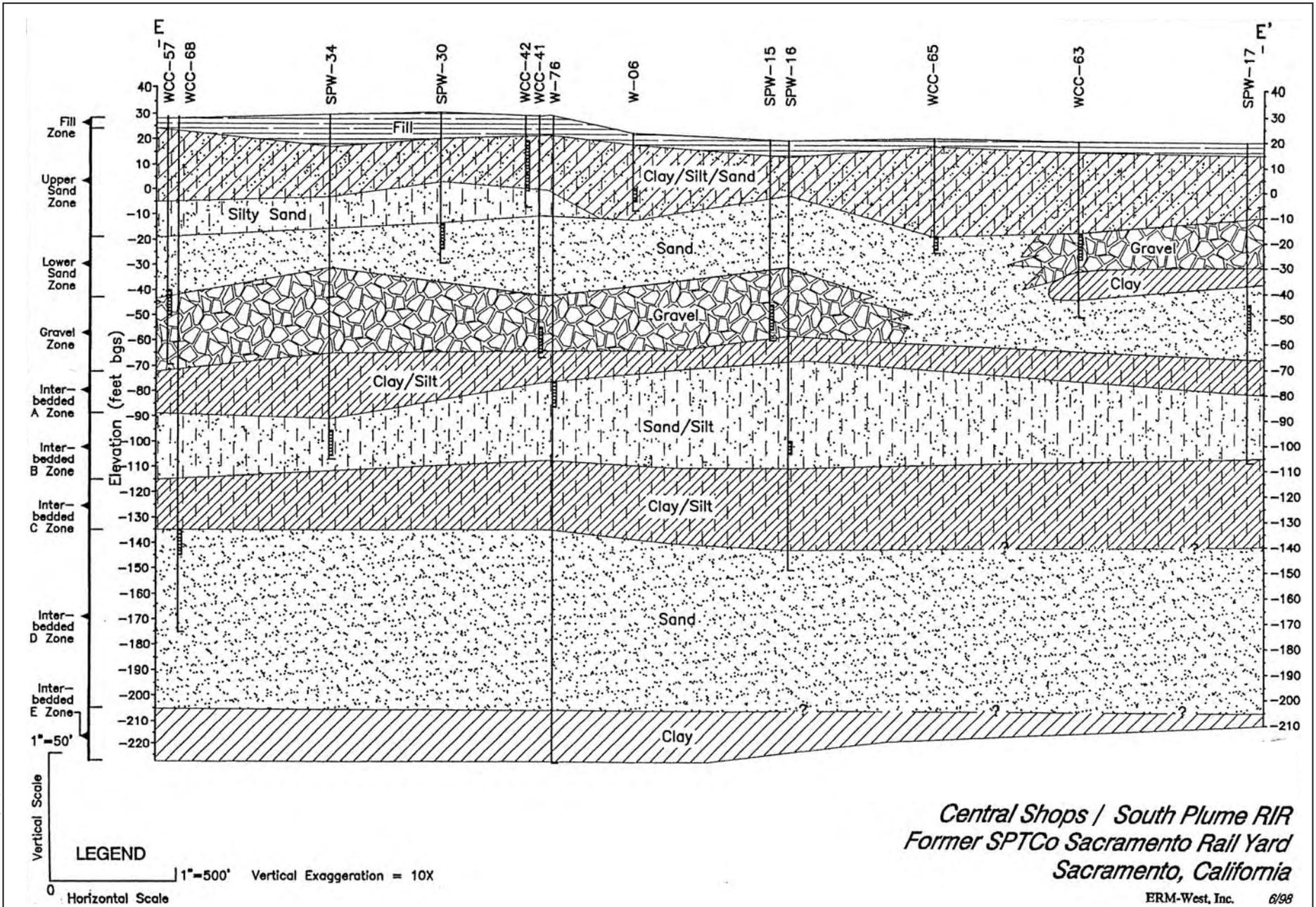


Figure 15
Geologic Cross Section E-E'

Interbedded C Zone varies from approximately 20 to 40 ft. The contact with the overlying Interbedded B Zone is distinct. (ERM 2002:3-8.)

The Interbedded D Zone is characterized by 20- to 40-ft-thick sand intervals with generally thin interbedded units of silt and clay. The sand intervals vary from silty to occasionally gravelly (pea-sized), with coarse sand predominant. The sand varies from greenish-gray to varicolored dark gray and occasionally is brown. The upper contact of the Interbedded D Zone is distinct. It varies from approximately 50 to 70 ft thick. (ERM 2002:3-8.)

The Interbedded E Zone is characterized by a thick, dense green to tan clay. The clay occasionally contains thin layers of tan, fine sand. The upper contact with the Interbedded D Zone is distinct. Geotechnical testing in the project vicinity has not encountered the lower contact of this zone, but it is known to be at least 40 ft thick north of the project vicinity. (ERM 2002:3-8.)

Discussion

Since the Last Glacial Maximum, the majority of the sediments in the APE have developed in a low- to moderate-energy environment characterized by episodes of flooding where sands, silts, and clays were deposited. During flooding events, localized scour most likely influenced channel dynamics, enlarging, deepening, and shifting the rivers, sloughs, and lake shorelines in the project vicinity. The hydrostratigraphic Gravel Zone (composed of igneous and metamorphic alluvium with minor sedimentary clasts that were derived from the Sierra Nevada) may represent ancestral river (American River) deposits that were laid down immediately after the Last Glacial Maximum, approximately 10,000 B.P. The presence of gravels at a depth of approximately 50 ft below ground surface and the fact that it has a gradational contact with the Fining Upward Sequence above suggests that the sediment transport capacity of the glacial melt waters originating from the Sierra Nevada decreased with time. The composition of sediments in the APE is compatible with those found in the lower reaches of glacial outwash deposits (West 1997).

As the energy (essentially the amount of water available) and the bedload of the rivers decreased, the APE shifted from a high energy environment characterized by localized scour and deposition of coarse materials to a lower energy environment characterized by fine material deposition. The lower-energy environment created a situation where sloughs, oxbow lakes, and low-lying swampy areas could form.

As the Holocene progressed, deposition of sands, silts, and clays continued and created what has been observed as the Fining Upward Sequence. This sequence represents thousands of years of deposition of fine materials. The composition and condition of sedimentary samples taken from the former Sutter Lake area suggest rapid deposition with little physical or chemical alteration after deposition. The plant communities in the project vicinity most likely consisted of the riparian gallery forest and the freshwater marsh communities (West 1997:273). Temperatures during the Holocene Epoch were variable, but the alluvial sedimentation influenced the geomorphology of the APE until the inception of historic-period reclamation and

flood-control efforts. Once the APE started to become filled in, and levees were built on the surrounding rivers, the geomorphic processes that created the thick sequence of alluvial sediments were permanently, though not completely, interrupted.

Because of the presence of the thick Fill Sequence, soil development is limited within the APE. As mentioned previously, the Clayey Silt Subunit of the Fill Sequence is the first unit that is wholly identifiable as a native soil layer. Accordingly, determining the depositional environment since the onset of soil development (i.e., pedogenic depositional history) is constrained. Instead, this analysis has sought only to explain the overall depositional environment of the geomorphic surfaces on which the soils are located (i.e., geologic depositional environment).

Summary

Determining the exact age of these soils is difficult; however, age can be inferred from the age of the geomorphic surface on which the soils are found (Bettis 1992; Parsons et al. 1970; Stafford 2004:1056). Soil development depends on a variety of factors, such as climate, living organisms, time, topography, and parent material. As such, determining the pedogenic history of a particular soil profile is difficult; however, present-day soil morphology, soil characteristics, and position within the landscape have revealed the following.

- Soils in the APE have developed during the present interglacial (i.e., the last 10,000 years), but soil development has been limited.
- The majority of the sediments in the APE have developed in a low- to moderate-energy environment characterized by episodes of flooding where silts and clays were deposited.
- The dominant geomorphic process in the project vicinity prior to the filling of the lakes and marshes and construction of levees was overbank and lacustrine deposition (scour was limited to only high flow events).
- The composition and condition of sediments suggest rapid deposition with little physical or chemical alteration after deposition, corresponding to the observed minimal soil development.
- Because of the presence of the artificial Fill Sequence, any artifacts that were left behind prior to ca. 1863 are presently buried.
- Resources, including hydrophytic plants such as tules and reeds, were widespread and may have encouraged habitation on higher-elevation surfaces, where present.

PREHISTORY

Evidence for Terminal Pleistocene and Early Holocene Occupations

Although the Sacramento Valley may have been inhabited by humans as early as 10,000 years ago, the evidence for early human occupation is likely buried by deep alluvial sediments that accumulated rapidly during the late Holocene Epoch. Although rare, archaeological remains of this early period allegedly have been identified in and around the Central Valley (Ann S. Peak & Associates 1981; Johnson 1967; Treganza and Heizer 1953). Johnson (1967) presents evidence for some use of the Mokelumne River area, under what is now Camanche Reservoir, during the late Pleistocene Epoch. Archaeologists working at Camanche Reservoir found a number of lithic cores and a flake that are associated with Pleistocene-age gravels. These archaeological remains have been grouped into what is called the Farmington Complex, which is characterized by core tools and large, reworked percussion flakes (Treganza and Heizer 1953). Recent geoarchaeological investigations at CA-STA-69 (in the vicinity of Farmington Complex type site CA-STA-44), however, indicate that the Farmington Complex assemblage at the site is contained completely within Holocene-age alluvial terrace deposits, not Pleistocene-age glacial outwash deposits. These findings raise the question of whether reinvestigation of other Farmington Complex assemblages will reveal a Holocene-age assemblage. (Rosenthal et al. 2007:151.) Finally, preliminary results from Tremaine & Associates' recent excavations at Sacramento City Hall (Sacramento City Hall overlies the Nisenan village of Sacum' ne, CA-SAC-38) reveal the earliest confirmed habitation of the immediate Sacramento vicinity. Obsidian hydration readings on artifacts from the Napa (this source dominates the assemblage), Borax Lake, Annadel, Bodie, Casa Diablo, and Mount Konocti obsidian flows range from 3 to 10.4 microns, with a mean value of 5.7 microns and with most readings falling between 3.6 and 8 microns. This range of results may represent use of the site from 3000–8000 B.P. Tremaine & Associates also ran three radiocarbon assays, which yielded conventional dates of 5870, 6690, and 6700 B.P. The radiocarbon assays were taken between 9.8 ft and 11.5 ft below ground surface. (Kim Tremaine, personal communication 2004.) Later periods are better understood because of more abundant representation in the archaeological record.

Middle to Late Holocene Prehistory and Summary of Regional Research

This section provides a brief overview of the changing adaptive strategies used by the inhabitants of the Central Valley and the archaeological manifestations of these changes. Although this area of the Central Valley was known to have reached high levels of population density, the distribution of people over the landscape was variable and closely tied to food and water availability.

The archaeological record of the Central Valley has been approached in two fundamentally different ways. The first is chronological. From relative sequences in stratified occupational and burial sites, a three-stage chronology initially was developed in the late 1930s. Simply called the Early, Transitional (later called "Middle"), and Late horizons, these were defined by shifting patterns in site assemblages and mortuary morphology. Although interpretations varied, explanations for change usually were linked to the movements of people.

This chronological framework was later refined and eventually became the Central California Taxonomic System (CCTS) which, to be consistent with the Midwest Taxonomic System, substituted the term “horizon” for “period.”

The second approach grew out of the archaeological patterns developed from the CCTS. As absolute dates became available for sites with early, middle, and late assemblages, it was discovered that sites with different assemblages actually were contemporaneous. This was particularly true with sites from the Early and Middle horizons. This discovery, along with a change in archaeological paradigms to a more economic and functional orientation in the 1960s led to a reorganization of the CCTS. This new scheme used the same archaeological manifestations to differentiate sites as did the CCTS, but ordered sites into functional groups rather than temporal ones.

This approach was advanced by Fredrickson (1973), who used the term pattern to describe an “adaptive mode extending across one or more regions, characterized by particular technological skills and devices, and particular economic modes.” Three patterns were introduced: Windmiller, Berkeley, and Augustine. Patterns, while generally corresponding to the Early, Middle, and Late horizons within the Central Valley, were conceptually different and free of spatial and temporal constraints. By changing the paradigm from a cultural historical orientation to a more processual/adaptive one and introducing the concept of pattern, Fredrickson addressed problems with the chronological and regional sequences that had been nagging archaeologists for several decades.

One problem with both approaches is that they have been based on an archaeological record derived primarily from village sites. This poses less of a problem under a chronological framework but presents a more substantial problem when an economic perspective is taken. Our current understanding of the prehistoric valley settlement and subsistence systems is heavily biased toward large habitation sites adjacent to permanent water sources. These sites, by their very nature, can provide only limited information on the total economic system. Much more archaeological work is needed at ephemeral and peripheral sites located away from the larger habitation sites.

The taxonomic framework of the Sacramento Valley has been described in terms of archaeological patterns, following Fredrickson’s (1973) system. A pattern is a general mode of life characterized archaeologically by technology, particular artifacts, economic systems, trade, burial practices, and other aspects of culture.

The Windmiller Pattern (4500–3000 B.P.) shows evidence of a mixed economy of game procurement and use of wild plant foods. The archaeological record contains numerous projectile points with a wide range of faunal remains. Hunting was not limited to terrestrial animals, as is evidenced by fishing hooks and spears that have been found in association with the remains of sturgeon (*Acipenser* sp.), salmon (*Oncorhynchus* sp.), and other fish. Plants also were used, as indicated by ground stone artifacts and clay balls that were used for boiling acorn mush. Settlement strategies during the Windmiller period reflect seasonal adaptations: Habitation sites in the valley were occupied during the winter months, but populations moved into the foothills during the summer. (Moratto 1984.)

The Windmill Pattern ultimately changed to a more specialized adaptation labeled the Berkeley Pattern (3500–2500 B.P.). A reduction in the number of manos and metates and an increase in mortars and pestles indicate a greater dependence on acorns. Although gathered resources gained importance during this period, the continued presence of projectile points and atlatls (spear-throwers) in the archaeological record indicates that hunting was still an important activity. (Fredrickson 1973.)

The Berkeley Pattern was superseded by the Augustine Pattern around 1450 B.P. The Augustine Pattern reflects a change in subsistence and land use patterns to those of the ethnographically known people of the historic era. This pattern exhibits a great elaboration of ceremonial and social organization, including the development of social stratification. Exchange became well developed, and an even more intensive emphasis was placed on the use of the acorn, as evidenced by the presence in the archaeological record of shaped mortars and pestles and numerous hopper mortars. Other notable elements of the artifact assemblage associated with the Augustine Pattern include flanged tubular smoking pipes, harpoons, clam shell disc beads, and an especially elaborate baked clay industry, which included figurines and pottery vessels (Cosumnes Brownware). The presence of small projectile point types, referred to as the Gunther Barbed series, suggests the use of the bow and arrow. Other traits associated with the Augustine Pattern include the introduction of preinterment burning of offerings in a grave pit during a mortuary ritual, increased village sedentism, population growth, and an incipient monetary economy in which beads were used as a standard of exchange. (Moratto 1984.)

ETHNOGRAPHY

The APE includes portions of territory that are historically attributed to the Valley Nisenan. However, the Plains Miwok have been included in this ethnographic context even though ethnographers did not place them in the project vicinity; depopulation and relocation of valley Native Americans in the nineteenth century resulted in conflicting and incomplete information about tribal locations (Levy 1978). Although cultural descriptions of these groups in the English language are known from as early as 1849, most of our current cultural knowledge comes from various anthropologists in the early part of the twentieth century (Levy 1978:413; Wilson and Towne 1978:397). This knowledge is briefly summarized below for both of these groups.

Both groups held territory primarily east of the Sacramento River. However, they each occupied lands west of the Sacramento River, as well (Levy 1978; Wilson and Towne 1978). The uncertainty regarding the territorial boundaries of the Nisenan and the Plains Miwok derives from the fact that ethnographers historically demarcated contact-period tribal boundaries in various and conflicting ways (Waechter 1993).

The material culture and settlement/subsistence behavior of these groups exhibit similarities, likely because of historical relationships and a shared natural environment. Historical maps and accounts of early travelers to the Sacramento Valley testify that tule marshes, open grasslands, and occasional oak groves characterized the study area (Jackson 1851; Ord 1843; Wyld 1849). The project vicinity was generally wet in the winter and often subject to

flooding; the weather was exceedingly dry in summer. Much of the floodplain was presumably sparsely inhabited, and Native Americans typically situated their larger, permanent settlements on high ground along the Sacramento and American rivers (Bennyhoff 1977; Kroeber 1925, 1932; Levy 1978; Wilson and Towne 1978).

The Nisenan and Plains Miwok languages are classified as part of the Penutian linguistic stock, the largest Native American linguistic stock in California (Shipley 1978). Linguistic, ethnographic, and archaeological data suggest that Penutian speakers entered California relatively late in time and had settled nearly half of the state by 200 years ago (Moratto 1984:Chapter 11; Waechter 1993).

Valley Nisenan

The Valley Nisenan is a subdivision of a larger group, the Nisenan, who form the southern linguistic group of the Maidu. The Maidu are a subgroup of the California Penutian linguistic family (Kroeber 1925; Shipley 1978). Three distinctive dialects, which Kroeber refers to as tongues, are known among the Maidu. The southern Maidu (the Valley Nisenan) called themselves “Nishinam” or “Nisinin” (Kroeber 1925:392). The Valley Nisenan lived in the Sacramento Valley from the Feather River north of Marysville to the Sacramento River just south of its confluence with the American River. Between these two points, the Valley Nisenan inhabited areas along the Bear and Yuba rivers, as well. Few permanent habitation sites were made between the Sacramento River and the foothills to the east; however, this area was used for gathering and hunting. (Wilson and Towne 1978.)

The political organization of the Nisenan extended to several villages organized in tribelets. Even though the leadership system is not well understood, the headman served as an adviser to a village. The headman of the dominant village in a cluster of villages (a tribelet) had the authority to call upon the aid of surrounding villages in social and political situations. What makes one village more influential than another is not well-known; however, near the project’s APE there are three well-known villages that are part of the larger system of tribelets and centers. The Pushune, also known as the “Pusune,” was an important and influential village situated on the north bank of the American River that exchanged labor and trade relations with the European settlers. The villages of Momol and Sacum’ne (also known as Sekumni) were located south of the American River near the APE, and, although they were not as influential as Pushune, they also had exchanges with European settlers. (Kroeber 1925; Secrest 2003; Wilson and Towne 1978.)

Most Valley Nisenan settlements were built on low natural rises along watercourses. Nisenan villages varied greatly in size. Some villages are recorded as having approximately five houses, while others contained up to 50. These houses were dome shaped; approximately 9.8–15.1 ft in diameter; and covered with earth, tule, mats, or grasses. Pole-supported brush shelters were constructed during gathering rounds in the warmer months. Major villages contained a dance house, which was built 2.9–3.9 ft into the ground; supported with heavy beams and posts; and covered with brush, tule, or earth. (Wilson and Towne 1978.)

The Nisenan's homeland consisted of flat, oak-studded grassland, bisected by riverine and marsh environments that provided an abundance and variety of resources. The Nisenan made use of the resources that became available at different times of the year. Acorns, roots, onions, garlic, grasses, herbs, and seeds, as well as twining, clothing, and structural materials, were gathered when these resources became available. Acorns were an especially important resource for the Nisenan. Deer, rabbit, rodents, birds, grasshoppers, larvae and pupae, lizards, and frogs were among the animals hunted and snared by the Nisenan. Salmon were an important resource for the Nisenan, as well, being caught by net or spear. Other river resources included sturgeon, clams, and mussels. Trade provided other valuable resources that normally were not available in the Nisenan environment. The Valley Nisenan received black acorns, pine nuts, manzanita berries, skins, bows, and bow wood from the Hill Nisenan to their east, in exchange for fish, roots, grasses, shells, beads, salt, and feathers. (Wilson and Towne 1978.)

To obtain, process, and use these material resources, the Nisenan had an array of tools to assist them. Wooden digging sticks, poles for shaking acorns loose, and baskets of primarily willow and redbud were used to gather vegetal resources. Stone mortars and pestles were used to process many of the vegetal foods, and baskets, heated stones, and wooden stirring sticks were used for cooking. Basalt and obsidian were the primary stone material used for making knives, arrow and spear points, clubs, arrow straighteners, and scrapers. Bows and arrows were constructed of wood and sinew. Other utilitarian items include stone and wooden skin-dressing tools, bags, cordage and netting, canoes, poles, and paddles. (Wilson and Towne 1978.)

The Valley Nisenan world included spiritual and ceremonial activities, as well. Shamans were persons who served an important role, as intermediaries between humans and spirits, and healed injuries and sicknesses. Ceremonies were conducted for girls' entrance into womanhood, during seasonal harvest or bounty times, and annually to mourn the dead. The Kuksu Cult was a religion practiced by the majority of Central Valley dwellers, as well as other indigenous Californians. This religion included an array of deities of varying rank; ceremonies, dances, and initiation rites; and a detailed cosmology, which served to explain their material world and guide their behavior. (Kroeber 1925.)

Plains Miwok

The Plains Miwok are part of the larger Eastern Miwok group who form one of the two major divisions of the Miwokan subgroup of the Utian speakers. The Plains Miwok lived in the Central Valley along the Sacramento, Cosumnes, and Mokelumne rivers. Like their neighbors to their north, the Plains Miwok, out of necessity, built their homes on high ground, with major villages concentrated along the major waterways. Conical shaped homes were constructed with poles and thatching of brush, grass, or tule, and semi-subterranean earth-covered homes were built, as well. Major villages contained an assembly house, which was a 39.3- to 49.2-ft-diameter semi-subterranean structure, as well as a sweathouse, which was a scaled down version of the assembly house. (Levy 1978.)

The Plains Miwok gathered food resources as the seasons varied. As with the majority of California tribes, the Plains Miwok relied heavily on the acorn for subsistence. Other foods that

were gathered include nuts, seeds, roots, greens, berries, and mushrooms. Animal foods included tule elk, pronghorn antelope, jackrabbits, squirrels, beaver, quail, and waterfowl. Salmon was the dominant animal food resource, ranking above other river resources, such as sturgeon. Salt, nuts, basketry, and obsidian were obtained through trade with the Sierra Miwok to the east, in exchange for shells, basketry, and bows obtained through trade from the west. (Levy 1978.)

Technological items of the Plains Miwok are similar to those of the Valley Nisenan. Wooden digging sticks, poles, and baskets were used for gathering vegetal resources, while stone mortars, pestles, and cooking stones were used for processing. Items used for obtaining animal resources included nets, snares, seines, bows, and arrows. Arrow points were made primarily of basalt and obsidian. (Levy 1978.)

Like the Valley Nisenan, the Plains Miwok also practiced the Kuksu religion with its ceremonies and dances, initiation rites, and ranking deity. The Plains Miwok also held ceremonies for girls' maturity, and held beliefs that explained their natural world. (Kroeber 1925.)

Euro-American Contact

Between 1770 and 1880, the native Californian population came in contact with people of entirely new cultures. These people were European or were of European descent. At first, the contact between these two cultures did not have a powerful effect on the native Californian's lifestyle. However, missionization, settlement, and the final blow of the Gold Rush in 1849 resulted in overwhelming and irreversible changes in the lives of indigenous people. Disease and warfare due to contact were the major influential factors for the decline in population, estimated to have reached 90 percent. (Cook 1955, 1978.)

The Mission System

Spanish explorers visited the Central Valley in the 1700s in attempts to locate sites suitable for inland missions. Pedro Fages, during an exploration of the "Port of San Francisco," followed the San Francisco Bay to the San Joaquin River, where he viewed the Sacramento River, in 1772. In 1793, Francisco Eliza sailed into the as-yet-unexplored Sacramento River, and in 1806 and 1817, a number of other mission site expeditions were conducted. Gabriel Moraga entered the area several times between 1805 and 1817, during which time he is believed to have reached the American, Mokelumne, and Cosumnes rivers. Jose Antonio Sanchez in 1811 and Father Narciso Duran in 1817 carried out other notable explorations. (Beck and Haase 1974; Hoover et al. 1990.)

During the early 1800s, many of the Plains Miwok were taken from their homes to the Franciscan missions established along the California coast. The establishment of these missions did not have a direct effect on the Nisenan living within the project region. However, it may be assumed that these populations were affected indirectly by whole groups moving northeast, away

from areas where the missions chose their neophytes, or by runaway neophytes seeking refuge. The Plains Miwok were among the first Native American groups to flee the missions and to take up arms against those who wished for their return. By the 1830s, the Plains Miwok, along with their Yokuts neighbors, posed a serious threat to Mexican settlements along the coast. (Levy 1978.)

American Explorations West

The first Euro-American known to have traveled through the area is Jedediah Strong Smith, in the late 1820s. Reporting to the Hudson's Bay Co. on the quantity and quality of furs in California, he established the Sacramento Trail. Joseph Walker and Ewing Young, during separate excursions, followed his general path in the 1830s (Gudde 1996; Hoover et al. 1990). The trappers who entered the area in the late 1820s had a minimal effect on the indigenous population. However, an epidemic believed to be malaria swept through the Sacramento Valley in 1833. This epidemic wiped out entire villages and prompted survivors to evacuate their homes and move into the hills for protection from the disease. Only 25–50 percent of the pre-epidemic population survived the disease, and the survivors would soon face a throng of immigrants because of the discovery of gold in the foothills (Cook 1955).

The Gold Rush

The first significant Euro-American settlement in the Sacramento Valley was that of John Sutter in Sacramento in 1839, which led to the discovery of gold at Coloma in 1848. The discovery of gold, and the subsequent search for the Mother Lode, brought an incursion of gold miners and settlers to the homes of the Nisenan and Plains Miwok. The indigenous populations were greatly reduced at the start of the Gold Rush, and native life had practically vanished within 30–50 years of European contact (Beals 1933). Runoff into creeks and rivers from hydraulic mining on ridges upstream and the dumping of sawdust silted the waterways so that they were destroyed for salmon spawning. By the 1880s, the native fish population on which the indigenous people depended had been decimated. Widespread killing, destruction of villages, and the persecution of the Nisenan and Plains Miwok reduced them to living at the fringes of Euro-American settlements. Eventually many found agricultural, logging, ranching, and domestic work. Having already suffered from diseases against which it had no immunity, the native population was reduced because of the Gold Rush, and the proliferation of the population's culture was impeded. Notwithstanding these effects, people of Nisenan and Miwok ancestry continue to be visible members of their communities today, often making substantial contributions to the maintenance of the culture (Levy 1978; Wilson and Towne 1978).

HISTORY

A historical context is provided in the project HRER (ICF Jones & Stokes 2008) and will not be reproduced here.

EXPECTED HISTORIC PROPERTY TYPES (ARCHAEOLOGICAL)

This section of the report describes the range and types of archaeological properties that are anticipated in the APE. The archaeological property types are described in terms of physical constituents to focus attention on the visibility and obtrusiveness of archaeological properties in the APE and to avoid functional and other behavioral assumptions that are best determined during Phase 2 and 3 archaeological investigations, should any be required. The property type descriptions are based on the “Sources Consulted” and “Setting” sections of this report, as well as ICF Jones & Stokes’ previous field observations in the APE and vicinity (Jones & Stokes 2007a:3–4; Jones & Stokes 2007b:2–4).

Prehistoric Archaeological Property Types

Previous studies in the project vicinity provide reasonable expectations of the range of prehistoric archaeological property types relevant to the present undertaking. These property types are classified here in terms of constituents and features. Because significant historic and modern landscape modifications in the APE have resulted in a proliferation of fill and pavement, the original (prehistoric) ground surface is completely obscured throughout the vast majority of the APE. Five prehistoric archaeological property types have the potential to be present within subsurface deposits in the APE: midden sites, multiple-constituent sites, isolated burials and features, lithic scatters, and isolated artifacts. Each historic property type is described under separate headings below. Archaeological constituents are summarized in Table 4.

Table 4. Prehistoric Archaeological Property Types

Property Type	Characteristics
Midden sites	Dark, friable, or greasy soil; midden constituents may include all or some of the following: shell, bone, ash, charcoal, fire-affected rock, baked clay, worked bone, flaked and ground stone, house floors, and human burials
Multiple-constituent sites	Discrete occurrences of shell, bone, ash, charcoal, fire-affected rock, worked bone, flaked and ground stone, and human burials
Isolated burials and features	Deliberately interred burials, cremations, or human bone; beads and other ornaments (e.g., charmstones and pendants) may be interred with burials
Lithic scatters	Flaked stone debitage, projectile points, and flaked stone tools; also may include some ground stone
Isolated artifacts	Artifacts that are found without association with other artifacts or features; they frequently lack stratigraphic integrity and significant spatial patterning

Midden Sites

Midden sites are anticipated to be the most structurally complex and have the greatest artifact diversity of all the prehistoric property types. Middens are usually distinguished by a high organic content that causes soil to be noticeably darker, and they can vary greatly in size. Middens usually are found where people ate shellfish and other invertebrates, fish, birds, and sea

mammals. All these food sources leave a great amount of debris that customarily was piled up where the food was processed and eaten. Middens in the Sacramento area were generally occupation sites, though some may have been used only on a seasonal basis. When deaths occurred, the middens sometimes were used as burial sites, perhaps because covering the body with shells could make a relatively secure grave. Constituents may include flaked stone debitage, ground-stone tools, marine shell, vertebrate remains, charcoal, baked clay, charred floral remains, and fire-affected rock. Non-utilitarian artifacts also may include charmstones, shell ornaments, and beads. Discrete features, including house floors, hearths, and human burials, also may be located within these deposits.

Multiple-Constituent Sites

Multiple-constituent sites lack midden, house floors, and baked clay artifacts but otherwise contain the broad range of archaeological constituents typical of midden sites, described above. Multiple-constituent sites may include burials and features such as hearths.

Isolated Burials and Features

Burial features can range in complexity from a simple isolated inhumation to more elaborate interments containing numerous bodies. These features may represent specially designated interment areas or remnants of larger archaeological sites. Burial associations often include *Olivella* beads; *Haliotis* ornaments; and ground- and polished-stone artifacts, such as charmstones and plummets.

Lithic Scatters

Lithic scatters are collections of flaked or ground stone debris, or both, including tools and debitage that relate to post-quarry reduction and tool manufacturing efforts. They are perceived primarily as daily or overnight task-oriented camps where a limited range of activities was conducted. These sites may or may not contain chronological information depending upon the presence and quantity of diagnostic items, such as projectile points and pottery, or dateable materials, such as obsidian. Lithic scatters can be perceived as simple, containing only flaked stone debitage and tools, or complex, having primarily flaked stone debris but some ground stone as well.

Isolated Artifacts

Isolated finds are three or fewer artifacts that occur within a restricted spatial context, generally within a 30-ft-diameter area. Information potential usually is limited to location, material type, style, and function of the individual artifact.

Historic Archaeological Property Types

Archival research suggests that the APE and the vicinity originally contained multiple historic archaeological property types. These property types are:

- domestic and commercial refuse sites;
- domestic, commercial, and industrial architecture;
- industrial refuse sites;
- urban infrastructure; and
- isolated artifacts.

These potential property types are discussed below and in Table 5.

Table 5. Historic Archaeological Property Types

Property Type	Feature Type	Attributes
Domestic and commercial refuse sites	Hollow-filled features (pits, privies, and/or wells)	Discrete deposits
	Sheet refuse (ephemeral vs. massive)	Thin layer of refuse that may have accumulated over time vs. large discrete layer of refuse representing one event
Domestic, commercial, and industrial architecture	Foundations	Brick alignments, concrete slabs, piers
	Builder's trenches	Trenches
	Walls	Concrete, brick, or wooden; in situ or collapsed
Industrial refuse sites	Hollow-filled features (pits, privies, kilns)	Discrete deposits of industrial waste
	Sheet refuse (ephemeral vs. massive)	In the project vicinity, typically extensive, thick deposits of slag, granite blocks, wood, etc.
Urban infrastructure	Sewer pipes	Metal or clay
	Power lines	Postholes
	Fill	Gravel, non-native soils, mixed refuse
Isolated artifacts	Not applicable	Artifacts that are found without association with other artifacts or features; they frequently lack stratigraphic integrity and significant spatial patterning.

Domestic and Commercial Refuse Sites

Examples of this property type are expected to be hollow features that were used as garbage receptacles before the days of organized refuse collection. These hollow features include wells; cisterns; outhouse pits; and lined, reusable garbage pits. Domestic and retail items

such as canning jars, food bottles, serving vessels, sewing implements, drawer pulls, vases, mirrors, figurines, buttons, shoes, combs, beads, patent medicine bottles, toothbrushes, syringes, and combs are a few of the myriad items that can be found in these types of deposits. Domestic occupation sites frequently contain deposits of intentionally imported fill that can accumulate on the horizontal plane and sometimes reach several feet in depth. (Costello et al. 1996.) Commercial and domestic refuse sites in the APE are most likely to represent African-American, Euro-American, or Chinese occupations (M. Praetzellis and A. Praetzellis 1992, 1993, 1997).

Domestic, Commercial, and Industrial Architecture

These are subsurface architectural remains of residences and domestic outbuildings, commercial establishments, and industrial buildings and structures. Most wooden structures leave few remains except, perhaps, for posts dug into the ground that supported wood sills. (Costello et al. 1996; M. Praetzellis and A. Praetzellis 1992, 1993, 1997.) Industrial architecture in the APE would most likely be the remnant of CPRR and SPRR operations and would be readily recognizable as such from historic maps and the scale of structural remains. Non-railroad industrial architecture, such as the gas holders associated with the Sacramento Gas Co. (P-34-1000-H/CA-SAC-689-H), has been unearthed in the project vicinity (Gross 2004).

Industrial Refuse Sites

Industrial refuse sites in the APE most likely represent the activities of the CPRR and SPRR, although non-railroad businesses, such as Pioneer Mills and Sacramento Gas Co., operated in the vicinity as well (Gross 2004). Industrial refuse sites in the APE would probably manifest as nonstructural accumulations of waste, such as slag, coke, masonry and concrete rubble, wood, and fire brick. Archaeological monitoring north of the Central Shops revealed that some of the accumulations extend continuously in excess of 100 horizontal ft and exceed 5 ft in thickness (Jones & Stokes 2007b:2–3). Industrial refuse sites also may manifest as hollow-filled features similar to those common in domestic and industrial contexts, namely privies and wells.

Urban Infrastructure

Examples of this property type include materials brought into the APE to fill the low ground in anticipation of development or redevelopment. The importance of this type of deposit would depend upon the integrity and focus of the fill and its relationship to larger issues. Additional examples of property types include municipal service systems, such as sewer pipes or power lines. (Tremaine and Nelson 2006.)

Isolated Artifacts

Isolated finds are three or fewer artifacts that occur within a restricted spatial context, generally within a 30-ft-diameter area. Information potential usually is limited to the location, material type, style, and function of the individual artifact.

Mapped Historic Archaeological Features in the Direct Area of Potential Effects

A comparison of historic maps with the APE map and with unmodified aerial photographs of the APE indicates that several CPRR and SPRR features were located in the direct APE. Specifically, proposed construction activities have the potential to affect the remains of the SPRR Foundry, the Casting Shop, the Pattern Storage Shop, the Southern Car Shops, the Train Shed and associated building remnants, and the original SPRR Passenger Station. A comparison of historic maps with modern aerials indicates that the majority of the above-listed buildings and structures should be evident on the ground surface in the direct APE. Historic maps do not indicate the presence of subsurface historic archaeological manifestations in the ADI for Phase 1. (See Figures 16–27.)

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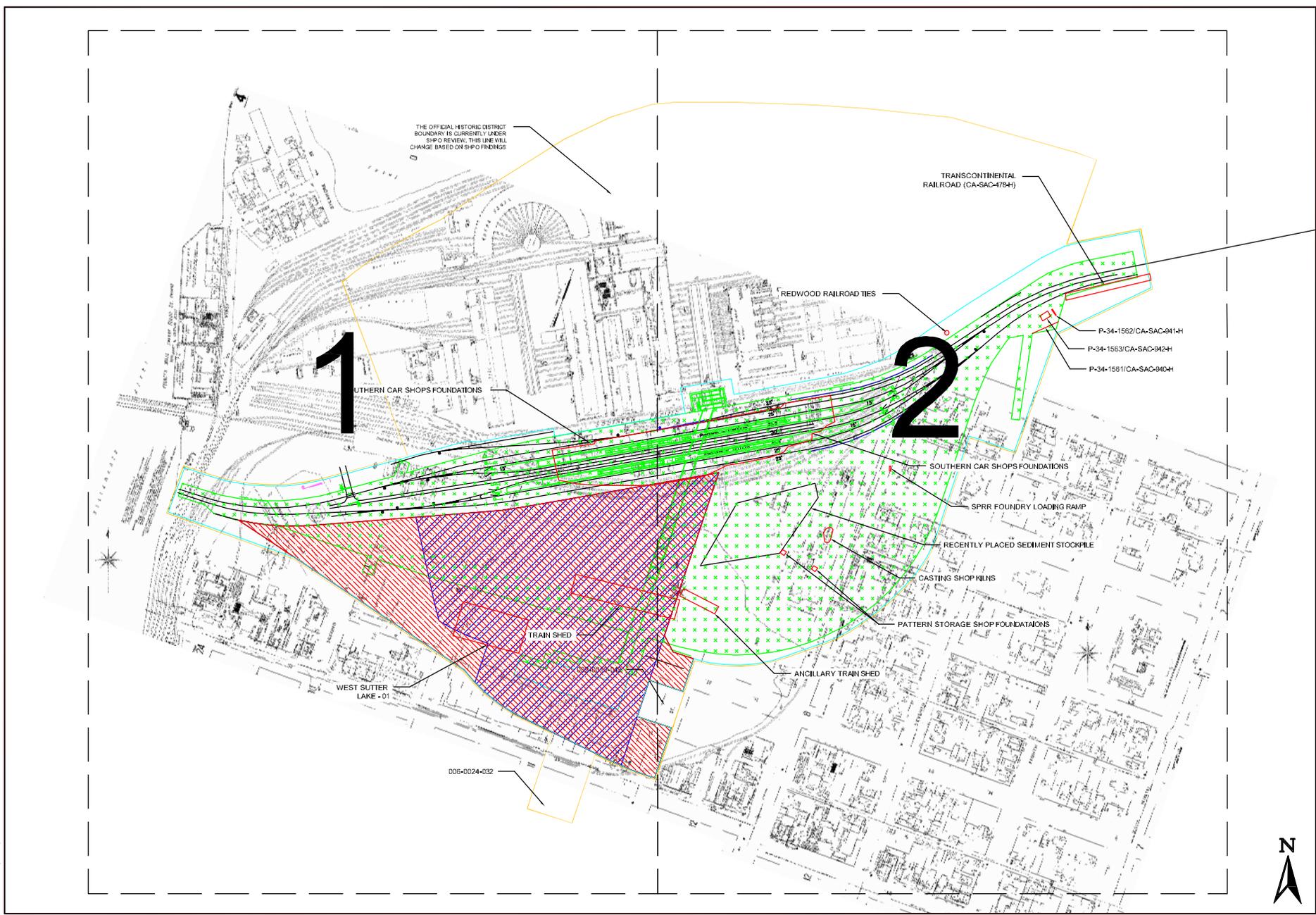


Figure 16
Overlay of Sanborn Insurance Map on APE
Overview, 1895



THE OFFICIAL HISTORIC DISTRICT BOUNDARY IS CURRENTLY UNDER SHPO REVIEW. THIS LINE WILL CHANGE BASED ON SHPO FINDINGS

SOUTHERN CAR SHOPS FOUNDATIONS

TRAIN SHED

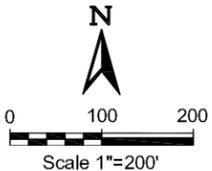
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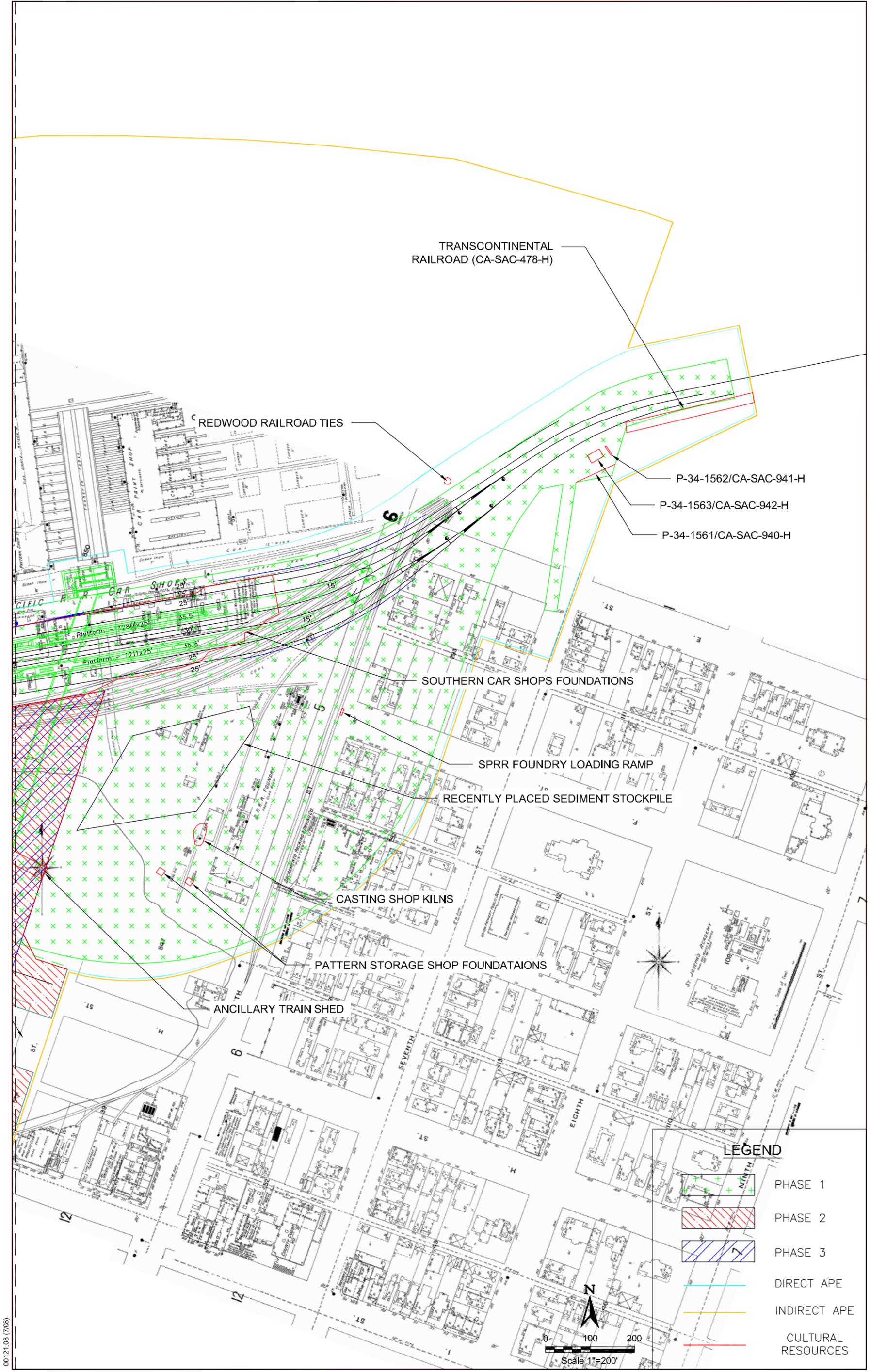
LEGEND

-  PHASE 1
-  PHASE 2
-  PHASE 3
-  DIRECT APE
-  INDIRECT APE
-  CULTURAL RESOURCES



00121.08 (7/08)

Figure 17
Overlay of Sanborn Insurance Map on APE
Detail of Western Half, 1895



00121.08 (7/08)

Figure 18
Overlay of Sanborn Insurance Map on APE
Detail of Eastern Half, 1895

00121.08 (7/08)

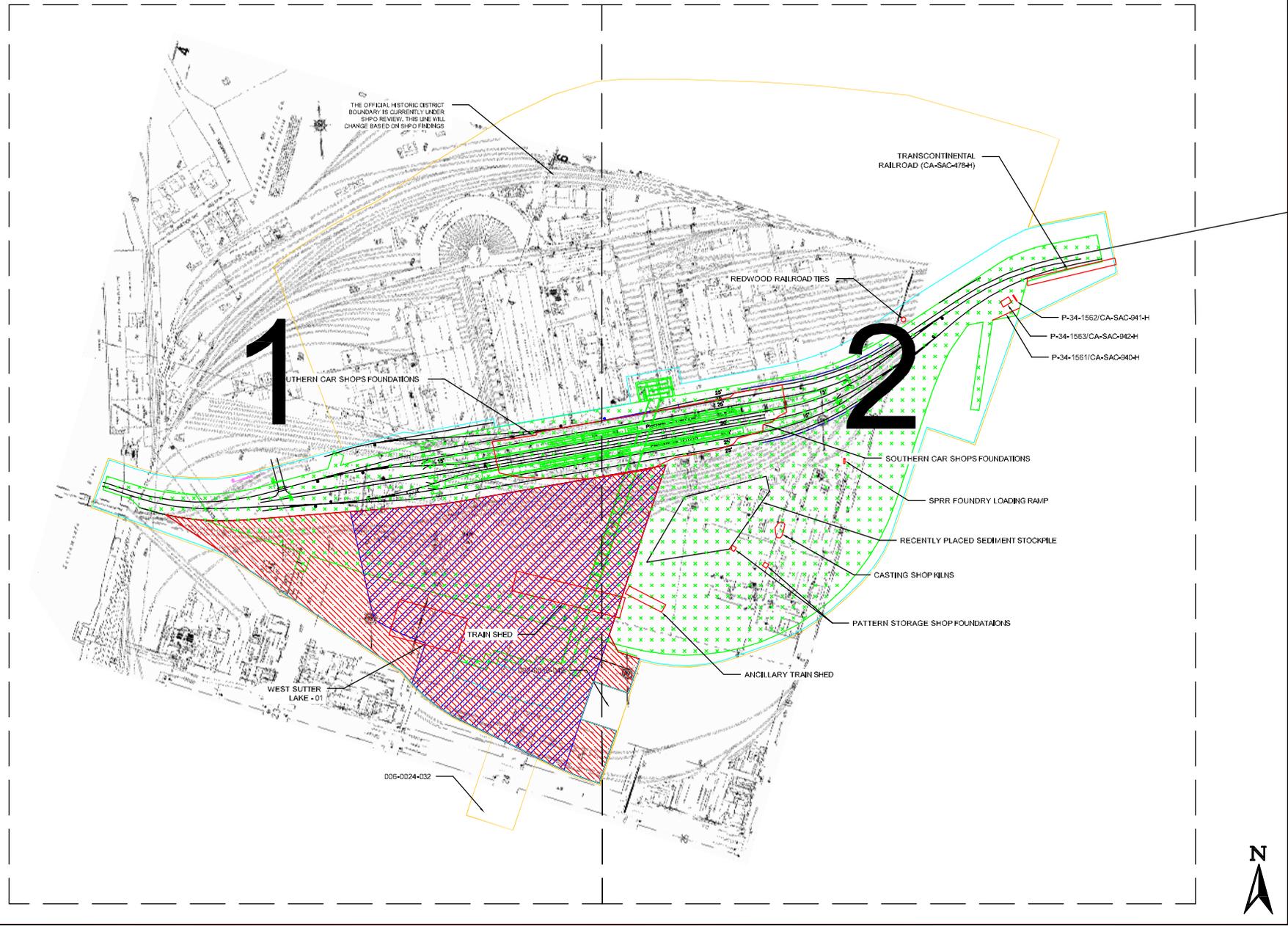


Figure 19
Overlay of Sanborn Insurance Map on APE
Overview, 1915



THE OFFICIAL HISTORIC DISTRICT BOUNDARY IS CURRENTLY UNDER SHPO REVIEW. THIS LINE WILL CHANGE BASED ON SHPO FINDINGS

SOUTHERN CAR SHOPS FOUNDATIONS

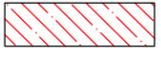
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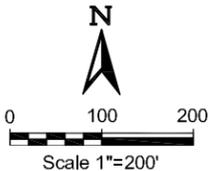
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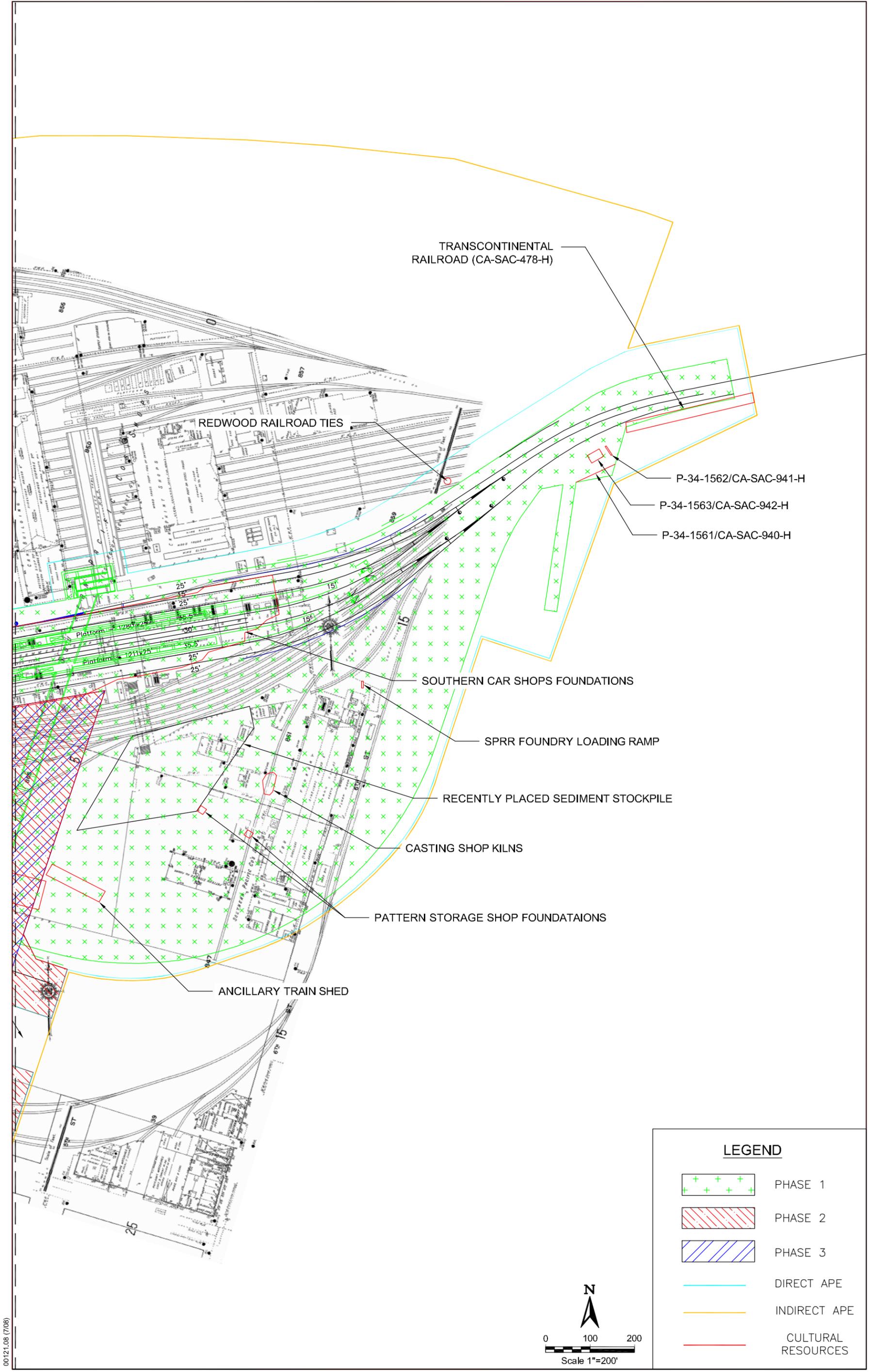
LEGEND

-  PHASE 1
-  PHASE 2
-  PHASE 3
-  DIRECT APE
-  INDIRECT APE
-  CULTURAL RESOURCES



00121.08 (7/08)

Figure 20
Overlay of Sanborn Insurance Map on APE
Detail of Western Half, 1915



00121.08 (7/08)

LEGEND

-  PHASE 1
-  PHASE 2
-  PHASE 3
-  DIRECT APE
-  INDIRECT APE
-  CULTURAL RESOURCES

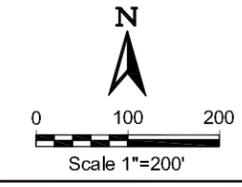


Figure 21
Overlay of Sanborn Insurance Map on APE
Detail of Eastern Half, 1915

00121.08 (7/08)

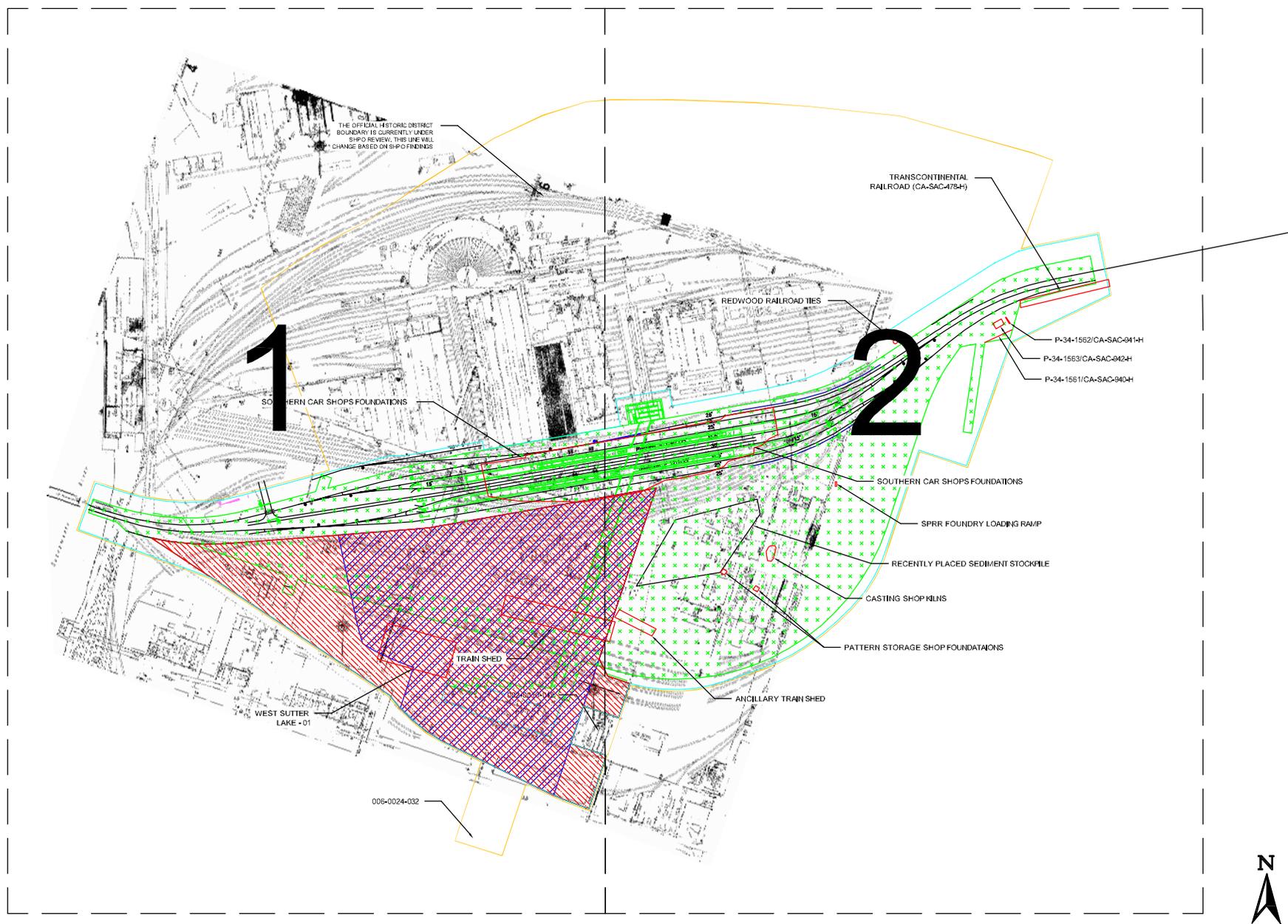
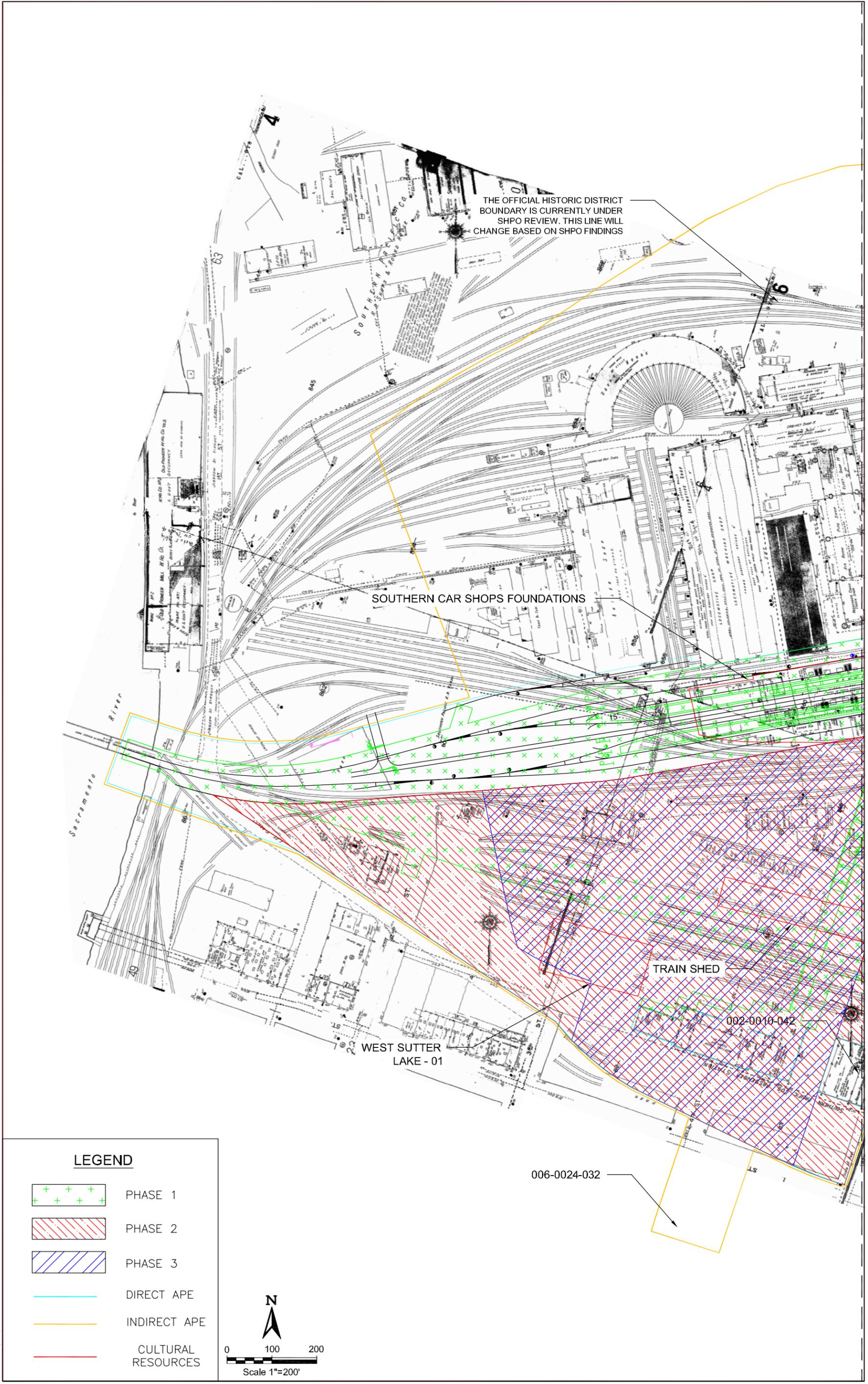


Figure 22
Overlay of Sanborn Insurance Map on APE
Overview, 1951



THE OFFICIAL HISTORIC DISTRICT BOUNDARY IS CURRENTLY UNDER SHPO REVIEW. THIS LINE WILL CHANGE BASED ON SHPO FINDINGS

SOUTHERN CAR SHOPS FOUNDATIONS

TRAIN SHED

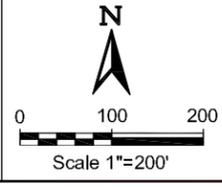
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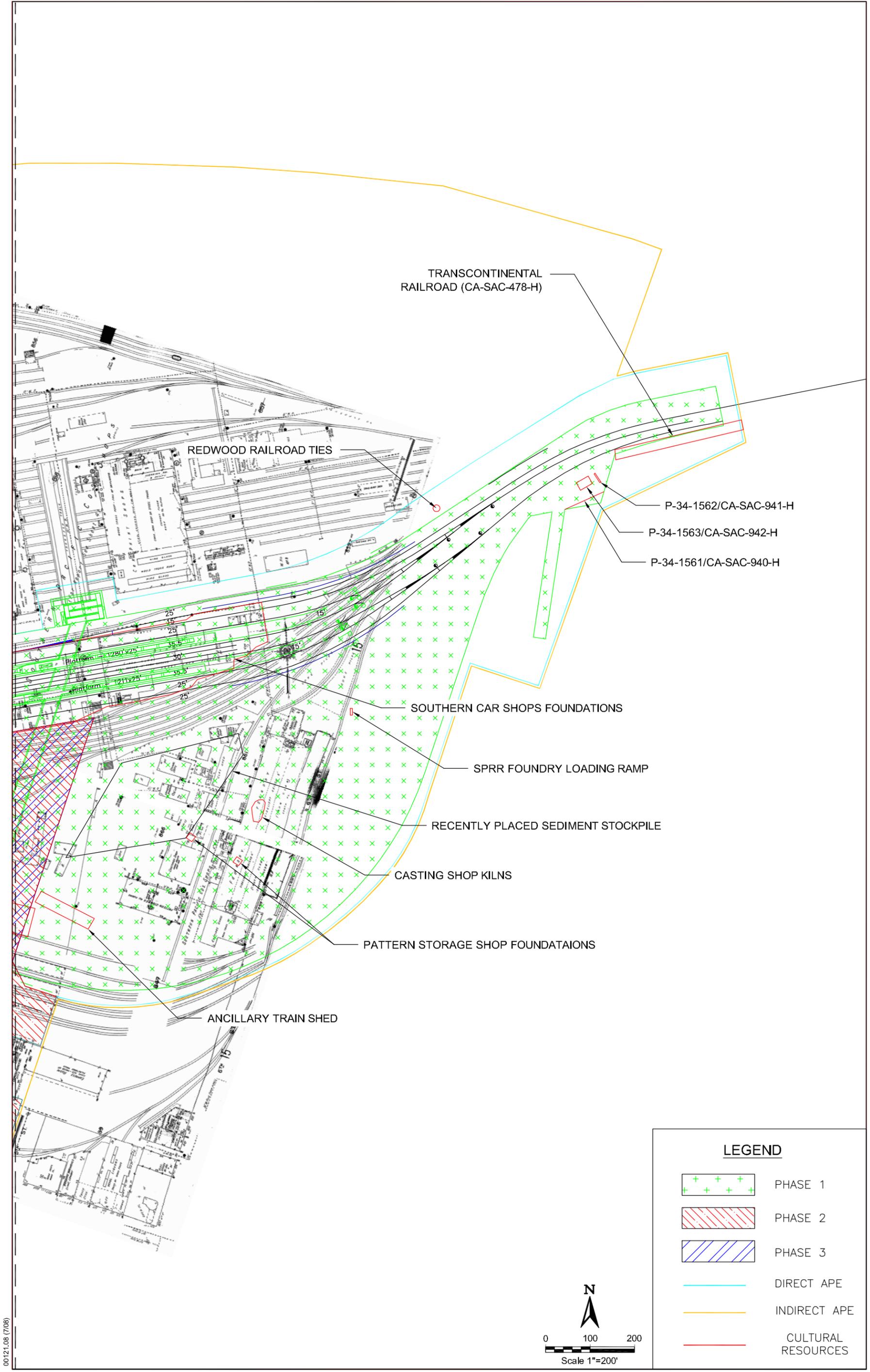
LEGEND

-  PHASE 1
-  PHASE 2
-  PHASE 3
-  DIRECT APE
-  INDIRECT APE
-  CULTURAL RESOURCES



00121.08 (7/08)

Figure 23
Overlay of Sanborn Insurance Map on APE
Detail of Western Half, 1951



00121.08 (7/08)

Figure 24
Overlay of Sanborn Insurance Map on APE
Detail of Eastern Half, 1951

00121.08 (7/08)

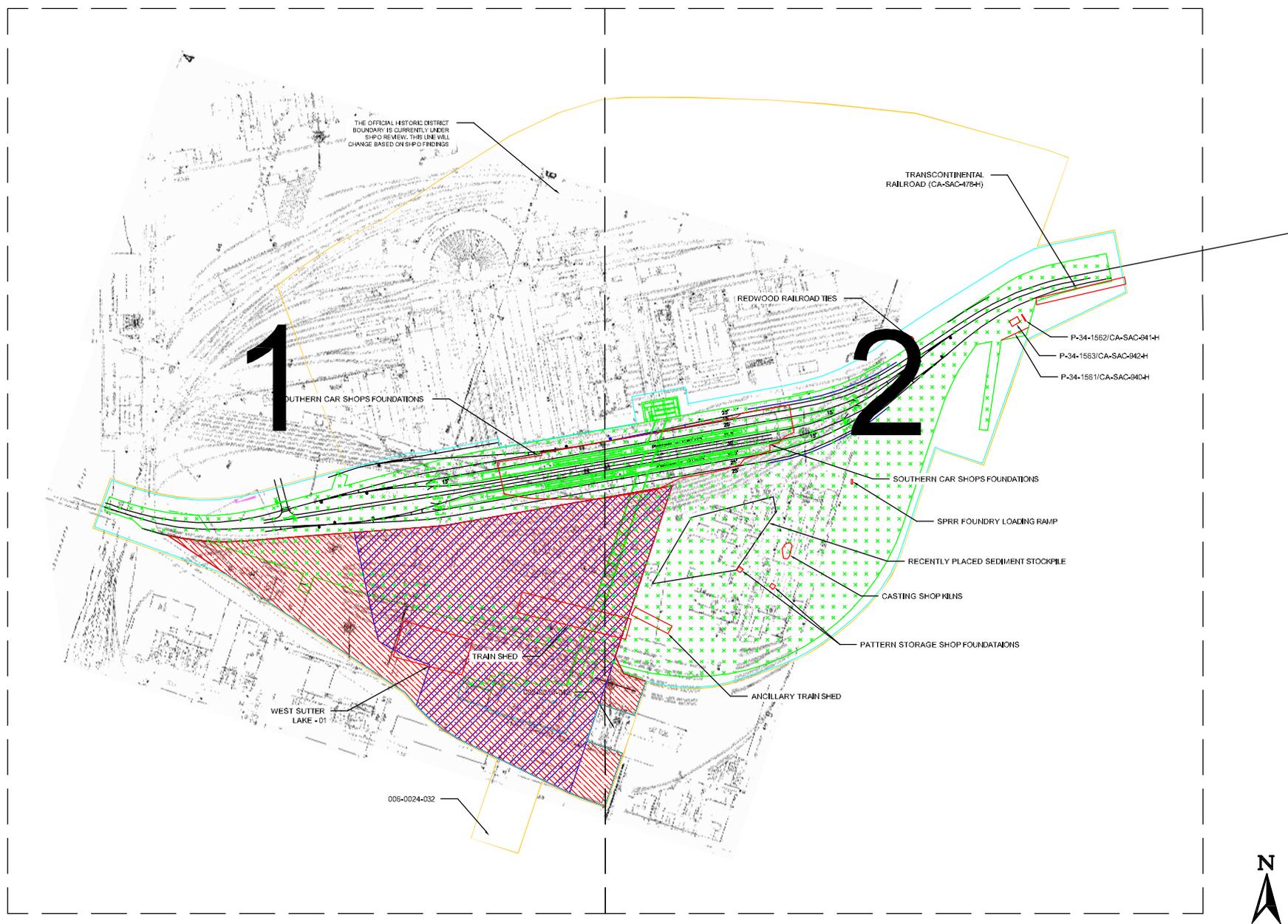


Figure 25
Overlay of Sanborn Insurance Map on APE
Overview, 1952



THE OFFICIAL HISTORIC DISTRICT BOUNDARY IS CURRENTLY UNDER SHPO REVIEW. THIS LINE WILL CHANGE BASED ON SHPO FINDINGS

SOUTHERN CAR SHOPS FOUNDATIONS

TRAIN SHED

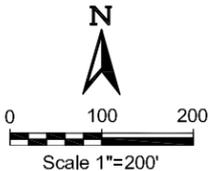
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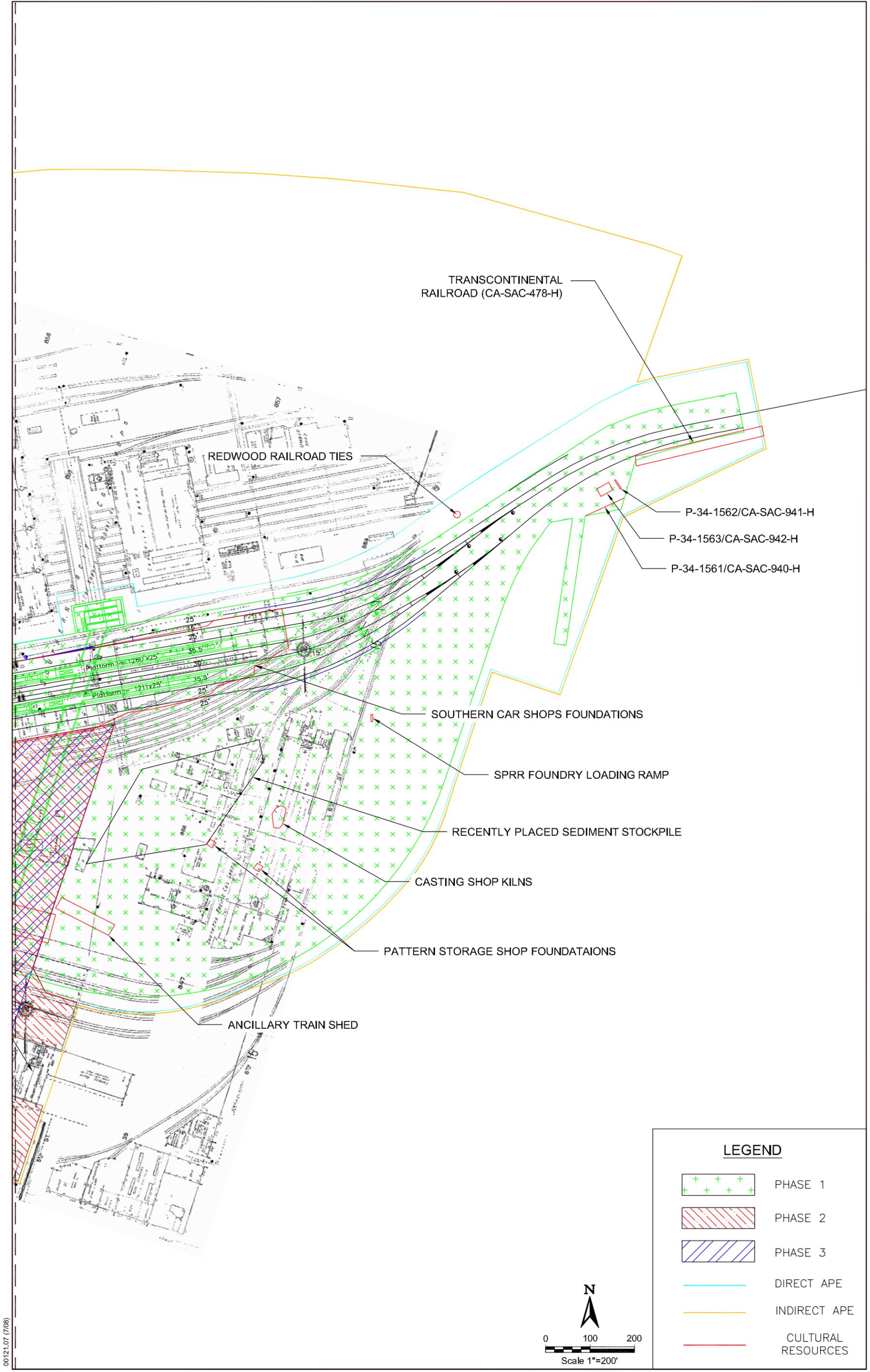
LEGEND

-  PHASE 1
-  PHASE 2
-  PHASE 3
-  DIRECT APE
-  INDIRECT APE
-  CULTURAL RESOURCES



00121.08 (7/08)

Figure 26
Overlay of Sanborn Insurance Map on APE
Detail of Western Half, 1952



00121.07 (7/08)

Figure 27
Overlay of Sanborn Insurance Map on APE
Detail of Eastern Half, 1952

Chapter 6. Field Methods

ICF Jones & Stokes archaeologist Gabriel Roark conducted an archaeological reconnaissance of the direct APE on June 27, 2008. The “Sources Consulted” and “Setting” sections of this report indicate that prehistoric archaeological manifestations would not be found on the current ground surface. Similarly, historical and industrial archaeological materials unrelated to the operations of the CPRR and SPRR are buried under more recent fill and development within the direct APE. More puzzling is the dearth of railroad-related archaeological resources recorded in the direct APE. Despite comprehensive prior inventories of the direct APE, no railroad archaeological resources have been identified at the ground surface; all such resources have been identified below ground surface during construction monitoring or deliberate test excavation (Tremaine and Nelson 2006).

The purpose of the present archaeological reconnaissance was to determine whether mapped, historic railroad features were in fact present at ground surface or evident in recent cut banks and other exposures, recognizing that the bulk of archaeological resources in the direct APE would not be discernible through surface survey. Mr. Roark conducted a general walkover of the direct APE, beginning in the south-central portion of the APE and working northeastward to the eastern extremity of the direct APE, and then westward just south of the Central Shops to the western end of the direct APE. Observations were made of the ground surface and compared with aerial photographs, copies of historic lithographs, and an overlay of Sanborn map data (Sanborn-Perris Map Co. 1895; Sanborn Map Co. 1915, 1951, 1952) onto the draft APE map. Mr. Roark also examined the recorded locations of P-34-1563, P-34-1562, P-34-1561, and CA-SAC-478-H to determine whether any surface manifestations of these resources were present in the direct APE or made visible through recent ground disturbance.

The direct APE was found to be largely denuded, save for a few stands of trees in the western and eastern portions of the APE and occasional ruderal vegetation. Much shallow grading was evident throughout the direct APE. Additionally, a 10-ft-tall sediment stockpile had been placed approximately 3 or 4 weeks prior to the present reconnaissance as part of the soil remediation effort underway north of the Central Shops (see Figure 4 for the location). The presence of the sediment stockpile thwarted any attempt to determine whether the following mapped historic features were visible on the ground surface: the Office and Store Room, Print Shop, and Signal Service structure (Sanborn Map Co. 1915:Sheet 6).

The archaeological reconnaissance resulted in the identification of seven previously unrecorded historic archaeological resources: Ancillary Train Shed Curbs, Train Shed Curbs, Casting Shop Kilns, Pattern Storage Shop Slab Foundations, SPRR Foundry Loading Ramp, Redwood Railroad Ties, and Southern Car Shops Slab Foundations (Figures 2 and 4). They, along with previously recorded archaeological resources, are described in Chapter 7 of this report. Archaeological resource locations have been mapped (using a global positioning system [GPS] unit), and brief descriptions are provided in Chapter 7 herein.

Chapter 7. Identified Cultural Resources

The archaeological survey and literature review reported in this ASR resulted in the identification of 16 cultural resources in the direct APE, four of which are located in the Phase 1 ADI. Four of these, constituting elements of the historic built environment, are evaluated in the project HRER (ICF Jones & Stokes 2008): Sacramento Southern Pacific Railroad Company Station District/Sacramento Valley Station and REA Building (P-34-1004), Jibboom Street Overhead (P-34-1374), I Street Viaduct (P-34-1375), and Southern Pacific Railyards/Central Shops Historic District. The remaining archaeological resources are described below, and DPR 523 record forms for previously recorded resources are provided in Appendix D. DPR 523 forms for newly identified resources are contained in the project HRER, because these resources are evaluated in that document and provide the necessary supporting documentation for the evaluations.

PREVIOUSLY RECORDED RESOURCES

Transcontinental Railroad (CA-SAC-478-H)

ICF Jones & Stokes' June 27, 2008, archaeological reconnaissance revealed that a modern railroad occupies the portion of the Transcontinental Railroad (CA-SAC-478-H) in the direct APE. Other than occupying the historic alignment of the Transcontinental Railroad, no features associated with CA-SAC-478-H were evident in the direct APE.

Sacramento Southern Pacific Railroad Company Station District/Sacramento Valley Station and REA Building (P-34-1004)

This resource is described and evaluated in the HRER for the proposed project (ICF Jones & Stokes 2008). The platform amenities (passenger platform and canopies) associated with the Depot District are located in the ADI.

Jibboom Street Overhead (P-34-1374)

This resource is described in the HRER for the proposed project (ICF Jones & Stokes 2008).

I Street Viaduct (P-34-1375)

This resource is described in the HRER for the proposed project (ICF Jones & Stokes 2008).

7th Street Historic-Era Refuse Deposit (P-34-1563/CA-SAC-942-H)

P-34-1563 is a historic refuse deposit located in the direct APE just north of the intersection of D and 7th streets. The site is situated 8 to 17 ft below ground surface along what historically was the Willow Lake shoreline. P-34-1563 measures 40 ft wide (northeast-southwest axis). Its eastern and western boundaries are not known, as a result of the project-imposed limits of investigation. The artifacts present at the site date from about 1880 to the early 1900s and included glass medicine bottles, ink bottles, sauce bottles, drinking glasses, pressed glass bowls, hair tonic containers, alcohol bottles, water bottles, and soda bottles; two ceramic sake bottle fragments, a bowl fragment made from Japanese celadon, Majolica ware, plate fragments with English transfer ware floral patterns, white improved earthenware, crockery fragments, and a porcelain doll's foot; and miscellaneous artifacts, such as buttons, articles of clothing, metal fragments, and hand-sawn butchered bone. The majority of the artifacts are of Euro-American manufacture and likely represent domestic refuse disposal from the historic Alkali Flat neighborhood. P-34-1563 was buried below fill that the CPRR placed during its land reclamation efforts related to expansion of the Railyards. The recorded portion of this refuse deposit was destroyed as a result of building the 7th Street undercrossing. (Tremaine et al. 2002a:1–2.)

On June 27, 2008, ICF Jones & Stokes archaeologist Gabriel Roark surveyed the recorded location of P-34-1563 and a 100-ft radius from the site location. The purpose of this examination was to seek any subsurface exposures that would facilitate a determination of whether P-34-1563 extends west or east of its recorded location. No such exposures or surface artifacts were identified. The ADI in this portion of the direct APE is only 3 ft deep. At 8–17 ft below ground surface, P-34-1563 is not located in the ADI.

7th Street Railroad Trestle Bents (P-34-1562/CA-SAC-941-H)

P-34-1562 consists of two wooden railroad trestle bents north of the 7th Street–D Street intersection. P-34-1562 was part of a railroad trestle that the CPRR constructed ca. 1863 (Tremaine and Nelson 2006:74). The redwood trestle appears to have stood about 8 ft above the original ground surface, with a 6–7-ft spacing between bents. The trestle was built to span Willow Lake on an east–west trajectory. Because P-34-1562 is one of the earliest railroad trestles built in California and has the potential “to yield important information about a type and method of trestle construction,” Tremaine and Nelson (2002:2; Tremaine and Nelson 2006:Table 8) recommended this resource as eligible for NRHP listing under criteria A and C. Construction of the 7th Street Extension Project, while responsible for unearthing P-34-1562 from fill placed in Willow Lake, did not result in the destruction of the two recorded trestle bents. P-34-1562, however, was reburied in construction-related fill. (Tremaine et al. 2002b.)

On June 27, 2008, Mr. Roark surveyed the recorded location of P-34-1562 and a 100-ft radius from the site location. The purpose of this examination was to seek any subsurface exposures that would facilitate a determination of whether P-34-1562 extends west or east of its recorded location. No such exposures or surface artifacts were identified. P-34-1562 is in the ADI, as the railroad trestle bents were identified approximately 1.5 ft below the year 2006

ground surface (Tremaine and Nelson 2006:Figure 7). This resource is evaluated in the HRER for the proposed project (ICF Jones & Stokes 2008).

6th Street Levee (P-34-1561/CA-SAC-940-H)

P-34-1561, located north of the D Street/7th Street intersection, consists of a portion of the 6th Street Levee, exposed in cross-section in the sidewalls of a 3-ft-wide backhoe trench (Tremaine and Nelson 2006:23, Figure 14). The cross-section of P-34-1561 reveals the multistage construction of the 6th Street Levee, which first was constructed in 1852–1853 to provide the city of Sacramento protection from American and Sacramento river floodwaters. The 6th Street Levee was subsequently improved in 1868 and 1880. The 1852–1853 iteration of the levee was evident as a 3-ft-high berm of medium-brown sandy silt resting on a base of clayey silt and surrounded by a silty sand–clayey silt matrix. The 1868 levee, built on top of the 1852–1853 structure, consists of yellowish-brown fine silty sand and a slope protection of darker yellowish-brown silty sand. The outer (northern) slope of the levee was armored with cobbles supplied by the CPRR in exchange for use of the 6th Street Levee as a new elevated railroad grade beginning between 1868 and 1880. The historic integrity of P-34-1561 was judged to be excellent, although the crown of the levee had been truncated by recent grading activities. The 6th Street Levee was recommended as eligible for listing in the NRHP under criteria A and C. P-34-1562 was destroyed during construction of the 7th Street Extension Project. (Tremaine and Nelson 2006:23; Tremaine et al. 2002c.)

On June 27, 2008, Mr. Roark surveyed the recorded location of P-34-1561 and a 100-ft radius from the site location. The purpose of this examination was to seek any subsurface exposures that would facilitate a determination of whether P-34-1561 extends west or east of its recorded location. No such exposures or surface artifacts were identified. Nevertheless, portions of the 6th Street Levee are located within the ADI, as the levee is buried by only 1.5–2 ft of fill. P-34-1561 is evaluated in the HRER for the proposed project (ICF Jones & Stokes 2008).

West Sutter Lake-01

West Sutter Lake-01 is a temporary designation that ICF Jones & Stokes has given to a historic artifact scatter and prehistoric isolate identified by Tremaine & Associates to the northwest of the Station train depot. According to a telephone conversation on July 2, 2008, between Mr. Roark and Tremaine & Associates principal Kim Tremaine, Tremaine & Associates identified the artifact scatter while conducting presence/absence trenching ahead of construction of Station RT facilities. Tremaine & Associates excavated 10 backhoe trenches on the margin of what once was the western arm of Sutter Lake and Slater's Addition or American Fork Addition. Seven of the trenches revealed historic Chinese and Euro-American artifacts, such as bottle glass, faunal bone, a marble, salt-glazed stoneware, miscellaneous metal fragments, a peach pit, a watermelon seed, a tobacco tin, milk glass sherds, ironstone sherds, and gaming pieces (Chinese). These artifacts appeared to be in a highly disturbed context with little or no meaningful intrasite patterning. Debris associated with the filling of Sutter Lake was observed also: wood, brick, glass, and ferrous metal. Construction monitoring subsequent to excavation of

the test trenches yielded a basalt artifact, possibly a core, at 9 ft below ground surface at the margin of former Sutter Lake (Kim Tremaine, personal communication 2008).

ICF Jones & Stokes examined the vicinity of West Sutter Lake-01 on June 27, 2008, and found the area to be completely paved over. No archaeological materials were evident. West Sutter Lake-01 is not located in the ADI and would not be affected by Phase 1 construction.

Southern Pacific Railyards/Central Shops Historic District

The Southern Pacific Railyards/Central Shops Historic District is discussed in detail in the HRER for the proposed project (ICF Jones & Stokes 2008). The discussion in this report focuses on the archaeological potential of the historic district. Rich and Valpey (2007) and Wyatt (2007) have prepared detailed nomination forms for what is more accurately described as the CPRR/SPPR Railyards Historic District, expanding on earlier descriptions of the district by Historic Environment Consultants (1998, 2000). The majority of the historic district consists of the Central Shops, which are primarily located outside the direct APE. Neither Rich and Valpey (2007) nor Wyatt (2007) consider historic archaeological resources in the vicinity of the Central Shops as potential contributors to the historic district (likely because of the paucity of historical archaeological investigations in the CPRR/SPPR Railyards), leaving open the question of whether a larger district boundary that encompasses railroad-related historic archaeological resources is needed to fully document the history and significance of Sacramento railroading operations under the CPRR and SPPR. Several of the resources documented below (Train Shed, Ancillary Train Shed, Casting Shop Kilns, Pattern Storage Shop Foundations, SPPR Foundry Loading Ramp, Redwood Railroad Ties, and Southern Car Shops Foundations) may be archaeological contributors to the Central Shops Historic District. These potential contributors are evaluated in the project HRER (ICF Jones & Stokes 2008).

NEWLY IDENTIFIED RESOURCES

Train Shed Curbs

The Train Shed Curbs consists of three concrete curbs that once bound two sets of standard-gauge rails. The curbs extend 350 ft on an east–west axis and 62.5 ft on a north–south axis. The superstructure depicted on the 1951 Sanborn map (Sanborn Map Co. 1951) has been demolished and is no longer present, and the northern pair of rails has been removed. The Train Shed is not depicted on historic maps dating prior to 1951 and appears to have been built between 1920 and 1951 (Sanborn Map Co. 1915, 1951; Sanborn-Perris Map Co. 1895; Southern Pacific 1920). Immediately north of and contemporaneous with the Train Shed Curbs was an east–west-oriented row of about six railroad buildings and structures: a store (storage), offices, a car maintenance shop, and an ice house. No evidence for these structures was evident during the survey. The current railroad alignment and Passenger Sheds were located immediately south of the Train Shed Curbs between 1920 and 1951 (Sanborn Map Co. 1951; Southern Pacific 1920). The Train Shed Curbs is in the ADI and is evaluated as a potential archaeological contributor to

the Southern Pacific Railyards/Central Shops Historic District in the HRER for the proposed project (ICF Jones & Stokes 2008).

Ancillary Train Shed Curbs

This resource is situated east and slightly north of the Train Shed Curbs. The resource consists of two concrete curbs oriented on a northwest–southeast trajectory 137.5 ft long and 25 ft wide. Between the curbs are a set of regularly spaced, pressure-treated wood railroad ties. The rails have been removed. Aerial photographs (see Figures 3 and 7) suggest that a third concrete curb and a second set of tracks were located along the northern edge of the Ancillary Train Shed Curbs, but these features were not evident during the survey. The age of this resource is unknown. The Ancillary Train Shed Curbs are not located in the ADI but may be eligible for NRHP listing under criteria A–C. The Ancillary Train Shed Curbs are evaluated as a potential archaeological contributor to the Southern Pacific Railyards/Central Shops Historic District in the HRER for the proposed project (ICF Jones & Stokes 2008).

Casting Shop Kilns

Eight brick-lined kilns were identified in the direct APE, four below ground surface in the profile of an excavated pit and four in plan at the ground surface immediately east of the kilns identified in profile. The location of the kilns corresponds to the SPRR Casting Shop, an ancillary structure to the SPRR Foundry (located to the east of the Casting Shop), as depicted by the Sanborn Map Co. (1951:Sheet 5). The kilns are circular, exhibit clear evidence for repeated firing, and are filled with ash and slag. A number of ceramic forms or patterns are located in the pit stratigraphically beneath the kilns; these artifacts were used in the manufacture of numerous railroad parts, such as springs and other “hollow” parts. The Casting Shop Kilns are not in the ADI for Phase I but may be eligible for NRHP listing under criteria A–C. Therefore, the resource is evaluated as a potential archaeological contributor to the Southern Pacific Railyards/Central Shops Historic District in the HRER for the proposed project (ICF Jones & Stokes 2008).

Pattern Storage Shop Slab Foundations

The Pattern Storage Shop Slab Foundations are two separate foundation remnants of the Pattern Storage Shop, which was built between 1895 and 1915 (Sanborn-Perris Map Co. 1895:Sheet 5a; Sanborn Map Co. 1915:Sheet 5). The easternmost foundation remnant contains the metal-and-concrete recess that housed the base of the Pattern Storage Shop’s center support post (Sanborn Map Co. 1915:Sheet 5). No other features or artifacts associated with the Pattern Storage Shop were evident at the time of survey. The Pattern Storage Shop Slab Foundations are not in the ADI for Phase I but may be eligible for NRHP listing under criteria A–C. Therefore, the resource is evaluated as a potential archaeological contributor to the Southern Pacific Railyards/Central Shops Historic District in the HRER for the proposed project (ICF Jones & Stokes 2008).

SPRR Foundry Loading Ramp

The SPRR Foundry Loading Ramp appears to be the only surface feature remaining of the SPRR Foundry, built by 1895 (Sanborn-Perris Map Co. 1895:Sheet 5a). The loading ramp is a simple concrete structure 3 ft tall, 12 ft long, and accessed from the north. The SPRR Foundry Loading Ramp is not in the ADI for Phase I but may be eligible for NRHP listing under criteria A–C. Therefore, the resource is evaluated as a potential archaeological contributor to the Southern Pacific Railyards/Central Shops Historic District in the HRER for the proposed project (ICF Jones & Stokes 2008).

Redwood Railroad Ties

This resource consists of five redwood railroad ties visible in plan in an existing gravel road. The ties are oriented on a southwest–northeast trajectory. The ties are located along the route of an 1870 rail line extending east from the Front Street/I Street intersection to 6th Street, and thence north on 6th Street to join the Transcontinental Railroad (CA-SAC-478-H) at approximately 7th and D streets (Koch 1870). By 1890, this route was abandoned and replaced with a rail line originating at the former passenger depot located between the western terminus of F Street and the Sacramento River and 3rd and 6th streets (Elliott 1890). The 1890 route approximated the curve along 6th Street that was used in 1870 and also joined the Transcontinental Railroad. This route witnessed continued use through 1952 (Sanborn Map Co. 1915, 1951, 1952). The Redwood Railroad Ties are not located in the ADI for Phase I but may be eligible for NRHP listing under criteria A–C. Therefore, the resource is evaluated as a potential archaeological contributor to the Southern Pacific Railyards/Central Shops Historic District in the HRER for the proposed project (ICF Jones & Stokes 2008).

Southern Car Shops Slab Foundations

Numerous foundations are present in the direct APE immediately south of the Central Shops. Between 1895 and the 1950s, this portion of the direct APE contained the Copper Shop, Coal Bin, Coal Shed, Tin and Copper Shed, Hammer Shop, Pipe Shop, Pipe Shed, Bolt Shop, Rolling Mill, and miscellaneous storage sheds and offices (Sanborn-Perris Map Co. 1895; Sanborn Map Co. 1915, 1951, 1952; Southern Pacific 1920). The foundations represent the only surface manifestation of the Southern Car Shops. The Southern Car Shops Slab Foundations are located in the ADI and are evaluated as a potential archaeological contributor to the Southern Pacific Railyards/Central Shops Historic District in the HRER for the proposed project (ICF Jones & Stokes 2008).

Chapter 8. Study Findings and Conclusions

The findings of this ASR are arranged by resource location with respect to the direct APE and Phase 1 ADI, as well as NRHP-eligibility status. The records search, literature review, and archaeological reconnaissance of the direct APE resulted in the identification of 16 cultural resources, 12 of which constitute archaeological resources. The archaeological resources are:

- 7th Street Historic-Era Refuse Deposit (P-34-1563/CA-SAC-942-H),
- 7th Street Railroad Trestle Bents (P-34-1562/CA-SAC-941-H),
- 6th Street Levee (P-34-1561/CA-SAC-940-H),
- West Sutter Lake-01 (historic artifacts, railroad refuse, and prehistoric isolate),
- Transcontinental Railroad (CA-SAC-478-H),
- Ancillary Train Shed Curbs,
- Train Shed Curbs,
- Casting Shop Kilns,
- Pattern Storage Shop Slab Foundations,
- SPRR Foundry Loading Ramp,
- Redwood Railroad Ties, and
- Southern Car Shops Slab Foundations.

The following identified resources are located in the ADI for Phase 1.

- 7th Street Railroad Trestle Bents (P-34-1562/CA-SAC-941-H),
- 6th Street Levee (P-34-1561/CA-SAC-940-H),
- Train Shed Curbs, and
- Southern Car Shops Slab Foundations.

ARCHAEOLOGICAL RESOURCES IN THE DIRECT APE (OUTSIDE THE ADI)

Eight identified archaeological resources are located in the direct APE but outside of the ADI: 7th Street Historic-Era Refuse Deposit (P-34-1563/CA-SAC-942-H), West Sutter Lake-01 (historic artifacts, railroad refuse, and prehistoric isolate), Transcontinental Railroad (CA-SAC-478-H), Ancillary Train Shed Curbs, Casting Shop Kilns, Pattern Storage Shop Slab Foundations, SPRR Foundry Loading Ramp, and Redwood Railroad Ties. P-34-1563, the 7th Street Historic-Era Refuse Deposit, is buried under 8–17 ft of fill, well beneath the vertical extent (3ft) of the ADI. Therefore, this resource is not discussed further in this ASR and is not evaluated in the project's HRER (ICF Jones & Stokes 2008). Although historically located in

the present ADI, nothing remains of CA-SAC-487-H (the first Transcontinental Railroad) within the ADI. CA-SAC-487-H is evaluated in the project's HRER (ICF Jones & Stokes 2008). West Sutter Lake-01 would not be affected by Phase 1 of the proposed project because the resource is capped by an asphalt parking lot, which would not be demolished during Phase 1. West Sutter Lake-01 is therefore not addressed further in this ASR, nor is the resource evaluated in the companion HRER (ICF Jones & Stokes 2008). The Ancillary Train Shed Curbs, Casting Shop Kilns, Pattern Storage Shop Slab Foundations, SPRR Foundry Loading Ramp, and Redwood Railroad Ties, although not situated in the ADI, all are potential contributors to the Central Shops Historic District. These resources are evaluated in the HRER prepared for the proposed project (ICF Jones & Stokes 2008).

ARCHAEOLOGICAL RESOURCES IN THE PHASE 1 ADI

The 7th Street Railroad Trestle Bents (P-34-1562/CA-SAC-941-H), 6th Street Levee (P-34-1561/CA-SAC-940-H), Train Shed Curbs, and Southern Car Shops Slab Foundations are located in the Phase 1 ADI. These resources are evaluated in the project HRER (ICF Jones & Stokes 2008).

POTENTIAL FOR LATE DISCOVERIES

The review of historic maps, geomorphological data, and soil remediation documents described earlier in this ASR indicates that all historic archaeological resources identifiable in the ADI from these sources are described herein. Although no other specific locations in the ADI can be identified as containing historic archaeological deposits, some potential exists for inadvertent historic archaeological discoveries to occur during Phase 1 construction. The potential for inadvertent prehistoric archaeological discoveries cannot be discounted, but the Phase 1 ADI is too shallow (areas subject to 3 ft of excavation) in most areas to intersect sediments below historic fill layers or other strictly historic-era contexts. Even the depth of excavation (20 ft) for the proposed passenger tunnel in Phase 1 is not deep enough to intersect identifiable native soils (see Appendix E). Therefore preparation of a late discovery plan is suggested in lieu of an extended Phase I plan.

It is Caltrans' policy to avoid cultural resources whenever possible. If cultural resources cannot be avoided, then additional work may be necessary. If buried cultural materials are encountered during construction, it is Caltrans' policy that work in that area must halt until a qualified archaeologist can evaluate the nature and significance of the find (California Department of Transportation 2001). Additional archaeological survey will be needed if project limits are extended beyond the present survey limits.

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Appendix A. Description of Depot Relocation

MOVING THE HISTORIC DEPOT

The alternative previously known as the Sacramento Northern requires moving the historic Depot building at least 400 feet (ft) to the north. This section provides additional information on the methodology for moving the building. The consultant team has investigated the feasibility of moving the building approximately 400 to 650 ft directly north from its present location and has concluded that the move is technically feasible. Numerous other large, important historic structures have been moved in California and other parts of the United States. Several members of the study team have previously used similar technology for raising and lowering large structures in order to install base isolation systems (for example, the Oakland City Hall and the Asian Art Museum in San Francisco).

The historic Depot building is approximately 370 ft long by 128 ft wide. It consists of a three-story concrete frame building with masonry infill. The building is well-suited for moving because it has a basement, a complete three-dimensional building frame system and concrete flat slab at the first-floor level. It has approximately 135 pile caps, a total weight of approximately 13,500 kips and has column loads ranging from 65 to 225 kips.

Prior to moving the building, all seismic strengthening work (e.g., diaphragm connections and walls) would be completed. This would make the building more resistant to strains that may occur during moving. The railroad tracks and other obstacles north of the Depot would be moved prior to the moving of the Depot. The new basement and foundation system would be constructed prior to the move. The building likely would be supported on precast concrete piles at its new location. New permanent terminal structures at the north side of the new Depot location would be constructed prior to the move and would be used to accommodate passenger functions during the relocation of the existing Depot. The ground over which the building would be moved would be leveled and compacted to provide a firm runway. It is assumed that temporary concrete strips would be cast in the ground to ensure that excessive deformation of the soil does not occur.

A new reinforced concrete slab would be cast at the existing basement level to provide a jacking platform and to facilitate the movement of equipment and materials with forklifts and buggies. A grid work of reinforced concrete beams would be cast under the first-floor slab to provide jacking points away from the existing basement columns and perimeter walls. Where extremely important finishes exist, such as the mural in the waiting room, localized strengthening would be provided as needed to mitigate unacceptable cracking.

The building would be raised about 8 to 10 feet with a system of interconnected hydraulic jacks. As columns and walls were unweighted with the jacks, they would be saw-cut. The cuts would be near the top of the basement columns and walls. When the building was entirely supported on the jacks, it would be raised and moved across the runway on rollers that would roll over a steel plate track. When the building had reached the new location, it would be lowered onto the new basement columns and walls and, if included in the work, the new base isolators. The procedure would be the reverse of the raising operation at the existing site.

The work to prepare the new basement and foundations would require approximately 6 months. The move-related strengthening in the basement of the existing building would require

approximately 6 months also. The seismic strengthening of the building shell would require approximately 4 months. All three of these tasks may be performed concurrently. Also, during this work, approximately 1 month would be required to prepare the temporary runway. Approximately 3 weeks would be required to raise the building, move it along the runway, and lower it at its new location. After the building was at its new location, approximately 4 months would be required to secure it to the new foundation system, cover the moat (assuming base isolation is included), and connect the utilities.

The move-related cost has been estimated at approximately \$10 million. This includes the new basement and foundation system, the runway, preparation of the Depot building, preservation-related issues, and the actual move. For an additional \$2.5 million, a seismic base isolation system could be installed. This is in comparison with \$11 million for base-isolating the building at its present location. Base-isolating the building, if it is moved, represents a relatively modest incremental cost. Regardless of whether the building is moved, or is base-isolated, conventional seismic retrofitting is required. The strengthening involves wall-to-diaphragm connections, diaphragm and collector strengthening, and a limited amount of shotcreting of the masonry infill walls. This work would nominally cost \$2.5 million for any of the alternatives, although it would be slightly less for the base-isolated scheme and may be offset slightly by some of the costs included for the move-related strengthening. At this phase, the differences are not significant. The seismic strengthening at the roofs was completed recently, so the above figure is for the remaining seismic strengthening work.

The approximate costs of seismic retrofit and moving the Depot (not including the seismic strengthening work required for all options) can be summarized as follows:

- base isolation (without move)—\$11 million,
- Move the Depot without base isolation—\$10 million, and
- Move the Depot with base isolation—\$12.5 million.

In summary, moving the building is technically feasible and has numerous precedents. If the building were relocated, base isolation would be a good investment. Base isolation would provide reasonable assurance of the protection of the historic fabric (masonry facade and waiting room mural and finishes) of the building in the event of any earthquake ground motion considered plausible for the vicinity. Conventional seismic strengthening would provide life-safety protection but would provide little protection of the historic fabric. Without base isolation, the maximum considered earthquake ground motion potentially would cause irreparable damage to the waiting room mural and to the masonry facade. Although the building could be expected to remain stable under this scenario, the extent of the damage could necessitate its demolition, so base isolation is important for ensuring long-term preservation of the building. If the building were to be moved, it may be prudent to pay a relatively small additional premium to protect its historic fabric from earthquakes.

PHASING OF RAIL OPERATIONS

The availability of open land area between the present mainline and station/storage tracks, and the south line of the Railyards shop buildings/future Railroad Technology Museum, means that the phasing of construction and operations implementation should be reasonably straightforward for the Sacramento Intermodal Transportation Facility. Essentially, new facilities could be built while the present facilities were kept in operation. When the new facilities were ready, there would be a “cutover” of connections from the old to the new, using as many prefabricated and preassembled elements as possible. The cutover might be accomplished over a long weekend, with freight service temporarily rerouted over other lines for a few days and with passengers handled by bus between the terminal and other stations east of the Sacramento River and a temporary terminal, perhaps in Davis or West Sacramento. As the cutover dates became known in advance, procedures could be planned to minimize disruption to freight and passenger service and to provide the maximum information to the traveling public. In general, it is not anticipated that phasing and durations would vary significantly between alternatives.

Appendix B. Records Search Letter

**NORTH CENTRAL INFORMATION CENTER
CALIFORNIA HISTORICAL RESOURCES INFORMATION SYSTEM**

Record Search Number: SAC-08-73
County: Sacramento

In Cooperation with:

State of California - The Resources Agency
Department of Parks and Recreation
Office of Historic Preservation

AGREEMENT TO CONFIDENTIALITY AND RECORD SEARCH STATEMENT

I, the undersigned, have been granted access to the Archaeological Site Record data at the North Central Information Center at California State University, Sacramento, 6000 'J' Street, Sacramento, CA 95819 for the purpose of:

scientific research project planning other: _____

I fully understand the confidential nature of the information contained in these records, and I agree to respect that confidentiality.

I will attempt to ensure that specific site location is not distributed in public documents or made available to unauthorized individuals within my institution or agency. I also understand that prior written consent of the Information Center Coordinator or State Historic Preservation Officer is required for any exceptions to the above stipulations.

Furthermore, I agree to forward to the appropriate Information Center, no later than 30 days after completion of field reconnaissance and investigation, any preliminary reports and complete site records for any sites that are identified or dealt with. I also agree to forward to the appropriate Information Center or Centers all subsequent reports on these sites, which are pertinent to archaeological resource management.

I understand that failure to comply with any of the above agreement is grounds for denial of subsequent access to the archaeological site data.

This agreement is based on State access policy.

Dillon Stapleton 5-28-08
Signature of Researcher Date

Printed Name of Researcher Dillon Stapleton Phone (916)737-3000

Firm Jones & Stokes

Address 630 K St. Suite 400 City/State Sacramento, CA Zip 95814

Method of contact: Phone _____ In person X Letter _____ Fax _____ Email _____ Date: May 28, 2008

Title of Project or Research Billing No: 00121.08 305 for Sacramento Intermodal Transportation Facility

Contact person/agency for which work conducted TranSystems

Address _____ N/A _____ Phone _____ N/A _____

USGS 7.5' Quad(s) consulted Sacramento East & West

Site Record(s) consulted All pertinent resources.

Site Record(s) copied All pertinent resources.

Reports/manuscripts consulted All pertinent resources.

Reports/manuscripts copied All pertinent resources.

Staff Researcher Ellen Bowden Date: May 28, 2008

No. of Hours -Record Search 8 Hours Use Fee charged \$ 800.00

No. of Copies @ .15¢ each 257 Copy Charge \$ 38.55

Intern Data Base Access Fee charged \$ 20.00

BILLING STATEMENT:

(Payment Instructions)

Total Fee charged: \$ 858.55

Make check payable to: University Enterprises, Inc.
Forward to: North Central Info Center CSU - Sacramento
6000 J Street, Adams Bldg., #208 Sacramento, CA 95819-6100

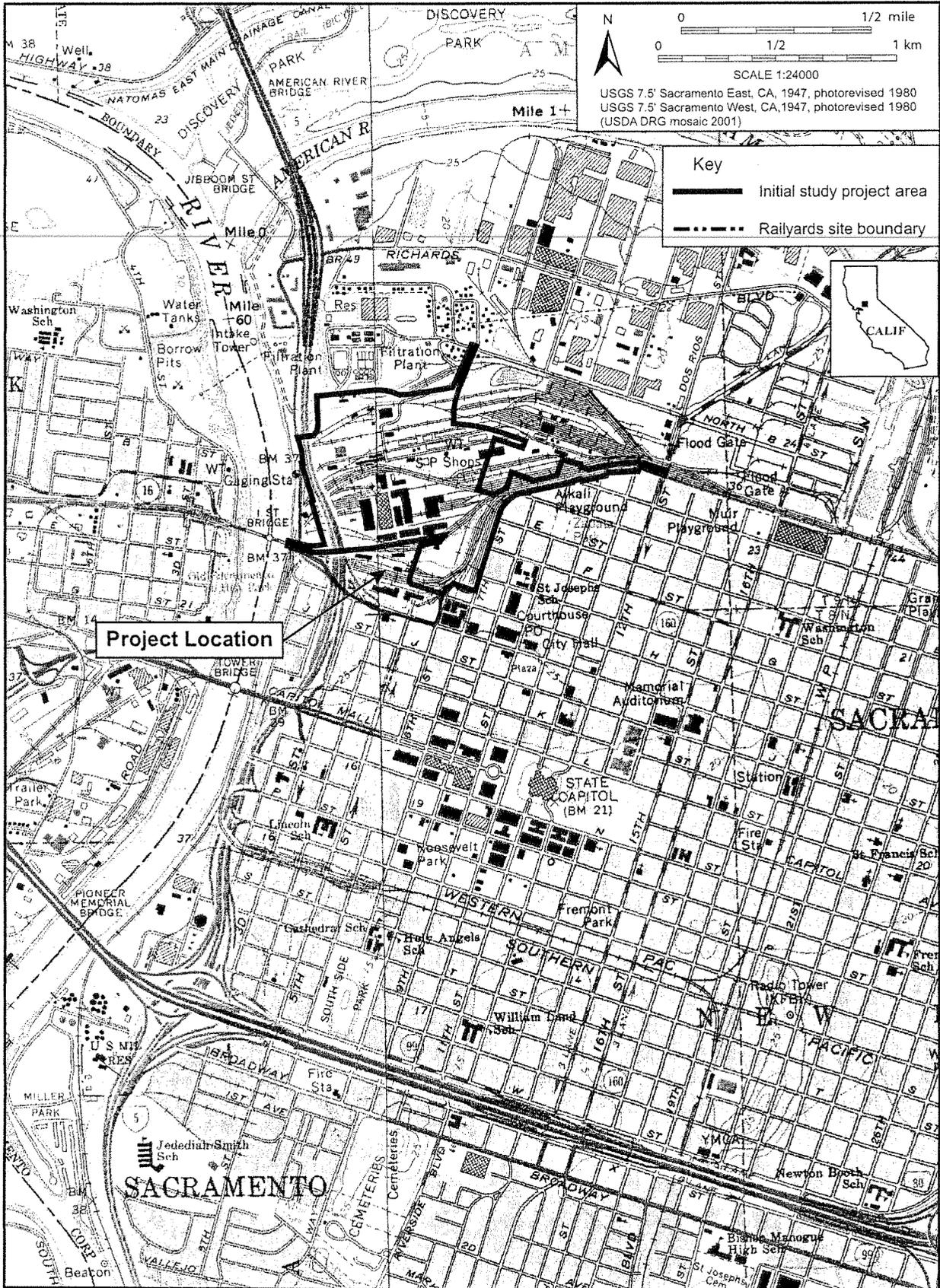


Figure 1. Project location

Appendix C. Native American Correspondence

Sacred Lands File Search_SITF

From: Gabriel Roark
Sent: Friday, May 23, 2008 11:52 AM
To: 'Debbie Pillas-Treadway (dpt_nahc@pacbell.net)'
Subject: Sacred Lands File Search - Sacramento Intermodal

Dear Debbie,

Please find the attached request. If you have any questions, please give a call or e-mail. Thanks.

Gabriel Roark
Archaeologist
ICF Jones & Stokes
630 K Street, Suite 400 | Sacramento | CA 95814
t 916.737.3000 | f 916.737.3030 | e groark@jсанet.com
www.icfi.com | www.jonesandstokes.com
? Please consider the environment before printing this message.
Passion. Expertise. Results.



Fax Transmission

Date: May 23, 2008

Attention: Debbie Pilas-Treadway
Native American Heritage Commission

Fax Number: 916/657-5390

Phone Number: 916/653-4038

Number of Pages [Click and type # of pages] (including this page)

From: Gabriel Roark, Archaeologist
Local Government and Transportation Planning Team

Client: TranSystems
Project: Sacramento Intermodal Project
Project Number: 00128.08 305

Subject: **Request for Sacred Lands File Search and List of Contacts in
Sacramento County: Sacramento Intermodal Transportation
Facility, City of Sacramento**

Dear Debbie:

ICF Jones & Stokes is assisting the Federal Highway Administration and California Department of Transportation with consultation and technical tasks associated with Section 106 of the National Historic Preservation Act. The proposed undertaking is the Sacramento Intermodal Transportation Facility (SITF), which would be built in three phases. The SITF would encompass a realignment of existing mainline rail tracks (Phase 1), improvements to the existing Sacramento Valley Station (Phase 2), and eventual transformation of the station into a multi-modal transportation center (Phase 3).

As part of our efforts to collect information concerning cultural resources in the SITF vicinity and to identify concerned parties, we request that your office search the Sacred Lands File for the presence of Native American cultural resources and also provide us with a list of known contacts to consult regarding area resources. The legal location of the SITF is as follows.

Sacramento East and Sacramento West 7.5-minute quadrangles. Unsectioned area in the city of Sacramento, T 9 N, R 4 E, M.D.B.M.

Please do not hesitate to contact me with any questions. Thank you for your assistance.

Gabriel

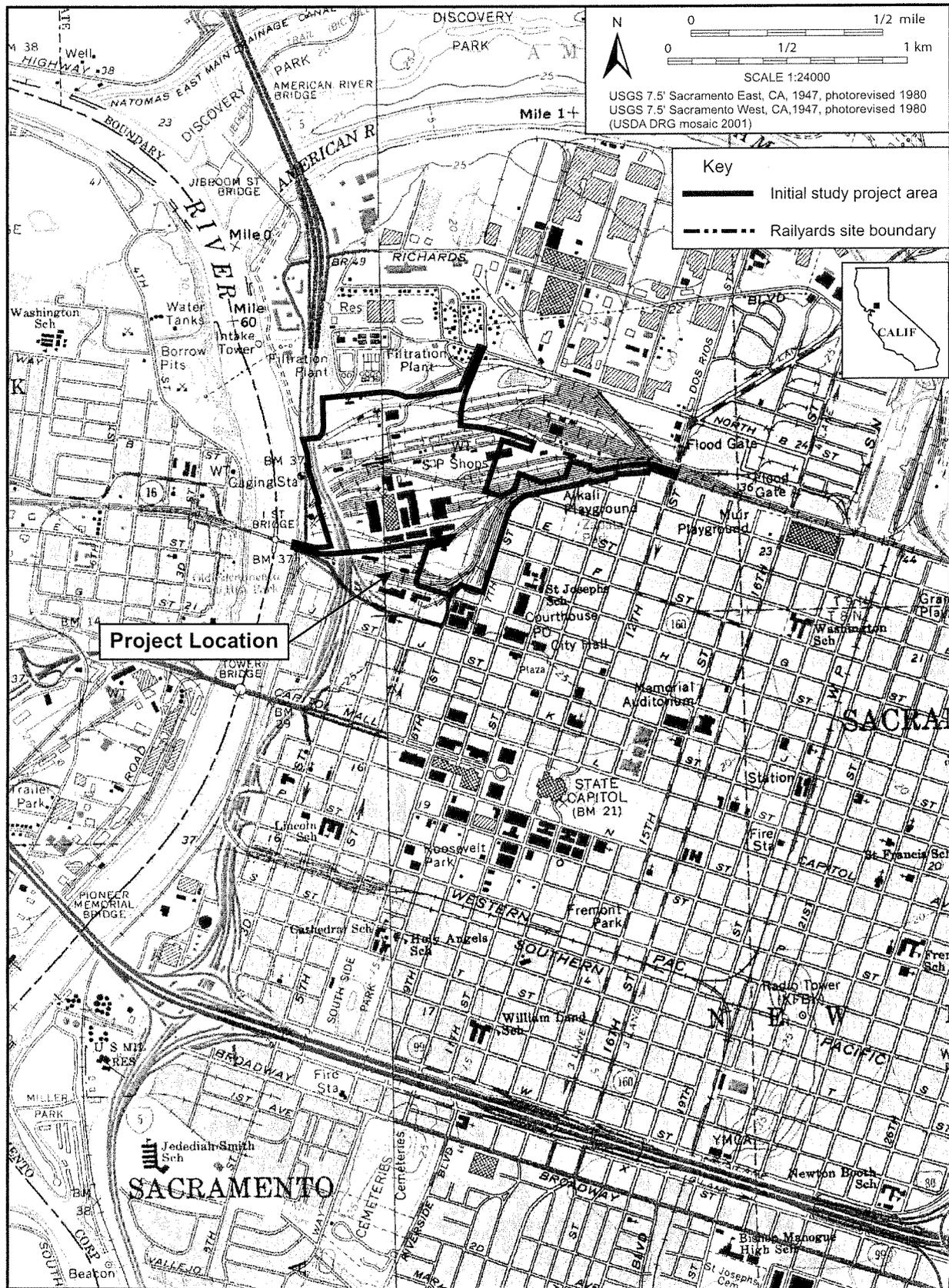


Figure 1. Project location

NATIVE AMERICAN HERITAGE COMMISSION

915 CAPITOL MALL, ROOM 364
SACRAMENTO, CA 95814
(916) 653-6251
Fax (916) 657-5390
Web Site www.nahc.ca.gov
✉mail: ds_nahc@pacbell.net



August 20, 2008

Gabriel Roark
ICF Jones & Stokes
630 K Street, Suite 400
Sacramento, CA 95814

Sent by Fax: 916-737-3030
Number of Pages: 2

Re: Proposed Sacramento Intermodal Project, 00121.08 305, Sacramento County

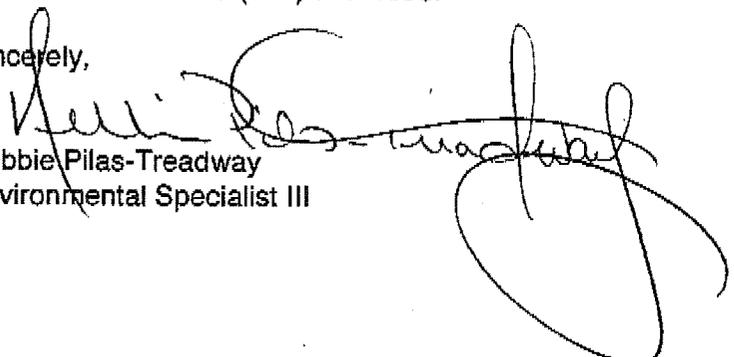
Dear Mr. Roark:

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
Sacramento County
August 20, 2008

Rose Enos
15310 Bancroft Road
Auburn , CA 95603
(530) 878-2378

Maidu
Washoe

United Auburn Indian Community of the Auburn
Tribal Preservation Committee
10720 Indian Hill Road
Auburn , CA 95603
530-883-2390
530-883-2380 - Fax

Maidu
Miwok

Kenneth Council
4209 V Street #5
Sacramento , CA 95817
mrken@sonic.net
916-457-7144 - Home
916-213-3934 - cell

Miwok
Maidu

Shingle Springs Band of Miwok Indians
John Tayaba, Vice Chairperson
P.O. Box 1340
Shingle Springs , CA 95682
(530) 676-8010
(530) 676-8033 Fax

Miwok
Maidu

Shingle Springs Band of Miwok Indians
Nicholas Fonseca, Chairperson
P.O. Box 1340
Shingle Springs , CA 95682
nfonseca@ssband.org
(530) 676-8010
(530) 676-8033 Fax

Miwok
Maidu

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 5097.98 of the Public Resources Code.

This list is only applicable for contacting local Native Americans with regard to cultural resources for the proposed Sacramento Intermodal project, Sacramento County.

Appendix D. DPR 523 Forms

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
CONTINUATION SHEET

Primary # P-34-1562
HRI#
Trinomial CA-SAC-941-H

Page 1 of 1

*Resource Name or # (Assigned by recorder) 7th Street Railroad Trestle Bents

*Recorded by: Gabriel Roark, ICF Jones & Stokes

*Date: 06-27-2008

Continuation

Update

This update was prepared to record current resource conditions and to reevaluate the resource in light of recently gained information. On June 27, 2008, ICF Jones & Stokes archaeologist, Gabriel Roark, surveyed the recorded location of P-34-1562 and a 100-foot (ft) radius from the site location. The purpose of this examination was to seek any subsurface exposures that would facilitate a determination whether P-34-1562 extends west or east of its recorded location. No such exposures or surface artifacts were identified. The survey was conducted as part of a cultural resources inventory for the proposed Sacramento Intermodal Transportation Facility project, which would involve ground disturbance at the location of P-34-1562 (ICF Jones & Stokes 2008a, 2008b). In the course of research for the proposed project, shortcomings in the previous evaluation by Tremaine and Nelson (2006) were identified (references to Tremaine and Nelson, where unpaginated, incorporate the attached DPR 523 form set by reference). First, the date of construction of the resource is incorrect. Second, the evaluation appears to give inordinate weight to what amounts to a partial feature of the First Transcontinental Railroad (CA-SAC-478-H), calling into question the recommendation of National Register (NRHP) eligibility.

Tremaine and Nelson (2006) correctly observe that the orientation and location of the trestle bents place them on the route of the First Transcontinental Railroad (TCRR). The construction date of 1863, however, is incorrect. Central Pacific Railroad engineer, Theodore Judah, commenced laying out what would become the TCRR from present-day Old Sacramento in October of 1863. As a temporary expedient, Judah laid out tracks from Front and I streets east until about 5th Street, at which point the tracks angled northeastward and curved onto 6th Street. From here the trackage proceeded north along the edge of Sutter Lake, then turned east around D Street, skirting the southern edge of Willow Lake. As stated previously, the line was a temporary expedient, likely to make progress toward the American River while arrangements were made to purchase rights-of-way across Slater's Addition; by May 30, 1866, construction was underway to take the railroad north from Front and I streets, across Slater's Addition, then northeast to curve around the nascent Central Pacific Railroad Central Shops on its north side. By July 23, 1867, "Judah's route" was complete from Front and K streets to the existing track at 6th and D streets, approaching this eastern terminus from the northwest, as indicated by the orientation of the trestles themselves. The trestle, therefore, was built between May 30, 1866 and July 23, 1867, not 1863. (Joslyn 1948:12; Wyatt 2007:8-4.) The wood trestle was abandoned in place sometime in 1868, at which time the Central Pacific Railroad widened the 6th Street Levee (P-34-1561/CA-SAC-940-H) via placement of large cobbles on the waterside of the levee.

Tremaine and Nelson (2006) recommend this resource as eligible for listing in the NRHP under criteria A and C; Criterion A for its role in facilitating the construction of the First Transcontinental Railroad and Criterion C as an early example of railroad technology, namely trestle construction. Although the importance of the First Transcontinental Railroad is doubtlessly of transcendent historical significance at the local, state, and national levels, the evaluation by Tremaine and Nelson (2006) does not give appropriate weight to the NRHP aspects of integrity. The evaluation treats the two exposed trestle bents as though the two structural elements comprise the entire resource. Rather, the resource is the trestle, which is part of a railroad (recorded as CA-SAC-478-H) that spans the contiguous United States. Tremaine and Nelson (2006) do not demonstrate that any portion of the trestle beyond the two identified bents has survived to the present day; the presence of only two trestle bents from a structure that likely contained several scores of bents calls into question the integrity of the resource. Furthermore, two bents occupying a linear distance of some 6 or 7 ft pales in comparison with surviving trestles on the TCRR, such as the trestle over Auburn Ravine (Fickewirth 1992). Eligibility under Criterion C therefore does not appear supported for this resource. Similarly, an argument for California Register of Historical Resources (CRHR) eligibility under Criterion 3 for this resource is not tenable. The role of the trestle in the construction of the TCRR is indisputable. Given that only a very small portion of the trestle is evident, the resource does not possess integrity of design. The absence of associated, historic elements of the railroad in the vicinity compromises its integrity of feeling and association. The resource does retain integrity of workmanship, materials, location, and setting. The scale of the resource is simply insufficient to convey the significance of the TCRR under NRHP Criterion A, nor under CRHR Criterion 1. P-34-1562 is therefore recommended ineligible for listing in the NRHP and the CRHR.

This resource has been evaluated in accordance with Section 15064.5(1)(2)-(3) of the CEQA guidelines, using the criteria outlined in Section 5024.1 of the California Public Resources Code. It is not a historical resource for purposes of CEQA.

REFERENCES CITED

Fickewirth, A. A. 1992. *California Railroads: An Encyclopedia of Cable Car, Common Carrier, Horsecar, Industrial Interurban, Logging, Monorail, Motor Road, Short Lines, Streetcar, Switching and Terminal Railroad in California (1851-1992)*. Golden West Books, San Marino, CA.

ICF Jones & Stokes. 2008a. *Historic Resources Evaluation Report for the Sacramento Intermodal Transportation Facility, City of Sacramento, Sacramento County, California*. September. ICF Jones & Stokes, Sacramento, CA. Submitted to District 3, California Department of Transportation, Marysville, and City of Sacramento, CA.

———. 2008. *Archaeological Survey Report for the Sacramento Intermodal Transportation Facility, City of Sacramento, Sacramento County, California*. September. ICF Jones & Stokes, Sacramento, CA. Submitted to District 3, California Department of Transportation, Marysville. Prepared for City of Sacramento, CA.

Joslyn, D. L. 1948. Sacramento General Shops, Southern Pacific Company—Pacific Liner. Unpublished typescript. On file, District 3, California Department of Transportation, Marysville.

Tremaine, K. J., and W. J. Nelson. 2006. *Final Report of Archaeological Testing and Monitoring for the City of Sacramento's 7th Street Extension Project, Sacramento, California*. February. Tremaine & Associates, West Sacramento, CA. Prepared for Department of Public Works, City of Sacramento, CA. On file, North Central Information Center, California Historical Resources Information System, Sacramento. Study 7565.

Wyatt, K. K. 2007. National Register of Historic Places Registration Form: Transcontinental Railroad Terminus and Shops Historic District. August 15. California State Railroad Museum, Sacramento. Submitted to National Park Service, U.S. Department of the Interior, Washington, D.C.

PRIMARY RECORD

Primary # P-34-1562
HRI #:
Trinomial: CA-SAK-941-H
NHRP Status Code

Other Listings
Review Code

Reviewer

Date:

Page # 1 of 4

*Resource name or #: 7th Street Railroad Trestle Bents

P1. Other Identifier:

*P2. Location: Not For Publication Unrestricted

*a. County: Sacramento

*b. USGS 7.5' quad Sacramento East Date: 1992 New Helvetia Land Grant (Assumed T9N R4E: Section 36, MDM)

c. Address: City: Zip:

d. UTM Zone: 10 , 631108 mE, 4272126 mN (NAD 1983)

e. Other Locational Data:

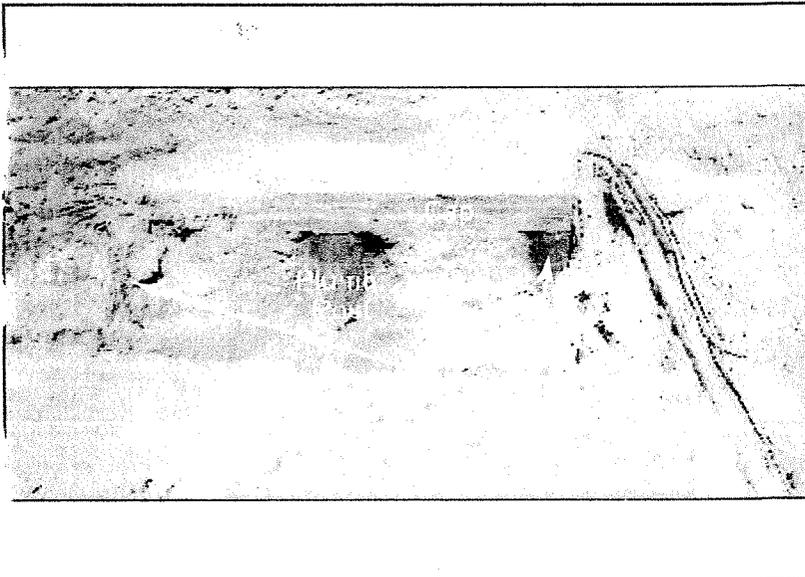
Park at the intersection of 7th and D streets. The trestle bents are just to the north. These trestles survived the construction of the underpass through the Southern Pacific Railyard for the 7th Street Extension Project, but are buried in historic reclamation fill for the railyard, so are not visible.

***P3a. Description:**

Two wooden trestle bents were found along the east side of the 7th Street corridor. These are remnants of one of the earliest railroad trestles constructed in the state of California, contributing to the completion of the first transcontinental railroad. Chief Engineer Montague, reporting to the CPRR directors in 1863, suggested that it would be more expedient in crossing low-lying depressions to substitute trestling for embankments (Kraus 1969). Trestling, as he saw it, properly constructed of Puget Sound pine and redwood, would last 8-10

***P3b. Resource Attributes: AH7**

4. Resources Present: Building Structure Object Site District Element of District Other



P5b. Description of Photo:

View of trestle feature

*P6. Date Constructed: ca. 1863

Age and Source: Historic Prehistoric Both

*P7. Owner and Address:

City of Sacramento

*P8. Recorded by:

K. Tremaine, M. Trumbly, & J. Cervantes
Tremaine & Associates, Inc.
240 West E Street,
Dixon, CA 95620

*P9. Date Recorded: 6/28/02

*10. Survey Type: Geophysical/Trenching

P11. Report Citation:

2004. Tremaine, K. & W. Nelson. Final Report of Archaeological Testing and Monitoring for the City of Sacramento's 7th Street Extension Project, Sacramento, California. Prepared by TREMAINE AND ASSOCIATES, INC.

*Attachments NONE Location Map Sketch Map Continuation Sheet Building, Structure & Object Record Archaeological Record District Record Linear Feature Record Milling Station Record Rock Art Record Artifact Record Photograph Record Other (list):

7385

BUILDING, STRUCTURE, AND OBJECT RECORD

Page # 2 of 4

*Resource name or #: 7th St. Railroad Trestle Bents

B1. Historic Name:

B2. Common Name: 7th Street Railroad Trestle Bents

B3. Original Use: to support tracks prior to building railroad grade south of Willow Lake

B4. Present Use: abandoned and buried in fill

* **B. Architectural Style:**

* **B6. Construction History:**

* **B7. Moved?** Yes No

Date: ca. 1863

Original Location:

* **B8. Related Features:**

A later-built "embankment" for railroad grade, otherwise known as the 6th Street Levee, is situated just to the south of the trestle alignment. If Chief Engineer Montague's plan in 1863 was followed, the trestling probably assisted in levee improvements over the next five years (see discussion under Applicable Criteria).

* **B9a. Architect:** Chief Engineer Montague?

B9b. Builder: Central Pacific Railroad

B10. Significance: Theme Railroad/Transportation

Area: Sacramento, CA

Period of Significance: 1860s

Property Type: Structure

Applicable Criteria: Criteria A and C

(Discuss importance in terms of historical or architectural context as defined by theme, period, and geographic scope. Also addresses integrity.)

The wooden trestle bents are remnants of one of the earliest railroad trestles constructed in the state of California, contributing to the completion of the first transcontinental railroad. Chief Engineer Montague, reporting to the CPRR directors in 1863, suggested that it would be more expedient in crossing low-lying depressions to substitute trestling for embankments (Kraus 1969). Trestling, as he saw it, properly constructed of Puget Sound pine and redwood, would last 8-10 years. The trestle tracks could then be used to transport borrow materials in rail cars, building the replacement embankments without the heavy work involved otherwise. The trestle bents, as such, appear eligible under two criteria: A- for their association with an event that made significant contributions to the broad patterns of history, i.e., the building of the first transcontinental railroad; and C- for their ability to yield important information about a type and method of trestle construction.

B11. Additional Resource Attributes:

B12. References:

Tremaine, K., and W. Nelson 2004. Final Report of Archaeological Testing and Monitoring for the City of Sacramento's 7th Street Extension Project, Sacramento, California. Prepared by Tremaine & Associates, Inc.
Kraus, G 1969. High Road to Promontory: Building the Central Pacific across the High Sierra. American West Publishing Company, Palo Alto, California.

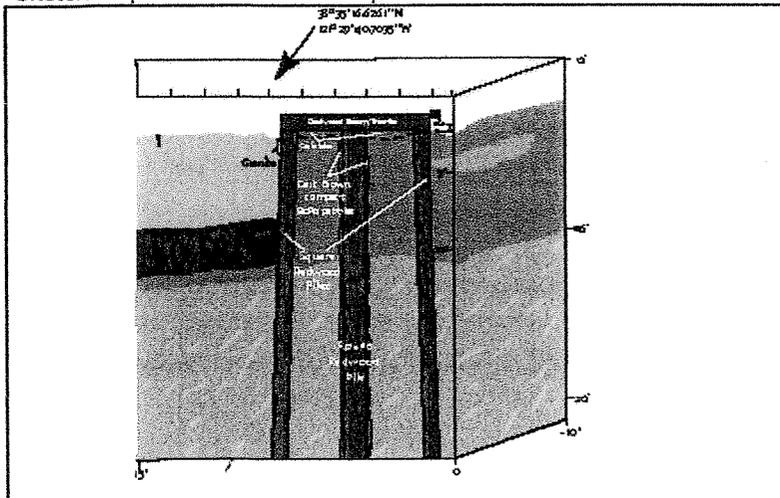
B13. Remarks:

B14. Evaluator: (Include date of evaluation)

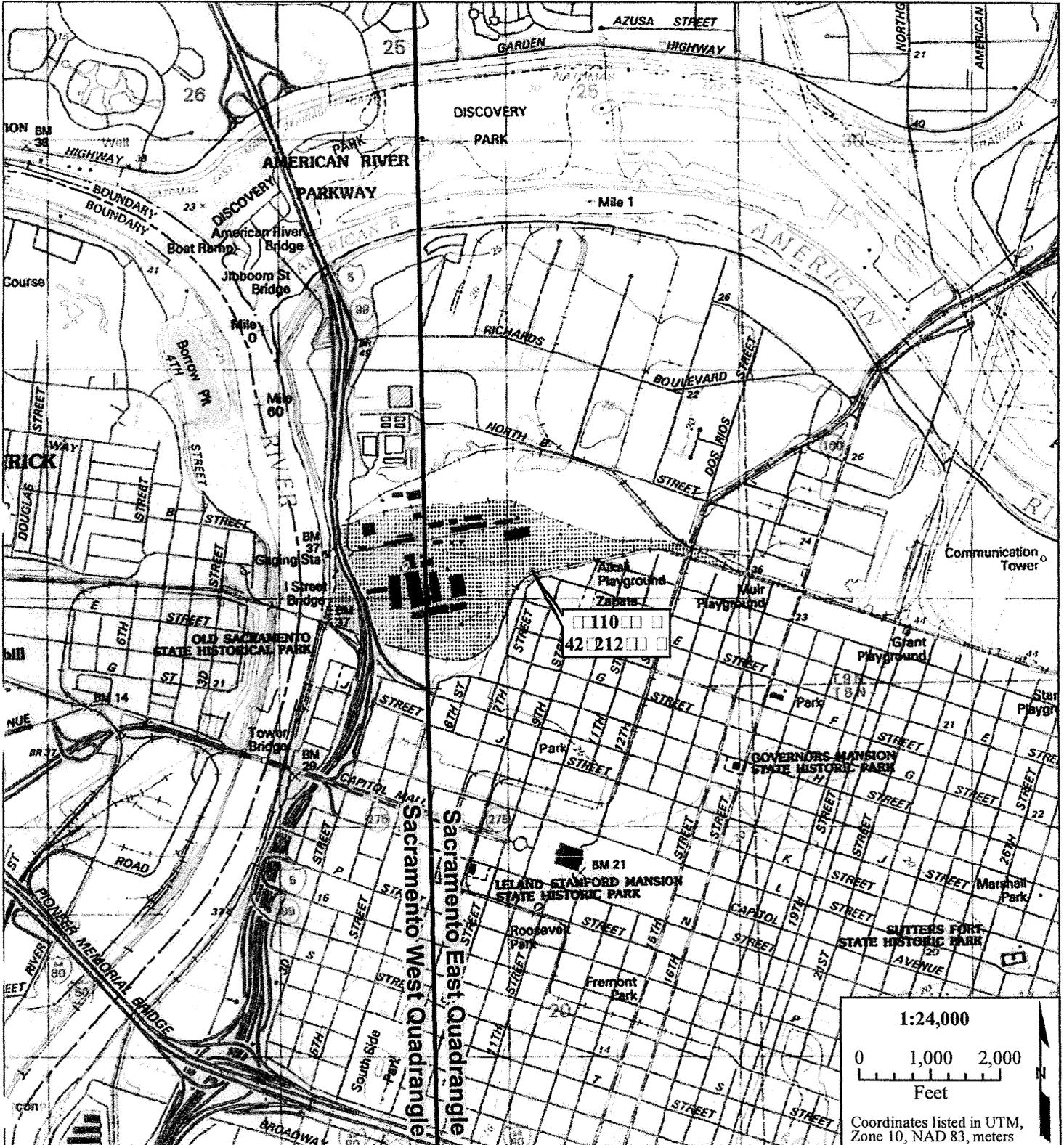
Tremaine, K. 6/28/02

Each bent consists of one superior crossbeam or cap measuring one-foot square by approximately 10 feet long. Three nearly vertical pilings, one in the middle (plumb post) and two on the edges (batter posts) were equally spaced beneath the cap. The center piling was round (18" diameter) while the outer pilings were 12" square for both bents. The caps were secured to the pilings by cylindrical (~1" diameter) drift bolts. The trestle appears to have stood approximately 8 feet above the original surface, with pilings driven 10 feet below ground. The caps were roughly oriented north/south, but slightly canted in relation to one another (349 & 354 degrees respectively), implying the tracks were curving slightly to the northwest. The distance between each bent was 6-7 feet.

Sketch Map with North Arrow required.



LOCATION MAP



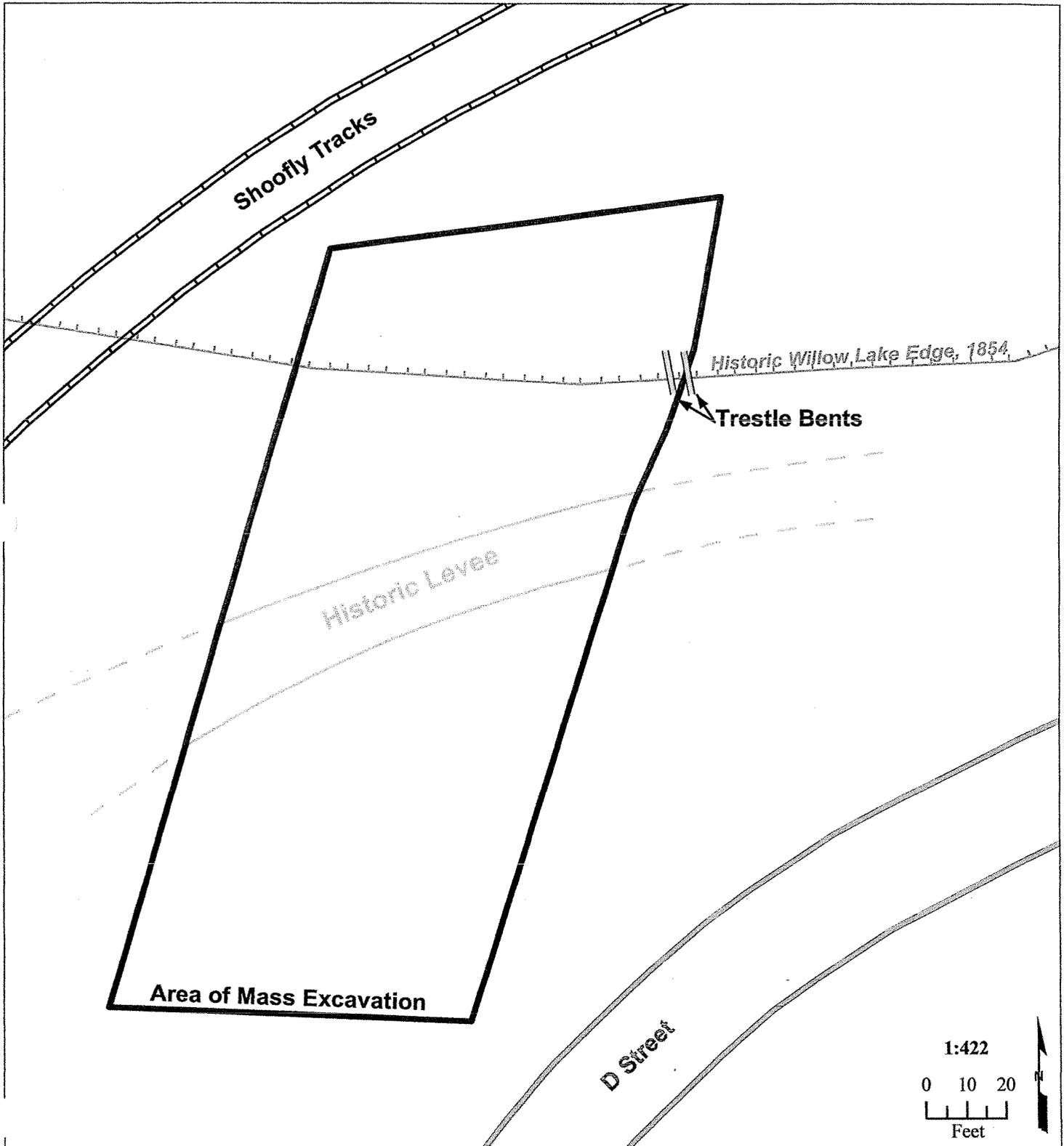
SKETCH MAP

Page # **4** of **4**

Resource name or # **7th St. Railroad Trestle Bents**

Drawn by: **Kim Tremaine**

Date of Map: **6/28/02**



*Recorded by: Gabriel Roark, ICF Jones & Stokes

*Date: 06/27/2008 Continuation Update

This update was prepared to record current resource conditions. On June 27, 2008, ICF Jones & Stokes archaeologist Gabriel Roark surveyed the recorded location of P-34-1561 and a 100-ft radius from the site location. The purpose of this examination was to seek any subsurface exposures that would facilitate a determination of whether P-34-1561 extends west or east of its recorded location. No such exposures or surface artifacts were identified. (ICF Jones & Stokes 2008:7-3.)

P-34-1561, located north of the D Street/7th Street intersection, consists of a portion of the 6th Street Levee, exposed in cross-section in the sidewalls of a 3-ft-wide backhoe trench (Tremaine and Nelson 2006:23, Figure 14). The cross-section of P-34-1561 reveals the multistage construction of the 6th Street Levee, which first was constructed in 1852-1853 to provide the city of Sacramento protection from American and Sacramento river floodwaters. The 6th Street Levee was subsequently improved in 1868 and 1880. The 1852-1853 iteration of the levee was evident as a 3-ft-high berm of medium-brown sandy silt resting on a base of clayey silt and surrounded by a silty sand-clayey silt matrix. The 1868 levee, built on top of the 1852-1853 structure, consists of yellowish-brown fine silty sand and a slope protection of darker yellowish-brown silty sand. The outer (northern) slope of the levee was armored with cobbles supplied by the CPRR in exchange for use of the 6th Street Levee as a new elevated railroad grade beginning between 1868 and 1880. In addition to the 6th Street or North Levee, the City of Sacramento constructed other levees and rechanneled the American River in order to keep floodwaters out of the city, followed by a program of street-raising in present-day downtown Sacramento (Itogawa 1976; Lagomarsino 1976).

Tremaine and Nelson (2006:23) recommended the 6th Street Levee as eligible for listing in the NRHP under criteria A and C. Eligibility under Criterion A is recommended due to the levee's association with Sacramentans' decades-long struggle with flooding caused by the Sacramento and American rivers. Eligibility under Criterion C is recommended as P-34-1562 represents three distinct episodes of levee construction, documenting the city residents' technological response to different and repeated flood events. The historic integrity of P-34-1561 was judged to be excellent, although the crown of the levee had been truncated by recent grading activities. The recorded portion of P-34-1562 was destroyed during construction of the 7th Street Extension Project (Tremaine and Nelson 2006:23; Tremaine et al. 2002). No information contradicting Tremaine and Nelson's (2006) evaluation has been identified as a result of this study, therefore ICF Jones & Stokes also recommends the levee as eligible under criteria A and C.

In addition, ICF Jones & Stokes recommends that P-34-1561 is eligible for listing in the California Register of Historical Resources (CRHR) under CRHR criteria 1 and 3 (see significance statement in the previous paragraph for NRHP eligibility under criteria A and C). This resource has been evaluated in accordance with Section 15064.5(1)(2)-(3) of the CEQA guidelines, using the criteria outlined in Section 5024.1 of the California Public Resources Code. It is a historical resource for purposes of CEQA.

Reference Cited

ICF Jones & Stokes. 2008. *Archaeological Survey Report for the Sacramento Intermodal Transportation Facility, City of Sacramento, Sacramento County, California*. October. ICF Jones & Stokes, Sacramento, California. ICF J&S 00121.08. Prepared for District 3, California Department of Transportation, Marysville. 03-Sac-00 PM EA 03-965100 3ENVR Sacramento Intermodal Transportation Facility.

Itogawa, Eugene. 1976. New Channels for the American River. Chapter 12 in *Sketches of Old Sacramento: A Tribute to Joseph A. McGowan*, edited by Jesse M. Smith, pp. 211-227. Sacramento County Historical Society, Sacramento, California.

Lagomarsino, Barbara. 1976. Sacramento on the Rise. Chapter 11 in *Sketches of Old Sacramento: A Tribute to Joseph A. McGowan*, edited by Jesse M. Smith, pp. 192-210. Sacramento County Historical Society, Sacramento, California.

Tremaine, Kimberly J., and Wendy J. Nelson. 2006. *Final Report of Archaeological Testing and Monitoring for the City of Sacramento's 7th Street Extension Project, Sacramento, California*. February. Tremaine & Associates, West Sacramento, California. Prepared for Department of Public Works, City of Sacramento, California. On file, North Central Information Center, California Historical Resources Information System, Sacramento. Study 7565.

Tremaine, K., M. Trumbly, and J. Cervantes. 2002. DPR 523 Forms for P-34-1561 (CA-SAC-940-H), 6th Street Levee. July 3. Tremaine & Associates, West Sacramento, California. On file, North Central Information Center, California Historical Resources Information System, Sacramento, California.

Other Listings
Review Code

Reviewer

Date:

Page # 1 of 5

*Resource name or #: 6th Street Levee

P1. Other Identifier:

*P2. **Location:** Not For Publication Unrestricted

*a. **County:** Sacramento

*b. **USGS 7.5' quad** Sacramento East **Date:** 1992 New Helvetia Land Grant (Assumed T9N R4E, Section 36, MDM)

c. **Address:** City: Zip:

d. **UTM Zone:** 10 , 631086 mE, 4272108 mN (NAD 1983)

e. **Other Locational Data:**

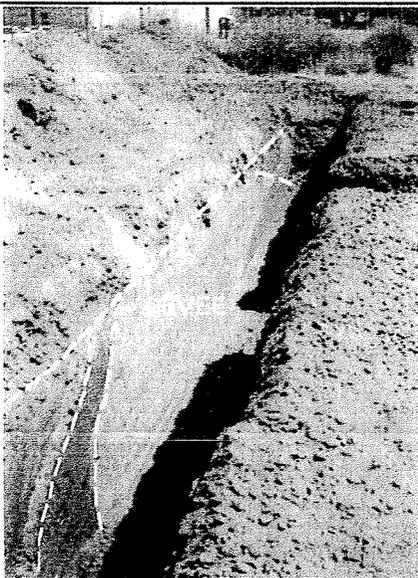
Park at the intersection of 7th and D streets. The levee is just to the north. The portion recorded here was destroyed during construction of the underpass through the Southern Pacific Railyard for the 7th Street Extension Project.

*P3a. **Description:**

East and west profiles of the 6th Street Levee at the point observation along 7th Street, showed a low three-foot high berm of medium brown sandy silt, assumed to represent the first effort in 1852 to stave off high water, overlying native soils. Additional yellowish-brown fine silty sand was observed heaped above this berm. Layers of fill, darker yellowish-brown silty sand, sandwiched both slopes (north and south) of this later-improved levee. The inner slope ranged from 1.5:1 to 2:1. The outer slope was at most 1.5:1, in contrast to specifications which called for 2:1 and 3:1 respectively. The slopes were also treated with a packing of reddish brown sandy clay followed by a layer of large granite cobbles and boulders. The height appears to be truncated by modern grading activities.

*P3b. **Resource Attributes:** AH7/AH8

Resources Present: Building Structure Object Site District Element of District Other



medium dense gravel
compact sandy clay
loose, fine silty sand
fine silt

P5b. Description of Photo:

Photo of East Profile of Levee facing SE

*P6. **Date Constructed:** ca. 1852-1868

Age and Source: Historic Prehistoric Both

*P7. **Owner and Address:**

City of Sacramento

*P8. **Recorded by:**

K. Tremaine, M. Trumbly, & J. Cervantes
Tremaine & Associates, Inc.
240 West E Street,
Dixon, CA 95620

*P9. **Date Recorded:** 7/3/02

Survey Type: Geophysical/Trenching

Report Citation:

2004. Tremaine, K. & W. Nelson. Final Report of Archaeological Testing and Monitoring for the City of Sacramento's 7th Street Extension Project, Sacramento, California. Prepared by TREMAINE AND ASSOCIATES, INC.

Comments NONE Continuation Sheet District Record Rock Art Record Other (list):
 Location Map Building, Structure & Object Record Linear Feature Record Artifact Record
 Sketch Map Archaeological Record Milling Station Record Photograph Record

7565

L1. Historic and/or common name:

L2a. Portion Described: Entire Resource Segment Point Observation **Designation:** Section crossing 7th Street

b. Location of Point or segment: (Provide UTM coords., legal description, and show field-inspected area on location map)
 The "6th Street Levee" was built from the Sacramento waterfront heading east along I Street, thence North along 6th Street to the bank of the slough [Willow Lake]; thence eastward toward Sutters Fort. The point observation is a section along this last segment, oriented east-west across 7th Street.

L3. Description: (Describe the construction details, materials, and artifacts found at this segment/point)

The 6th Street Levee, aka the North Levee, was built over 17 years beginning in 1852, after flooding wiped out a levee built two years earlier to protect the growing town of Sacramento. During this time, the levee was successively widened and raised to prevent continued flooding problems. By 1880, Thompson and West (1880:75) described it as a "splendid embankment" and a "massive structure". Commissioner Knapp and Engineer Bassett bragged that the only way water could top the levee was if the Sacramento River flood stage reached thirty feet and the American River was choked full... Written records suggest that by 1868, the levee had been widened to 14 feet at the crown and 28 feet at the base, and stood nine feet high, being further fortified with carloads of cobbles on the outer slopes by the Central Pacific Railroad in exchange for using the levee as their new railroad grade. East and west profiles at the point observation along 7th Street, showed a low three-foot high berm of medium brown sandy silt, assumed to represent the first effort in 1852 to stave off high water, overlying native soils. Additional yellowish-brown fine silty sand was observed heaped above this berm. Layers of fill, darker yellowish-brown silty sand, sandwiched both slopes (north and south) of this later-improved levee. The inner slope ranged from 1.5:1 to 2:1. The outer slope was at most 1.5:1, in contrast to specifications which called for 2:1 and 3:1 respectively. The slopes were also treated with a packing of reddish brown sandy clay followed by a layer of large granite cobbles and boulders. The height appears to be truncated by modern grading activities.

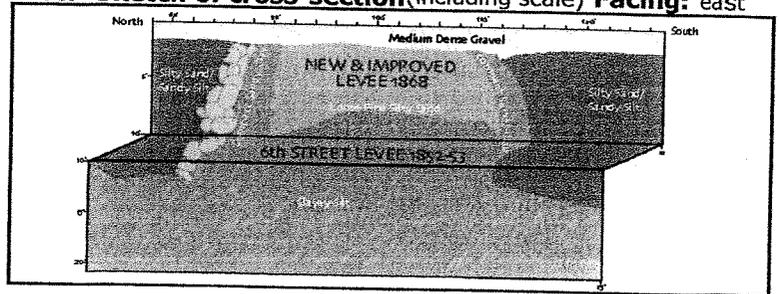
L4. Dimensions (In feet for historic features and meters for prehistoric features)

- a **Top Width** 25-30 feet
- b **Bottom Width** 30-64 feet
- c **Height or Depth** 13 feet
- d **Length of Segment** 100 feet

L5. Associated resources:

Two railroad trestle bents are situated 30 feet north of the levee.

L4e. Sketch of cross-section(including scale) **Facing:** east



Setting: (Describe natural features, slope, etc.)

This point observation of the 6th Street levee borders the south edge of historic Willow Lake which captured seasonal flood waters. This section of levee and points east were engineered to ward off high water from the American River, thereby protecting historic Sacramento's northern boundary.

Integrity Considerations:

This levee segment appeared to retain excellent integrity, with the exception of some minor truncating at the crown due to modern grading activities. It had essentially been buried following early 20th century reclamation efforts to expand the Central Pacific Railyard. The 7th Street extension project required virtual

Photo, Map or Drawing

L8b. Description of Photo, Map, or Drawing

Levee as seen in east wall of mass excavation pit

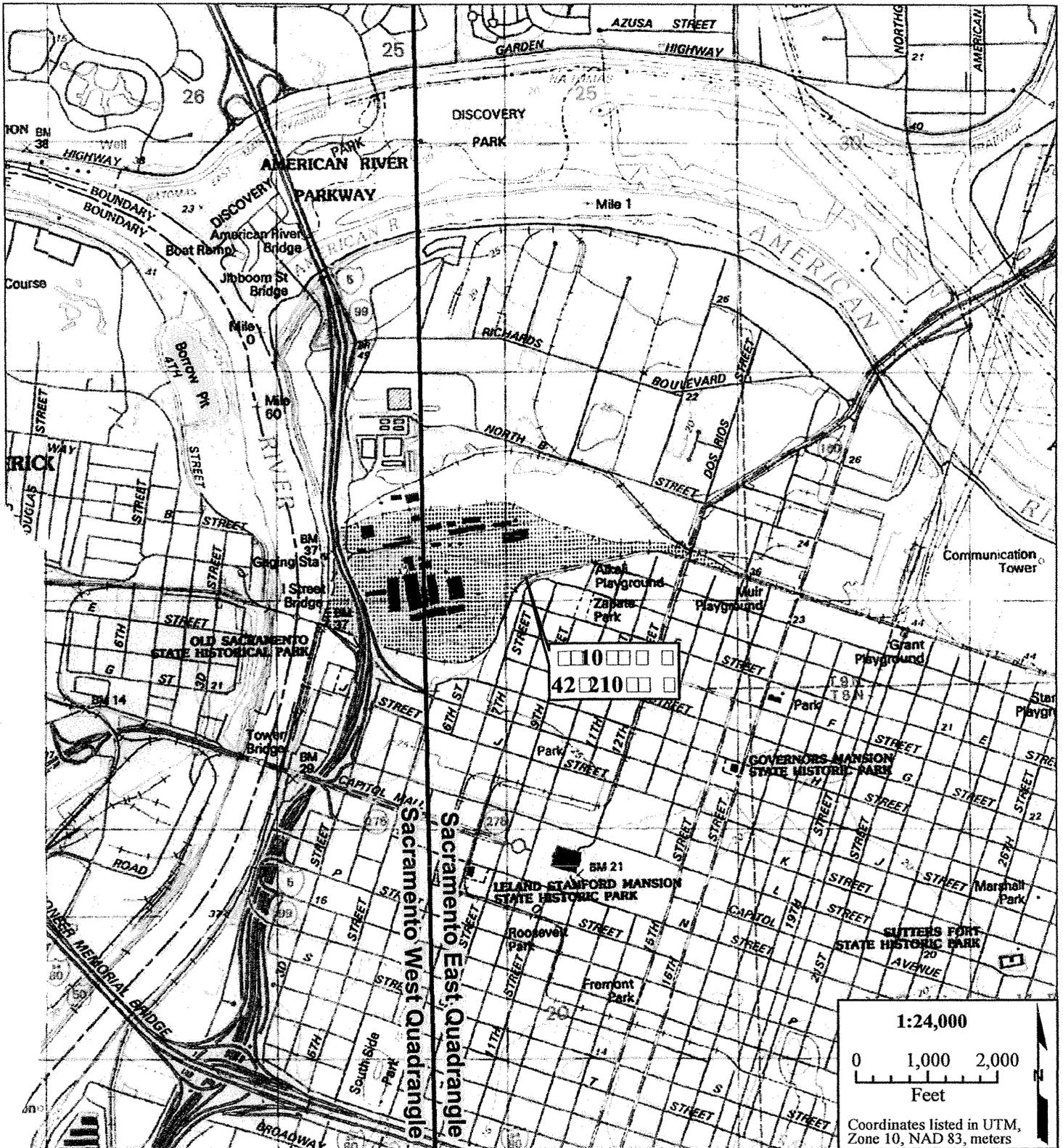
L9. Remarks:

L... Form Prepared by:

Kim Tremaine
 Tremaine & Associates, Inc.
 240 West E Street
 Dixon, CA 95620

L... Date

LOCATION MAP



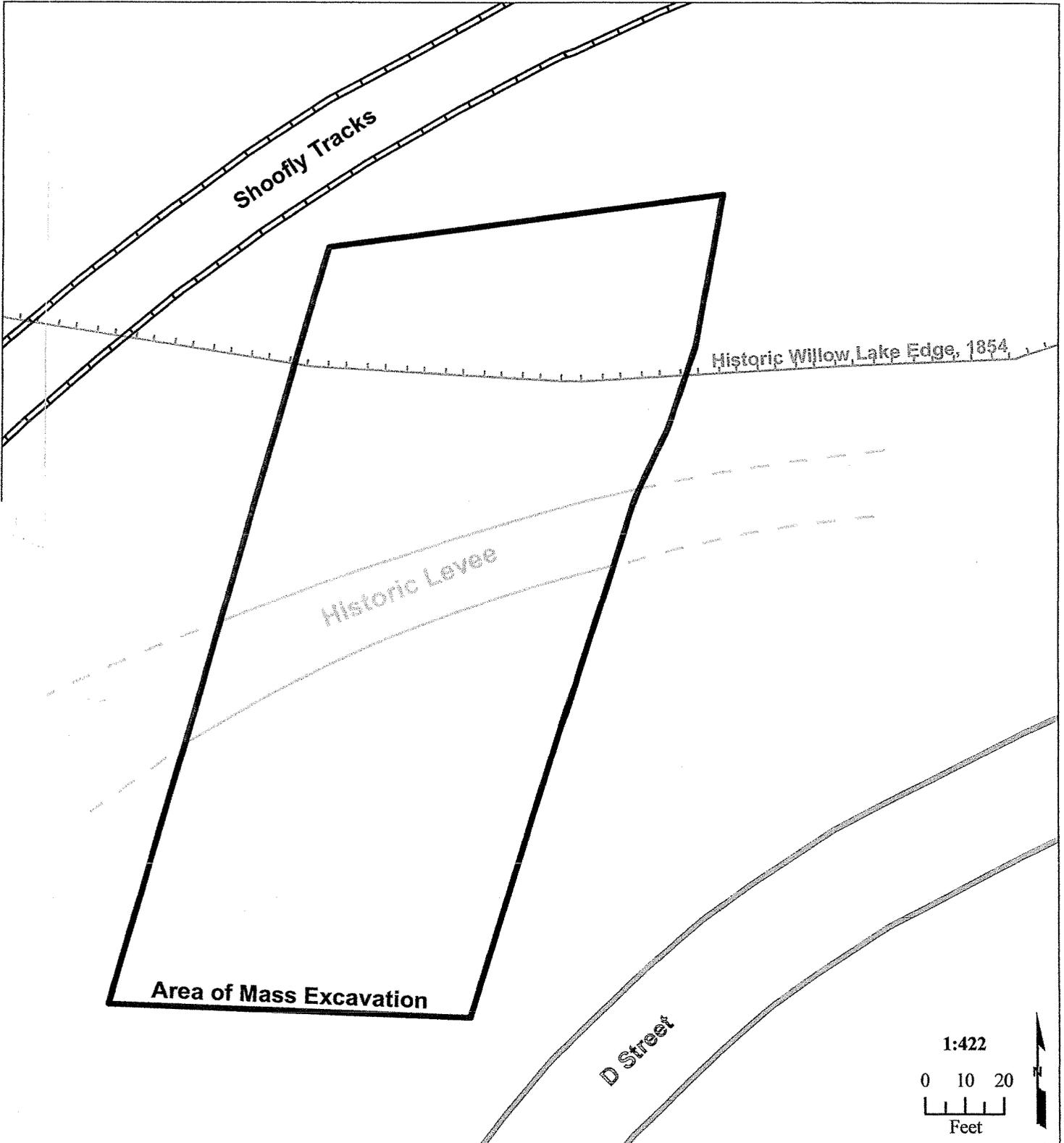
SKETCH MAP

Page # 4 of 5

Resource name or # **6th Street Levee**

Drawn by: **Kim Tremaine**

Date of Map: **7/3/02**



CONTINUATION SHEET

Page # 5 of 5

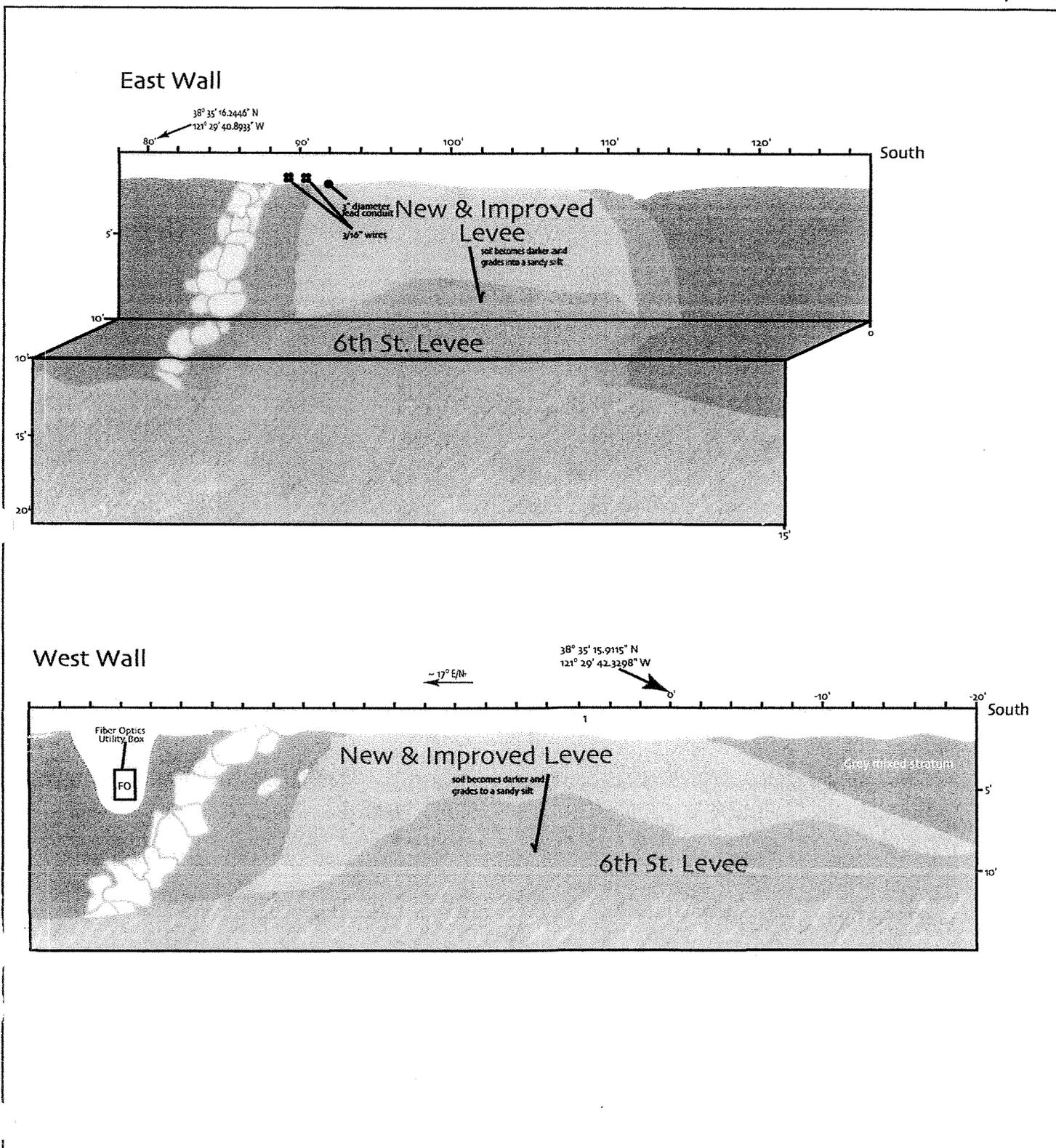
*Resource name or # 6th Street Levee

Recorded by: Kim Tremaine

Date: 7/3/04

Continuation

Update



State of California — The Resources Agency
 DEPARTMENT OF PARKS AND RECREATION
PRIMARY RECORD

Primary #
 HRI #
 Trinomial
 NRHP Status Code 6Z

Other Listings
 Review Code Reviewer Date

Page 1 of 3 *Resource Name or #: Train Shed Curbs (Element of Central Shops Historic District)

P1. Other Identifier: Map Reference #13

***P2. Location:** Not for Publication Unrestricted ***a. County:** Sacramento

and (P2b and P2c or P2d. Attach a Location Map as necessary.)

***b. USGS 7.5' Quad:** Sacramento East **Date:** 1994 T 9 N; R 4 E ; ¼ of ¼ of Sec ; M.D. **B.M.**

c. Address: City: Zip:

d. UTM: Zone: ; mE/ mN

e. Other Locational Data: (e.g., parcel #, directions to resource, elevation, etc., as appropriate):

***P3a. Description:** (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries)
 This resource is a non-contributing element of the Central Shops Historic District, a National Register of Historic Places (NRHP)-eligible historic district. The district, as originally conceived by Historic Environment Consultants (1998:11), consists of the 10 extant fabrication, repair, and maintenance shops. The Central Shops Historic District is eligible for inclusion on the NRHP under Criteria A and C because the "structures have strong associations with the development of the Central Pacific Railroad Company (CPRR), the creators of the western portion of the historic transcontinental railroad. The structures were also central features in what became one of the largest manufacturing complexes in the western United States" (Mellon 2001:2). Historic Environment Consultants (1998:14) adds that the "Sacramento Shops were highly notable for their construction and maintenance of all types of railroad cars and locomotives."

The only surviving evidence of the former Train Shed consists of three concrete curbs that once bound two sets of standard-gauge rails. The curbs extend 350 ft on an east-west axis and 62.5 ft on a north-south axis. The Train Shed is not depicted on historic maps dating prior to 1951 and appears to have been built between 1920 and 1951 (Sacramento Archives and Museum Collection Center 2002; Sanborn Map Co. 1915, 1951; Sanborn-Perris Map Co. 1895; Southern Pacific 1920). See Continuation Sheet.

***P3b. Resource Attributes:** (List attributes and codes) AH2. Foundations/structure pads

***P4. Resources Present:** Building Structure Object Site District Element of District Other (Isolates, etc.)

P5a. Photo or Drawing (Photo required for buildings, structures, and objects.)



P5b. Description of Photo: (View, date, accession #)
 Facing east, 06/27/2008

***P6. Date Constructed/Age and Sources:** Historic
 Prehistoric Both
 Ca. 1920 (Southern Pacific 1920)

***P7. Owner and Address:**
 S. Thomas Enterprises of Sacramento. 431 I St, Ste. 202
 Sacramento, CA 95814

***P8. Recorded by:** (Name, affiliation, and address)
 Gabriel Roark, ICF Jones & Stokes
 630 K Street, Suite 400
 Sacramento, CA 85814

***P9. Date Recorded:**

***P10. Survey Type:** (Describe)
 Reconnaissance survey

***P11. Report Citation:** (Cite survey report and other sources, or enter "none.") ICF Jones & Stokes 2008a, 2008b (see Continuation Sheet)

***Attachments:** NONE Location Map Sketch Map Continuation Sheet Building, Structure, and Object Record
 Archaeological Record District Record Linear Feature Record Milling Station Record Rock Art Record
 Artifact Record Photograph Record Other (List):

*Recorded by: Gabriel Roark, ICF Jones & Stokes

*Date: 10/31/2008 Continuation Update

P3a (Continued). The superstructure depicted on the 1951 Sanborn map (Sanborn Map Co. 1951) has been demolished and is no longer present, and the northern pair of rails has been removed. Immediately north of and contemporaneous with the Train Shed was an east-west-oriented row of about six railroad buildings and structures: a store (storage), offices, a car maintenance shop, and an ice house. No evidence for these structures was evident during the survey. The current railroad alignment and Passenger platforms (part of the Sacramento SPRR Station District) were located immediately south of the Train Shed between 1920 and 1951 (Sanborn Map Co. 1951; Southern Pacific 1920). The Train Shed Curbs are also located in close proximity to the Ancillary Train Shed Curbs, remnants of a contemporary structure.

All that remains of the former Train Shed are three concrete curbs; the rails and ties have been pulled and moved off-site. The Train Shed Curbs lack association with the appurtenant facilities for which trains were diverted from the main tracks to the Train Shed – maintenance of the vehicles – because the car maintenance shop, offices, and stores are no longer evident. No subsurface archaeological manifestations, such as refuse deposits or buried structural remains, are anticipated to be present at the Train Shed Curbs given the nature of activities that occurred there. The Train Shed curbs do not meet any of the National Register criteria, either individually or as a contributor to the Central Shops District. Although doubtless an important functional unit of the Central Shops, the Train Shed Curbs lacks integrity of design, workmanship, materials, feeling, and association. Integrity of setting is compromised, as the majority of railroad structures with which the Train Shed was associated also lack superstructure or are absent altogether. The only uncompromised aspect of the Train Shed Curb's integrity, therefore, is location, which is insufficient to warrant an assignment of contributing status to this resource. This resource does not appear to meet the significance criteria of the California Register, either. Similarly, the Train Shed Curbs do not appear to meet any of the California Register significance criteria.

This resource has been evaluated in accordance with Section 15064.5(1)(2)-(3) of the CEQA guidelines, using the criteria outlined in Section 5024.1 of the California Public Resources Code. It is a not historical resource for purposes of CEQA.

REFERENCES CITED

Historic Environment Consultants. 1998. *Historic Property Inventory and Evaluation Report for the Central Pacific/Southern Pacific Railroad Railyards Project, Sacramento County*. Submitted to Union Pacific Railroad Company.

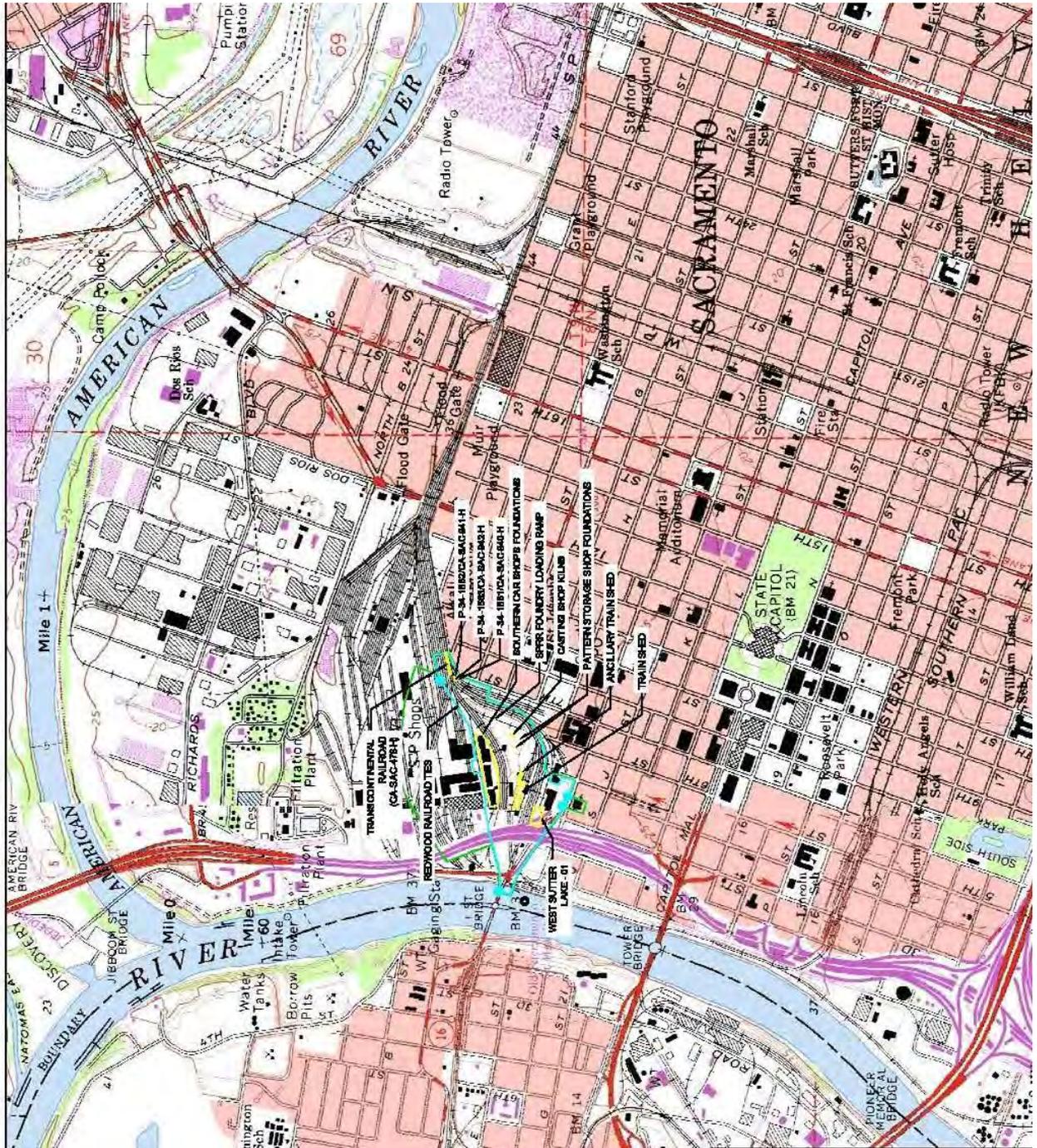
ICF Jones & Stokes. 2008a. *Archaeological Survey Report for the Sacramento Intermodal Transportation Facility, City of Sacramento, Sacramento County, California*. October. ICF Jones & Stokes, Sacramento, California. ICF J&S 00121.08. Submitted to District 3, California Department of Transportation, Marysville. 03-Sac-00 PM EA 03-965100 3ENVR Sacramento Intermodal Transportation Facility. Prepared for City of Sacramento, California.

— — —. 2008b. *Historical Resources Evaluation Report for the Sacramento Intermodal Transportation Facility, City of Sacramento, Sacramento County, California*. October. ICF Jones & Stokes, Sacramento, California. ICF J&S 00121.08. Submitted to District 3, California Department of Transportation, Marysville. 03-Sac-00 PM EA 03-965100 3ENVR Sacramento Intermodal Transportation Facility. Prepared for City of Sacramento, California.

Mellon, Knox. 2001. Letter Regarding Seventh Street Extension Project, City of Sacramento, Sacramento County. September 4. Office of Historic Preservation, Department of Parks and Recreation, Sacramento, California. FHWA010423G. Submitted to California Division, Region Nine, Federal Highway Administration, Sacramento.

Sanborn Map Co. 1951. Insurance Maps of Sacramento, California, Volume 1. 2 vols. Sanborn Map Co., New York. Electronic document, <http://sanborn.umi.com.ezproxy.lapl.org>, accessed June 24, 2008.

Southern Pacific. 1920. Sacramento Shops, Showing Buildings. Map. On file, California State Railroad Museum Library, Sacramento, California.



State of California — The Resources Agency
 DEPARTMENT OF PARKS AND RECREATION
PRIMARY RECORD

Primary #
 HRI #
 Trinomial
 NRHP Status Code 6Z

Other Listings
 Review Code Reviewer Date

Page 1 of 3 *Resource Name or #: Ancillary Train Shed Curbs (Element of Central Shops Historic District)

P1. Other Identifier: Map Reference #14

***P2. Location:** Not for Publication Unrestricted ***a. County:** Sacramento

and (P2b and P2c or P2d. Attach a Location Map as necessary.)

***b. USGS 7.5' Quad:** Sacramento East **Date:** 1994 T 9 N; R 4 E ; ¼ of ¼ of Sec ; M.D. **B.M.**
 c. Address: City: Zip:

d. UTM: Zone: ; mE/ mN

e. Other Locational Data: (e.g., parcel #, directions to resource, elevation, etc., as appropriate):

***P3a. Description:** (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries) This resource is a non-contributing element of the Central Shops Historic District, a National Register of Historic Places (NRHP)-eligible historic district. The district, as originally conceived by Historic Environment Consultants (1998:11), consists of the 10 extant fabrication, repair, and maintenance shops. The Central Shops Historic District is eligible for inclusion on the NRHP under Criteria A and C because the "structures have strong associations with the development of the Central Pacific Railroad Company (CPRR), the creators of the western portion of the historic transcontinental railroad. The structures were also central features in what became one of the largest manufacturing complexes in the western United States" (Mellon 2001:2). Historic Environment Consultants (1998:14) adds that the "Sacramento Shops were highly notable for their construction and maintenance of all types of railroad cars and locomotives."

This resource is situated east and slightly north of the former Train Shed. The resource consists of two concrete curbs oriented on a northwest-southeast trajectory 137.5 ft long and 25.0 ft wide. Between the curbs is a set of regularly spaced, pressure-treated wood railroad ties. The rails have been removed. Aerial photographs (ICF Jones & Stokes 2008a:Figure 3) suggest that a third concrete curb and a second set of tracks were located along the northern edge of the Ancillary Train Shed, but these features were not evident during the survey. The age of the resource is unknown, not being evident on historic maps dating from 1875 to 1952 (Sacramento Archives and Museum Collection Center 2002; Sanborn Map Co. 1915, 1951, 1952; Sanborn-Perris Map Co. 1895; Southern Pacific 1920).

***P3b. Resource Attributes:** (List attributes and codes) AH2. Foundations/structure pads. AH7. Railroad grades.

***P4. Resources Present:** Building Structure Object Site District Element of District Other (Isolates, etc.)

P5a. Photo or Drawing (Photo required for buildings, structures, and objects.)
 No photograph available.

P5b. Description of Photo: (View, date, accession #)
 Facing east, 06/27/2008

***P6. Date Constructed/Age and Sources:** Historic
 Prehistoric Both
 Unknown.

***P7. Owner and Address:**
 S. Thomas Enterprises of
 Sacramento. 431 I St, Ste. 202
 Sacramento, CA 95814

***P8. Recorded by:** (Name, affiliation, and address)
 Gabriel Roark, ICF Jones & Stokes
 630 K Street, Suite 400
 Sacramento, CA 85814

***P9. Date Recorded:**

***P10. Survey Type:** (Describe)
 Reconnaissance survey

***P11. Report Citation:** (Cite survey report and other sources, or enter "none.") ICF Jones & Stokes 2008a, 2008b (see Continuation Sheet)

***Attachments:** NONE Location Map Sketch Map Continuation Sheet Building, Structure, and Object Record
 Archaeological Record District Record Linear Feature Record Milling Station Record Rock Art Record
 Artifact Record Photograph Record Other (List):

*Recorded by: Gabriel Roark, ICF Jones & Stokes

*Date: 10/31/2008 Continuation Update

All that remains of the former Ancillary Train Shed are two concrete curbs and the railroad ties; the rails have been pulled and moved off-site. No subsurface archaeological manifestations, such as refuse deposits or buried structural remains, are anticipated to be present at the Ancillary Train Shed given the nature of activities that occurred there. The Ancillary Train Shed Curbs do not meet any of the National Register criteria, either individually or as a contributor to the Central Shops District. Although possibly an important functional unit of the Central Shops, the Ancillary Train Shed lacks integrity of design, workmanship, materials, feeling, and association. Integrity of setting is compromised, as the majority of railroad structures with which the Ancillary Train Shed was associated also lack superstructure or are absent altogether. The only uncompromised aspect of the Ancillary Train Shed Curb's integrity, therefore, is location, which is insufficient to warrant an assignment of contributing status to this resource. The resource does not appear to be eligible for listing in the NRHP on its own merit, either. Moreover, this resource cannot be reliably assigned to the Central Shops Historic District's period of significance. This resource also does not appear to meet the significance criteria of the California Register.

This resource has been evaluated in accordance with Section 15064.5(1)(2)-(3) of the CEQA guidelines, using the criteria outlined in Section 5024.1 of the California Public Resources Code. It is a not historical resource for purposes of CEQA.

REFERENCES CITED

Historic Environment Consultants. 1998. *Historic Property Inventory and Evaluation Report for the Central Pacific/Southern Pacific Railroad Railyards Project, Sacramento County*. Submitted to Union Pacific Railroad Company.

ICF Jones & Stokes. 2008a. *Archaeological Survey Report for the Sacramento Intermodal Transportation Facility, City of Sacramento, Sacramento County, California*. October. ICF Jones & Stokes, Sacramento, California. ICF J&S 00121.08. Submitted to District 3, California Department of Transportation, Marysville. 03-Sac-00 PM EA 03-965100 3ENVR Sacramento Intermodal Transportation Facility. Prepared for City of Sacramento, California.

— — —. 2008b. *Historical Resources Evaluation Report for the Sacramento Intermodal Transportation Facility, City of Sacramento, Sacramento County, California*. October. ICF Jones & Stokes, Sacramento, California. ICF J&S 00121.08. Submitted to District 3, California Department of Transportation, Marysville. 03-Sac-00 PM EA 03-965100 3ENVR Sacramento Intermodal Transportation Facility. Prepared for City of Sacramento, California.

Mellon, Knox. 2001. Letter Regarding Seventh Street Extension Project, City of Sacramento, Sacramento County. September 4. Office of Historic Preservation, Department of Parks and Recreation, Sacramento, California. FHWA010423G. Submitted to California Division, Region Nine, Federal Highway Administration, Sacramento.

Sacramento Archives and Museum Collection Center. 2002. Map Showing Lands Owned by the Central Pacific Rail Road Company of California, in the City of Sacramento, with the Tracks, Buildings, and Other Improvements thereon. Sacramento Archives and Museum Collection Center, Sacramento, California. Originally published 1875 by Steam Lithographers Britton & Rey, San Francisco.

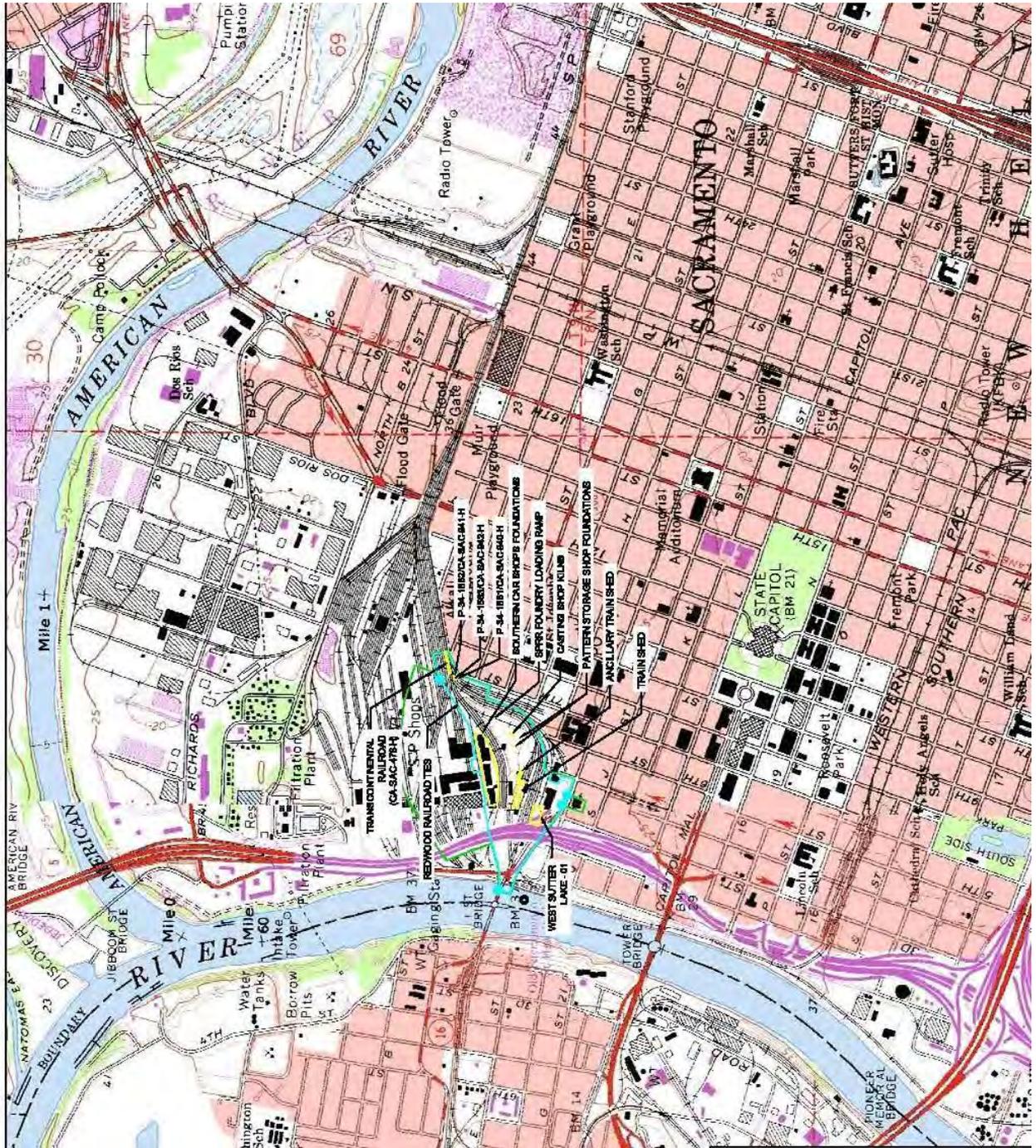
Sanborn Map Co. 1915. Insurance Maps of Sacramento, California, Volume 1. 2 vols. Sanborn Map Co., New York. Electronic document, <http://sanborn.umi.com.ezproxy.lapl.org>, accessed June 24, 2008.

— — —. 1951. Insurance Maps of Sacramento, California, Volume 1. 2 vols. Sanborn Map Co., New York. Electronic document, <http://sanborn.umi.com.ezproxy.lapl.org>, accessed June 24, 2008.

— — —. 1952. Insurance Maps of Sacramento, California, Volume 1. 2 vols. Sanborn Map Co., New York. Electronic document, <http://sanborn.umi.com.ezproxy.lapl.org>, accessed June 24, 2008.

Sanborn-Perris Map Co. 1895. Insurance Maps of Sacramento, California, 1895. Electronic document, <http://sanborn.umi.com.ezproxy.lapl.org>, accessed June 24, 2008.

Southern Pacific. 1920. Sacramento Shops, Showing Buildings. Map. On file, California State Railroad Museum Library, Sacramento, California.



State of California — The Resources Agency
 DEPARTMENT OF PARKS AND RECREATION
PRIMARY RECORD

Primary #
 HRI #
 Trinomial
 NRHP Status Code 3D

Other Listings
 Review Code

Reviewer

Date

Page 1 of 3

*Resource Name or #: Casting Shop Kilns (Element of Central Shops Historic District)

P1. Other Identifier: Map Reference #11

*P2. Location: Not for Publication Unrestricted

*a. County: Sacramento

and (P2b and P2c or P2d. Attach a Location Map as necessary.)

*b. USGS 7.5' Quad: Sacramento East

Date: 1994 T 9 N; R 4 E ; ¼ of ¼ of Sec ; M.D. B.M.

c. Address:

City:

Zip:

d. UTM: Zone: ; mE/ mN

e. Other Locational Data: (e.g., parcel #, directions to resource, elevation, etc., as appropriate):

*P3a. Description: (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries) This resource is a contributing element of the Central Shops Historic District, a National Register of Historic Places (NRHP)-eligible historic district. The district, as originally conceived by Historic Environment Consultants (1998:11), consists of the 10 extant fabrication, repair, and maintenance shops. The Central Shops Historic District is eligible for inclusion on the NRHP under Criteria A and C because the "structures have strong associations with the development of the Central Pacific Railroad Company (CPRR), the creators of the western portion of the historic transcontinental railroad. The structures were also central features in what became one of the largest manufacturing complexes in the western United States" (Mellon 2001:2). Historic Environment Consultants (1998:14) adds that the "Sacramento Shops were highly notable for their construction and maintenance of all types of railroad cars and locomotives."

The resource consists of eight brick-lined kilns, four of which were identified below ground surface in the profile of an excavated pit and four in plan at the ground surface immediately east of the kilns identified in profile. The location of the kilns corresponds to the Southern Pacific Railroad (SPRR) Casting Shop, an ancillary structure to the SPRR Foundry (located to the east of the Casting Shop), as depicted on historic maps (Sanborn Map Co. 1951:Sheet 5; Southern Pacific 1920). The kilns are circular, exhibit clear evidence of repeated firing, and are filled with ash and slag. A number of ceramic forms or patterns are located in the pit stratigraphically beneath the kilns; these artifacts were used in the manufacture of numerous railroad parts, such as springs.

*P3b. Resource Attributes: (List attributes and codes) AH16. Other (Kilns)

*P4. Resources Present: Building Structure Object Site District Element of District Other (Isolates, etc.)

P5a. Photo or Drawing (Photo required for buildings, structures, and objects.)



P5b. Description of Photo: (View, date, accession #)
 Facing east, 06/27/2008

*P6. Date Constructed/Age and Sources: Historic
 Prehistoric Both
 Ca. 1920 (Southern Pacific 1920)

*P7. Owner and Address:
 S. Thomas Enterprises of
 Sacramento. 431 I St, Ste. 202
 Sacramento, CA 95814

*P8. Recorded by: (Name, affiliation, and address)
 Gabriel Roark, ICF Jones & Stokes
 630 K Street, Suite 400
 Sacramento, CA 85814

*P9. Date Recorded:

*P10. Survey Type: (Describe)
 Reconnaissance survey

*P11. Report Citation: (Cite survey report and other sources, or enter "none.") ICF Jones & Stokes 2008a, 2008b (see Continuation Sheet)

*Attachments: NONE Location Map Sketch Map Continuation Sheet Building, Structure, and Object Record
 Archaeological Record District Record Linear Feature Record Milling Station Record Rock Art Record
 Artifact Record Photograph Record Other (List):

*Recorded by: Gabriel Roark, ICF Jones & Stokes

*Date: 10/31/2008 Continuation Update

The Casting Shop Kilns are part of the Foundry complex responsible for the manufacture of parts essential to operations of the Central Shops. Moreover, the Casting Shop Kilns enabled the Central Shops to maintain self-sufficiency in manufacturing. The Casting Shop Kilns are the sole representative of parts-casting operations extant at the Railyards. They also provide a unique representation of casting operations in that four of the kilns are preserved intact (visible in plan at the ground surface), whereas four have been truncated, permitting observation of the kilns and their contents in cross-section. The Casting Shop Kilns retain most aspects of integrity: location, workmanship, materials, setting (partially compromised), feeling (partially compromised), association (partially compromised), and design. The Casting Shop Kilns appear to contribute to the significance of the Central Shops District under Criterion A and C for its representation of a critical function of the district. Similarly, the Casting Shop Kilns would be considered a contributor to a California Register of Historical Resources-eligible historic district.

This resource has been evaluated in accordance with Section 15064.5(1)(2)-(3) of the CEQA guidelines, using the criteria outlined in Section 5024.1 of the California Public Resources Code. It is a historical resource for purposes of CEQA.

REFERENCES CITED

Historic Environment Consultants. 1998. *Historic Property Inventory and Evaluation Report for the Central Pacific/Southern Pacific Railroad Railyards Project, Sacramento County*. Submitted to Union Pacific Railroad Company.

ICF Jones & Stokes. 2008a. *Archaeological Survey Report for the Sacramento Intermodal Transportation Facility, City of Sacramento, Sacramento County, California*. October. ICF Jones & Stokes, Sacramento, California. ICF J&S 00121.08. Submitted to District 3, California Department of Transportation, Marysville. 03-Sac-00 PM EA 03-965100 3ENVR Sacramento Intermodal Transportation Facility. Prepared for City of Sacramento, California.

— — —. 2008b. *Historical Resources Evaluation Report for the Sacramento Intermodal Transportation Facility, City of Sacramento, Sacramento County, California*. October. ICF Jones & Stokes, Sacramento, California. ICF J&S 00121.08. Submitted to District 3, California Department of Transportation, Marysville. 03-Sac-00 PM EA 03-965100 3ENVR Sacramento Intermodal Transportation Facility. Prepared for City of Sacramento, California.

Mellon, Knox. 2001. Letter Regarding Seventh Street Extension Project, City of Sacramento, Sacramento County. September 4. Office of Historic Preservation, Department of Parks and Recreation, Sacramento, California. FHWA010423G. Submitted to California Division, Region Nine, Federal Highway Administration, Sacramento.

Sanborn Map Co. 1951. Insurance Maps of Sacramento, California, Volume 1. 2 vols. Sanborn Map Co., New York. Electronic document, <http://sanborn.umi.com.ezproxy.lapl.org>, accessed June 24, 2008.

Southern Pacific. 1920. Sacramento Shops, Showing Buildings. Map. On file, California State Railroad Museum Library, Sacramento, California.

State of California — The Resources Agency
 DEPARTMENT OF PARKS AND RECREATION
PRIMARY RECORD

Primary #
 HRI #
 Trinomial
 NRHP Status Code 6Z

Other Listings
 Review Code Reviewer Date

Page 1 of 3 *Resource Name or #: Pattern Storage Shop Slab Foundations (Element of Central Shops Historic District)

P1. Other Identifier: Map Reference #15

*P2. Location: Not for Publication Unrestricted *a. County: Sacramento

and (P2b and P2c or P2d. Attach a Location Map as necessary.)

*b. USGS 7.5' Quad: Sacramento East Date: 1994 T 9 N; R 4 E ; ¼ of ¼ of Sec ; M.D. B.M.

c. Address: City: Zip:

d. UTM: Zone: ; mE/ mN

e. Other Locational Data: (e.g., parcel #, directions to resource, elevation, etc., as appropriate):

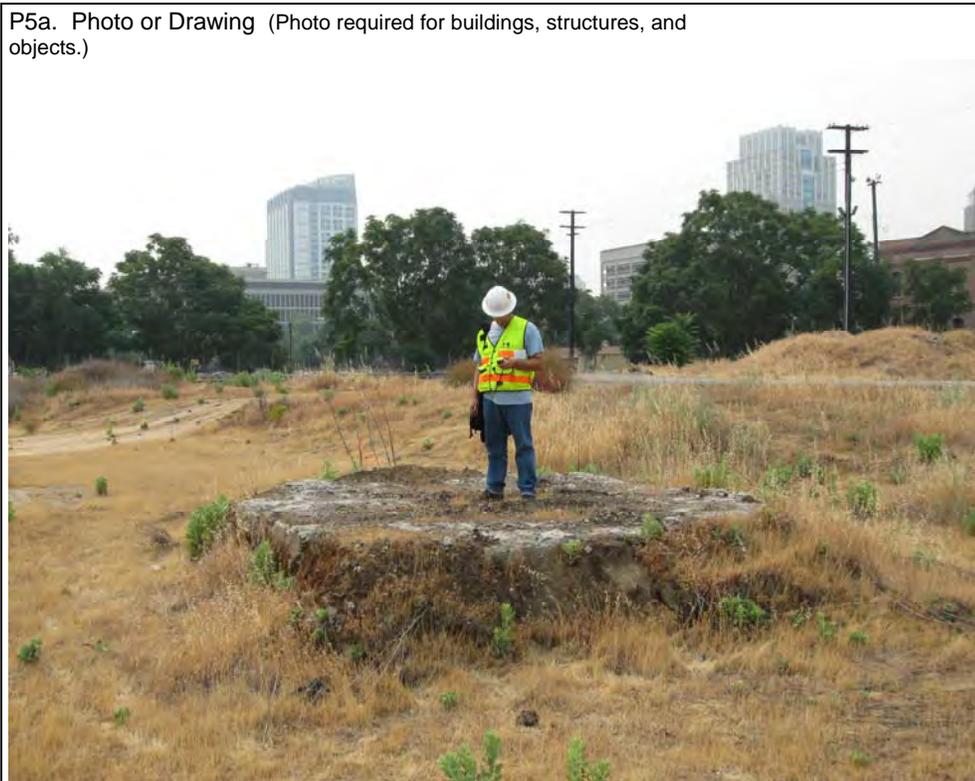
*P3a. Description: (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries)
 This resource is a non-contributing element of the Central Shops Historic District, a National Register of Historic Places (NRHP)-eligible historic district. The district, as originally conceived by Historic Environment Consultants (1998:11), consists of the 10 extant fabrication, repair, and maintenance shops. The Central Shops Historic District is eligible for inclusion on the NRHP under Criteria A and C because the "structures have strong associations with the development of the Central Pacific Railroad Company (CPRR), the creators of the western portion of the historic transcontinental railroad. The structures were also central features in what became one of the largest manufacturing complexes in the western United States" (Mellon 2001:2). Historic Environment Consultants (1998:14) adds that the "Sacramento Shops were highly notable for their construction and maintenance of all types of railroad cars and locomotives."

The Pattern Storage Shop Slab Foundations are two separate foundation remnants of the Pattern Storage Shop, construction of which commenced after the fire of November 7, 1898. The Pattern Storage Shop was completed in 1900. The structure measured approximately 140 ft east-west by 65 ft north-south, was two stories tall, built of brick on concrete foundation, and was divided into fireproof sections (Joslyn 1948:42; Sanborn-Perris Map Co. 1895:Sheet 5a; Sanborn Map Co. 1915:Sheet 5). The building's purpose was for storage of the patterns used to make dies and castings of iron and brass.

*P3b. Resource Attributes: (List attributes and codes) AH2. Foundations/structure pads.

*P4. Resources Present: Building Structure Object Site District Element of District Other (Isolates, etc.)

P5a. Photo or Drawing (Photo required for buildings, structures, and objects.)



P5b. Description of Photo: (View, date, accession #)
 Facing northeast, 06/27/2008

*P6. Date Constructed/Age and Sources: Historic
 Prehistoric Both
 Constructed 1900 (Joslyn 1948:42)

*P7. Owner and Address:
 S. Thomas Enterprises of
 Sacramento. 431 I St, Ste. 202
 Sacramento, CA 95814

*P8. Recorded by: (Name, affiliation, and address)
 Gabriel Roark, ICF Jones & Stokes
 630 K Street, Suite 400
 Sacramento, CA 85814

*P9. Date Recorded:

*P10. Survey Type: (Describe)
 Reconnaissance survey

*P11. Report Citation: (Cite survey report and other sources, or enter "none.") ICF Jones & Stokes 2008a, 2008b (see Continuation Sheet)

*Attachments: NONE Location Map Sketch Map
 Continuation Sheet Building, Structure, and Object Record

Archaeological Record District Record Linear Feature Record Milling Station Record Rock Art Record
 Artifact Record Photograph Record Other (List):

*Recorded by: Gabriel Roark, ICF Jones & Stokes

*Date: 10/31/2008 Continuation Update

P3a (Continued). The easternmost foundation remnant contains the metal-and-concrete recess that housed the base of the Pattern Storage Shop's center support post (Sanborn Map Co. 1915: Sheet 5, 1951:Sheet 5, 1952:Sheet 5). No other features or artifacts associated with the Pattern Storage Shop were evident at the time of survey (ICF Jones & Stokes 2008a). During the Central Shops Historic District's period of significance, the Pattern Storage Shop was located in close proximity to the SPRR Foundry and its ancillary buildings, such as the Castings Shop. No subsurface archaeological deposits (e.g., refuse deposits, buried structure remains) are anticipated at the Pattern Storage Shop Slab Foundations given the nature of activities that occurred there. The Pattern Storage Shop Slab Foundations do not meet any of the National Register criteria, either individually or as a contributor to the Central Shops District. Similarly, this resource does not appear to meet the significance criteria of the California Register.

This resource has been evaluated in accordance with Section 15064.5(1)(2)-(3) of the CEQA guidelines, using the criteria outlined in Section 5024.1 of the California Public Resources Code. It is a not historical resource for purposes of CEQA.

REFERENCES CITED

Historic Environment Consultants. 1998. *Historic Property Inventory and Evaluation Report for the Central Pacific/Southern Pacific Railroad Railyards Project, Sacramento County*. Submitted to Union Pacific Railroad Company.

ICF Jones & Stokes. 2008a. *Archaeological Survey Report for the Sacramento Intermodal Transportation Facility, City of Sacramento, Sacramento County, California*. October. ICF Jones & Stokes, Sacramento, California. ICF J&S 00121.08. Submitted to District 3, California Department of Transportation, Marysville. 03-Sac-00 PM EA 03-965100 3ENVR Sacramento Intermodal Transportation Facility. Prepared for City of Sacramento, California.

— — —. 2008b. *Historical Resources Evaluation Report for the Sacramento Intermodal Transportation Facility, City of Sacramento, Sacramento County, California*. October. ICF Jones & Stokes, Sacramento, California. ICF J&S 00121.08. Submitted to District 3, California Department of Transportation, Marysville. 03-Sac-00 PM EA 03-965100 3ENVR Sacramento Intermodal Transportation Facility. Prepared for City of Sacramento, California.

Joslyn, D. L. 1948. *Sacramento General Shops, Southern Pacific Company – Pacific Liner*. Unpublished typescript. On file, District 3, California Department of Transportation, Marysville.

Mellon, Knox. 2001. *Letter Regarding Seventh Street Extension Project, City of Sacramento, Sacramento County*. September 4. Office of Historic Preservation, Department of Parks and Recreation, Sacramento, California. FHWA010423G. Submitted to California Division, Region Nine, Federal Highway Administration, Sacramento.

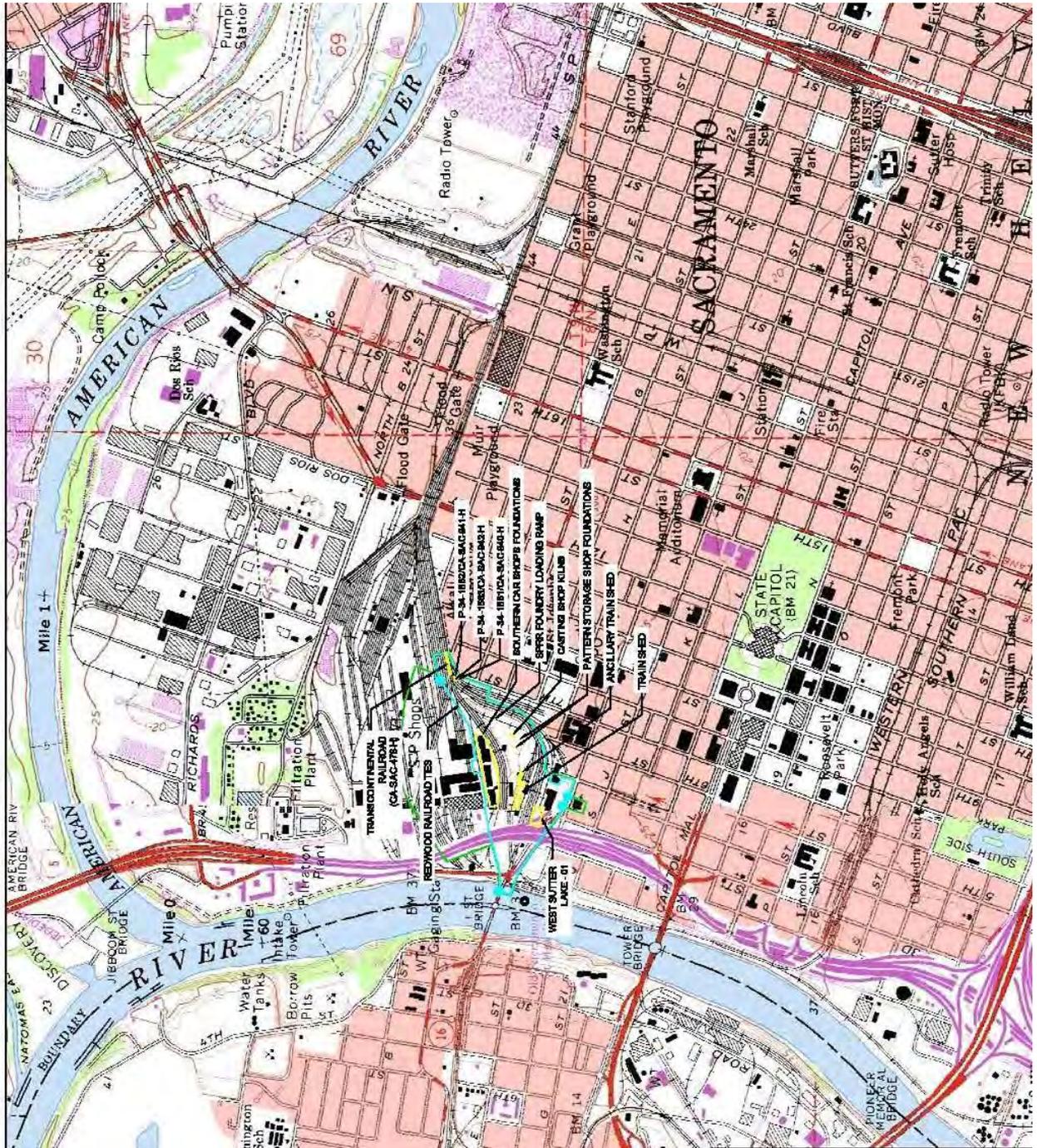
Sanborn Map Co. 1915. *Insurance Maps of Sacramento, California, Volume 1*. 2 vols. Sanborn Map Co., New York. Electronic document, <http://sanborn.umi.com.ezproxy.lapl.org>, accessed June 24, 2008.

— — —. 1951. *Insurance Maps of Sacramento, California, Volume 1*. 2 vols. Sanborn Map Co., New York. Electronic document, <http://sanborn.umi.com.ezproxy.lapl.org>, accessed June 24, 2008.

— — —. 1952. *Insurance Maps of Sacramento, California, Volume 1*. 2 vols. Sanborn Map Co., New York. Electronic document, <http://sanborn.umi.com.ezproxy.lapl.org>, accessed June 24, 2008.

Sanborn-Perris Map Co. 1895. *Insurance Maps of Sacramento, California, 1895*. Electronic document, <http://sanborn.umi.com.ezproxy.lapl.org>, accessed June 24, 2008.

Southern Pacific. 1920. *Sacramento Shops, Showing Buildings*. Map. On file, California State Railroad Museum Library, Sacramento, California.



State of California — The Resources Agency
 DEPARTMENT OF PARKS AND RECREATION
PRIMARY RECORD

Primary #
 HRI #
 Trinomial
 NRHP Status Code 6Z

Other Listings
 Review Code Reviewer Date

Page 1 of 3 *Resource Name or #: SPRR Foundry Loading Ramp (Element of Central Shops Historic District)

P1. Other Identifier: Map Reference #16

*P2. Location: Not for Publication Unrestricted *a. County: Sacramento

and (P2b and P2c or P2d. Attach a Location Map as necessary.)

*b. USGS 7.5' Quad: Sacramento East Date: 1994 T 9 N; R 4 E ; ¼ of ¼ of Sec ; M.D. B.M.

c. Address: City: Zip:

d. UTM: Zone: ; mE/ mN

e. Other Locational Data: (e.g., parcel #, directions to resource, elevation, etc., as appropriate):

*P3a. Description: (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries)
 This resource is a non-contributing element of the Central Shops Historic District, a National Register of Historic Places (NRHP)-eligible historic district. The district, as originally conceived by Historic Environment Consultants (1998:11), consists of the 10 extant fabrication, repair, and maintenance shops. The Central Shops Historic District is eligible for inclusion on the NRHP under Criteria A and C because the "structures have strong associations with the development of the Central Pacific Railroad Company (CPRR), the creators of the western portion of the historic transcontinental railroad. The structures were also central features in what became one of the largest manufacturing complexes in the western United States" (Mellon 2001:2). Historic Environment Consultants (1998:14) adds that the "Sacramento Shops were highly notable for their construction and maintenance of all types of railroad cars and locomotives."

The SPRR Foundry Loading Ramp appears to be the only surface feature remaining of the Southern Pacific Railroad (SPRR) Foundry, built ca. 1883 (Joslyn 1948:41). The loading ramp is a simple concrete structure 3 ft tall, 12 ft long, and accessed from the north. The Foundry, of which the loading ramp is a part, operated from 1883 to at least 1952 (Joslyn 1948:41; Sanborn Map Co. 1915, 1951, 1952; Sanborn-Perris Map Co. 1895: Sheet 5a).

*P3b. Resource Attributes: (List attributes and codes) AH2. Foundations/structure pads.

*P4. Resources Present: Building Structure Object Site District Element of District Other (Isolates, etc.)

P5a. Photo or Drawing (Photo required for buildings, structures, and objects.)



P5b. Description of Photo: (View, date, accession #)

Facing northeast, 06/27/2008

*P6. Date Constructed/Age and

Sources: Historic

Prehistoric Both

Ca. 1883 (Joslyn 1948:41)

*P7. Owner and Address:

S. Thomas Enterprises of
 Sacramento. 431 I St, Ste. 202
 Sacramento, CA 95814

*P8. Recorded by: (Name, affiliation, and address)
 Gabriel Roark, ICF Jones & Stokes
 630 K Street, Suite 400
 Sacramento, CA 85814

*P9. Date Recorded:

*P10. Survey Type: (Describe)

Reconnaissance survey

*P11. Report Citation: (Cite survey report and other sources, or enter "none.") ICF Jones & Stokes 2008a, 2008b (see Continuation Sheet)

*Attachments: NONE Location Map Sketch Map Continuation Sheet Building, Structure, and Object Record

Archaeological Record District Record Linear Feature Record Milling Station Record Rock Art Record
 Artifact Record Photograph Record Other (List):

*Recorded by: Gabriel Roark, ICF Jones & Stokes

*Date: 10/31/2008 Continuation Update

The Foundry at 6th Street was a critical element of the Central Shops' manufacturing capabilities (see Joslyn 1948:41-42); however, the loading ramp, as the only surviving element, is incapable of conveying the significance of operations at the Foundry. Further, no subsurface archaeological deposits (e.g., refuse deposits, buried structure remains) are anticipated at the Foundry given the nature of activities that occurred there. Consequently, the Foundry Loading Ramp does not meet any of the National Register criteria, either individually or as a contributor to the Central Shops District. This resource also does not appear to meet the California Register significance criteria.

This resource has been evaluated in accordance with Section 15064.5(1)(2)-(3) of the CEQA guidelines, using the criteria outlined in Section 5024.1 of the California Public Resources Code. It is a not historical resource for purposes of CEQA.

REFERENCES CITED

Historic Environment Consultants. 1998. *Historic Property Inventory and Evaluation Report for the Central Pacific/Southern Pacific Railroad Railyards Project, Sacramento County*. Submitted to Union Pacific Railroad Company.

ICF Jones & Stokes. 2008a. *Archaeological Survey Report for the Sacramento Intermodal Transportation Facility, City of Sacramento, Sacramento County, California*. October. ICF Jones & Stokes, Sacramento, California. ICF J&S 00121.08. Submitted to District 3, California Department of Transportation, Marysville. 03-Sac-00 PM EA 03-965100 3ENVR Sacramento Intermodal Transportation Facility. Prepared for City of Sacramento, California.

— — —. 2008b. *Historical Resources Evaluation Report for the Sacramento Intermodal Transportation Facility, City of Sacramento, Sacramento County, California*. October. ICF Jones & Stokes, Sacramento, California. ICF J&S 00121.08. Submitted to District 3, California Department of Transportation, Marysville. 03-Sac-00 PM EA 03-965100 3ENVR Sacramento Intermodal Transportation Facility. Prepared for City of Sacramento, California.

Joslyn, D. L. 1948. *Sacramento General Shops, Southern Pacific Company — Pacific Liner*. Unpublished typescript. On file, District 3, California Department of Transportation, Marysville.

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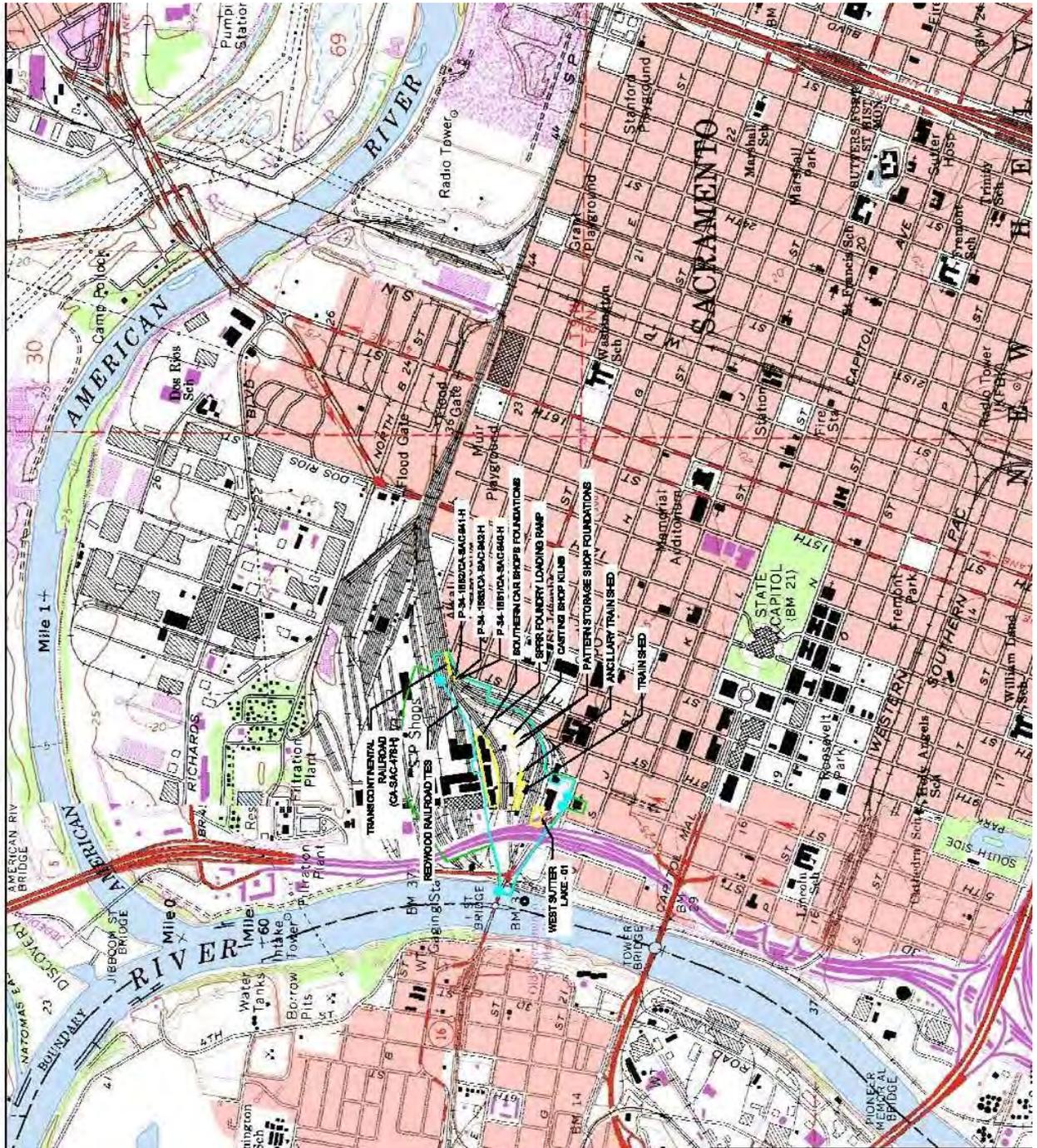
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State of California — The Resources Agency
 DEPARTMENT OF PARKS AND RECREATION
PRIMARY RECORD

Primary #
 HRI #
 Trinomial
 NRHP Status Code 6Z

Other Listings
 Review Code Reviewer Date

Page 1 of 3 *Resource Name or #: Redwood Railroad Ties (Element of Central Shops Historic District)

P1. Other Identifier: Map Reference #17

*P2. Location: Not for Publication Unrestricted *a. County: Sacramento

and (P2b and P2c or P2d. Attach a Location Map as necessary.)

*b. USGS 7.5' Quad: Sacramento East Date: 1994 T 9 N; R 4 E ; ¼ of ¼ of Sec ; M.D. B.M.
 c. Address: City: Zip:
 d. UTM: Zone: ; mE/ mN
 e. Other Locational Data: (e.g., parcel #, directions to resource, elevation, etc., as appropriate):

*P3a. Description: (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries)
 This resource is a non-contributing element of the Central Shops Historic District, a National Register of Historic Places (NRHP)-eligible historic district. The district, as originally conceived by Historic Environment Consultants (1998:11), consists of the 10 extant fabrication, repair, and maintenance shops. The Central Shops Historic District is eligible for inclusion on the NRHP under Criteria A and C because the "structures have strong associations with the development of the Central Pacific Railroad Company (CPRR), the creators of the western portion of the historic transcontinental railroad. The structures were also central features in what became one of the largest manufacturing complexes in the western United States" (Mellon 2001:2). Historic Environment Consultants (1998:14) adds that the "Sacramento Shops were highly notable for their construction and maintenance of all types of railroad cars and locomotives."

This resource consists of five redwood railroad ties visible in plan in an existing gravel road. The ties are oriented on a southwest-northeast trajectory. The ties are located alongside the route of the CPRR's second mainline railroad, which was constructed from August through December 1879. The second mainline extended from the First Transcontinental Railroad at 6th and D streets southwest to skirt the southern end of Central Shops to a new passenger depot near the Second Street Extension (Wyatt 2007:8-4).

*P3b. Resource Attributes: (List attributes and codes) AH7. Roads/trails/railroad grades

*P4. Resources Present: Building Structure Object Site District Element of District Other (Isolates, etc.)

P5a. Photo or Drawing (Photo required for buildings, structures, and objects.)



P5b. Description of Photo: (View, date, accession #)
 Detail, 06/27/2008

*P6. Date Constructed/Age and Sources: Historic
 Prehistoric Both
 Ca. 1879 (Wyatt 2007:8-4)

*P7. Owner and Address:
 City of Sacramento, CA

*P8. Recorded by: (Name, affiliation, and address)
 Gabriel Roark, ICF Jones & Stokes
 630 K Street, Suite 400
 Sacramento, CA 85814

*P9. Date Recorded:

*P10. Survey Type: (Describe)
 Reconnaissance survey

*P11. Report Citation: (Cite survey report and other sources, or enter "none.") ICF Jones & Stokes 2008a, 2008b (see Continuation Sheet)

*Attachments: NONE Location Map Sketch Map
 Continuation Sheet Building, Structure, and Object Record
 Archaeological Record District Record Linear Feature

Record Milling Station Record Rock Art Record
 Artifact Record Photograph Record Other (List):

*Recorded by: Gabriel Roark, ICF Jones & Stokes

*Date: 10/31/2008 Continuation Update

The Redwood Railroad Ties represent an isolated portion of a historic spur line to the second CPRR mainline tracks. As a small remnant of one of many spur lines in the Railyards, the Redwood Railroad Ties do not contribute to the Central Shops District's significance under any criteria. The resource does not appear to be eligible for listing in the NRHP on its own merit, either. Moreover, this resource cannot be reliably assigned to the Central Shops Historic District's period of significance. This resource also does not appear to meet the significance criteria of the California Register.

This resource has been evaluated in accordance with Section 15064.5(1)(2)-(3) of the CEQA guidelines, using the criteria outlined in Section 5024.1 of the California Public Resources Code. It is a not historical resource for purposes of CEQA.

REFERENCES CITED

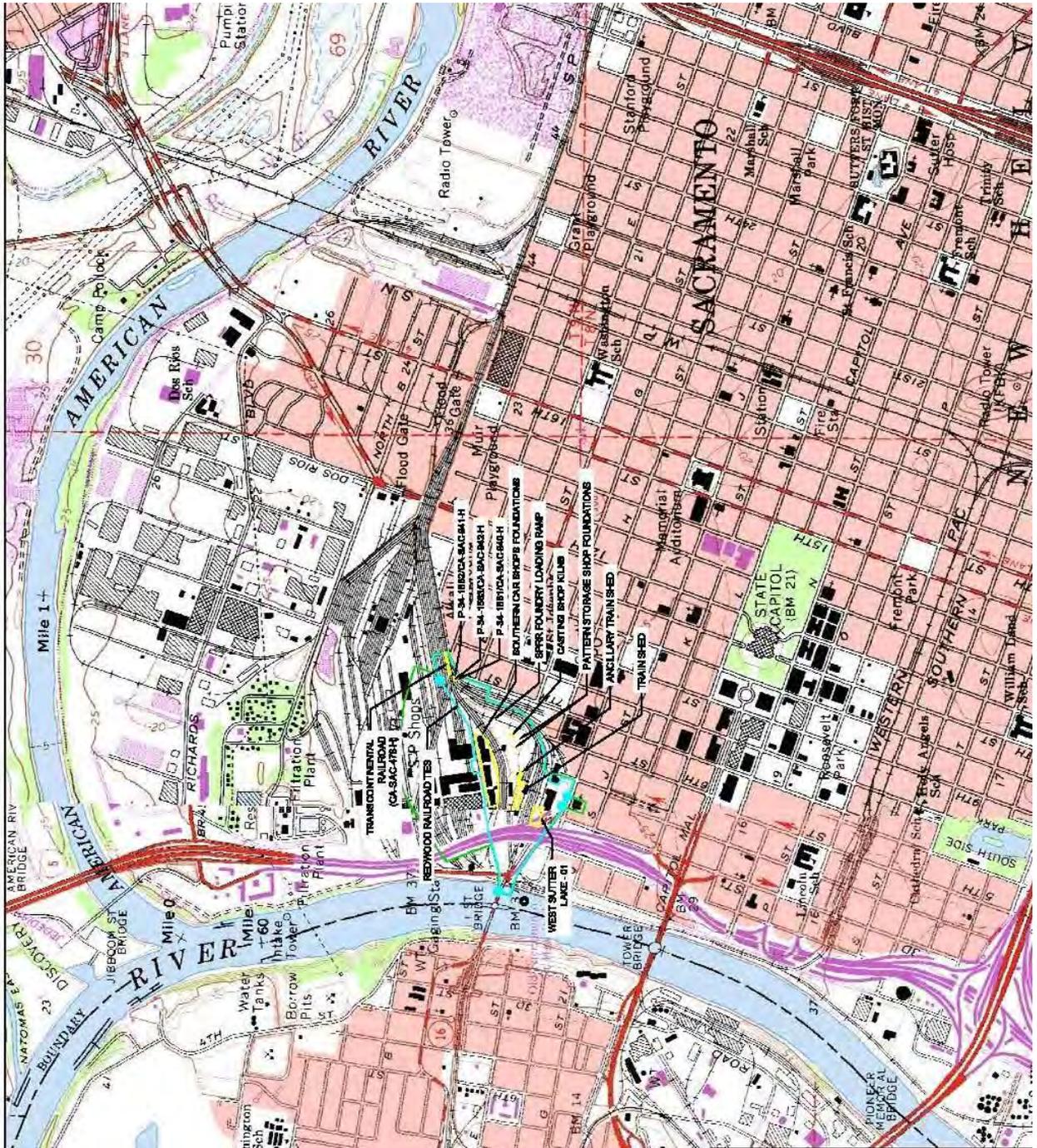
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State of California — The Resources Agency
 DEPARTMENT OF PARKS AND RECREATION
PRIMARY RECORD

Primary #
 HRI #
 Trinomial
 NRHP Status Code 6Z

Other Listings
 Review Code Reviewer Date

Page 1 of 3 *Resource Name or #: Southern Car Shops Slab Foundations (Element of Central Shops Historic District)

P1. Other Identifier: Map Reference #18

*P2. Location: Not for Publication Unrestricted *a. County: Sacramento

and (P2b and P2c or P2d. Attach a Location Map as necessary.)

*b. USGS 7.5' Quad: Sacramento East Date: 1994 T 9 N; R 4 E ; ¼ of ¼ of Sec ; M.D. B.M.

c. Address: City: Zip:

d. UTM: Zone: ; mE/ mN

e. Other Locational Data: (e.g., parcel #, directions to resource, elevation, etc., as appropriate):

*P3a. Description: (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries)
 This resource is a non-contributing element of the Central Shops Historic District, a National Register of Historic Places (NRHP)-eligible historic district. The district, as originally conceived by Historic Environment Consultants (1998:11), consists of the 10 extant fabrication, repair, and maintenance shops. The Central Shops Historic District is eligible for inclusion on the NRHP under Criteria A and C because the "structures have strong associations with the development of the Central Pacific Railroad Company (CPRR), the creators of the western portion of the historic transcontinental railroad. The structures were also central features in what became one of the largest manufacturing complexes in the western United States" (Mellon 2001:2). Historic Environment Consultants (1998:14) adds that the "Sacramento Shops were highly notable for their construction and maintenance of all types of railroad cars and locomotives."

Numerous foundations are present immediately south of the Central Shops. Between 1890 and the 1950s, this area contained the Copper Shop, Coal Bin, Coal Shed, Tin and Copper Shed, Hammer Shop, Pipe Shop, Pipe Shed, Bolt Shop, Blacksmith Shop, Rolling Mill, and miscellaneous storage sheds and offices, which are collectively referred to here as the "Southern Car Shops" (Elliott 1890; Sanborn-Perris Map Co. 1895; Sanborn Map Co. 1915, 1951, 1952; Southern Pacific 1920).

*P3b. Resource Attributes: (List attributes and codes) AH7. Roads/trails/railroad grades

*P4. Resources Present: Building Structure Object Site District Element of District Other (Isolates, etc.)



P5b. Description of Photo: (View, date, accession #)
 View to east, 06/27/2008

*P6. Date Constructed/Age and Sources: Historic
 Prehistoric Both
 1890-1950s (see P3a for citations)

*P7. Owner and Address:
 City of Sacramento, CA

*P8. Recorded by: (Name, affiliation, and address)
 Gabriel Roark, ICF Jones & Stokes
 630 K Street, Suite 400
 Sacramento, CA 95814

*P9. Date Recorded:

*P10. Survey Type: (Describe)
 Reconnaissance survey

*P11. Report Citation: (Cite survey report and other sources, or enter "none.") ICF Jones & Stokes 2008a, 2008b (see Continuation Sheet)

*Attachments: NONE Location Map Sketch Map
 Continuation Sheet Building, Structure, and Object Record
 Archaeological Record District Record Linear Feature Record Milling Station Record

Rock Art Record
 Artifact Record Photograph Record Other (List):

*Recorded by: Gabriel Roark, ICF Jones & Stokes

*Date: 10/31/2008 Continuation Update

The foundations represent the only surviving surface manifestation of the Southern Car Shops buildings. No superstructure or machinery remains at the Southern Car Shops Slab Foundations. No evidence of subsurface archaeological deposits was noted or is anticipated at the Southern Car Shop Slab Foundations. The Southern Car Shops Foundations lack sufficient integrity to convey significance as a potential contributor to the Central Shops Historic District and are not individually eligible for the NRHP under any criteria. The resource does not appear to be eligible for listing in the NRHP on its own merit, either. Moreover, this resource cannot be reliably assigned to the Central Shops Historic District's period of significance. This resource also does not appear to meet the significance criteria of the California Register.

This resource has been evaluated in accordance with Section 15064.5(1)(2)-(3) of the CEQA guidelines, using the criteria outlined in Section 5024.1 of the California Public Resources Code. It is a not historical resource for purposes of CEQA.

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