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October 31, 2008
Project No. 92666-4F

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Subject: Hazardous Materials Corridor Study

**Project: Perris Valley Line Project
Riverside County, California**

Dear Mr. Venturato:

The enclosed Hazardous Materials Corridor Study for the Perris Valley Line Corridor Project provides the needed information for the CEQA Document. This report provides site specific data for the preparation of a sampling plan in support of the Geotechnical Field Exploration and HazMat Investigation Work Plan.

We appreciate this opportunity to provide our services to you. Should you require additional information or have any questions regarding this report, please contact Mark Peabody at (858) 320-2000 or Lizanne Simmons at (951) 506-1488.

Respectfully submitted,

KLEINFELDER WEST, INC.

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**HAZARDOUS MATERIALS CORRIDOR STUDY
PERRIS VALLEY LINE PROJECT
RIVERSIDE COUNTY, CALIFORNIA**

October 31, 2008

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A Report Prepared for:

STV Incorporated
9130 Anaheim Place, Suite 210
Rancho Cucamonga, California 91730

**HAZARDOUS MATERIALS STUDY
PERRIS VALLEY LINE CORRIDOR PROJECT
RIVERSIDE COUNTY, CALIFORNIA**

Kleinfelder Project No. 92666-4F

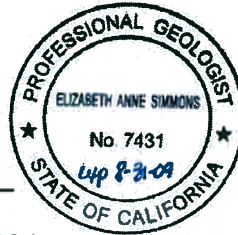
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October 31, 2008

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Appendix B	Corridor Photographs
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1.0 INTRODUCTION

A Hazardous Materials Corridor Study (HMCS) was performed for Riverside County Transportation Commission (RCTC) under contract to STV Incorporated (STV) by Kleinfelder, for the Perris Valley Line (PVL) Corridor Project (Project). The proposed Project traverses a section of railroad alignment from the City of Riverside on the north to the City of Perris on the south, in Riverside County, California (see [Plate 1](#), Site Vicinity Map). The Corridor is the San Jacinto Branch Line (SJBL) portion of the PVL plus the proposed connection to the Burlington Northern Santa Fe (BNSF) mainline. The Corridor evaluated in this report does not include BNSF mainline portion however. The Corridor has been divided into seven segments, as shown on [Plate 1](#), from north to south, to simplify preparation and understanding of this report. According to the California Environmental Quality Act (CEQA) draft project description, the proposed new connection to the BNSF mainline and proposed stations at eight locations are referred to from north to south, as the proposed Citrus Connection and proposed Palmyrita Station (both included in Segment 1), proposed University of California Riverside (UCR) Station (Segment 2), proposed Fair Isle Station (Segment 3), proposed Moreno Valley/March Field Station (Segment 4), proposed Ramona Station (Segment 5), proposed Downtown Perris Station (Segment 6), and proposed South Perris Station (Segment 7). For the purposes of this report, the Corridor, proposed connector, and proposed stations are referred to collectively as the Site. Additionally, the Corridor, proposed connector, proposed stations, and off-Site properties located within a 500-foot distance of the Corridor and proposed stations are referred to as the Study Area for this assessment. This report was prepared as part of the overall CEQA study for the Corridor and to provide data for the preparation of a sampling plan as part of the Geotechnical Drilling Program.

1.1 PURPOSE

The purpose of this HMCS is to identify, to the extent feasible pursuant to limitations discussed in this report and the scope of work set forth in Work Order No. 2 provided by STV¹: 1) the potential for hazardous materials from Study Area sources to have impacted the Site; and 2) to identify potential impacts from environmental conditions of concern associated with the Site that could cause risk to human health and/or the environment. The term *environmental conditions of concern* is not intended to include

¹ Dated February 19, 2008

de minimis conditions that generally do not present a threat to human health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies.

This report describes Kleinfelder's assessment methodology and documents our assessment findings, subject to the limitations presented in Section 1.4 of this report.

1.2 DETAILED SCOPE-OF-SERVICES

The following sections describe Kleinfelder's work scope:

- [Section 1, Introduction](#), includes a discussion of the purpose/reason for performing the HMCS, an evaluation of significant assumptions (i.e., property boundaries if not marked in the field), limitations, exceptions, and special terms and conditions (i.e., contractual), and user reliance parameters.
- [Section 2, Setting](#), is a compilation of information concerning the study area, legal description (if provided), current and proposed use of the Study Area, a description of structures and improvements on the Site at the time of Kleinfelder's assessment, and adjoining property use. Physical setting sources (including topography, soil and groundwater conditions) are also presented in this Section.
- [Section 3, Historical Use of the Study Area](#), summarizes the history of the Corridor, proposed stations, and adjoining properties. This history is based on various sources, which include: a review of historical aerial photographs, historical topographic maps, and Sanborn Fire Insurance Maps.
- [Section 4, Site Reconnaissance](#), describes Kleinfelder's observations during the reconnaissance of the Study Area. The methodology and limiting conditions are described in this Section.
- [Section 5, Records Review](#), is a compilation of Kleinfelder's review of several databases available from Federal, State, and local regulatory agencies regarding hazardous substance use, storage, or disposal within the Study Area. Records provided by the RCTC and STV are summarized and copies of relevant documents, such as building department records and results of previous site assessments, are included in the appendices of this report.

- [Section 6, Evaluation](#), is a presentation of identified impacts and their significance, as well as opinions regarding the information in [Sections 2](#) through [5](#). Our conclusions regarding the sites of environmental interest and potential presence of hazardous materials connected with the Site are presented.
- [Section 7, Potential Mitigation Measures](#), is a summary of potential measures to mitigate potential environmental impacts/issues discussed in [Section 6](#).
- [Section 8, References](#), is a summary of some of the resources used to compile this report.

Pertinent documentation regarding the Study Area is included in appendices of this report.

The scope of this HMCS is designed to meet CEQA requirements, was not performed to the American Society for Testing and Materials (ASTM) E1527-05 Standard for Phase I Environmental Site Assessments. An evaluation of business environmental risk associated with the Site was not included in Kleinfelder's scope of work. This report therefore does not incorporate business environmental risk considerations, such as asbestos-containing materials, radon, lead-based paint, lead in drinking water, wetlands, regulatory compliance, cultural and historical resources, industrial hygiene, health and safety, ecological resources, endangered species, indoor air quality, vapor intrusion, and high voltage power lines.

1.3 SIGNIFICANT ASSUMPTIONS

Kleinfelder assumes the accuracy of the subcontracted regulatory agency database report, attached. Kleinfelder also assumes the property owner(s) and/or Client provided all applicable and available environmental records and specialized knowledge regarding the Site. Kleinfelder has not made other significant assumptions during the performance of this HMCS.

1.4 LIMITATIONS AND EXCEPTIONS

A HMCS is non-comprehensive by nature and may not identify all environmental problems, and will not eliminate all risk. This report is a qualitative assessment. Kleinfelder offers a range of investigative and engineering services to suit the needs of our clients, including more quantitative investigations. Although risk can never be

eliminated, more detailed and extensive investigations yield more information, which may help RCTC and STV understand and better manage risks. Since such detailed services involve greater expense, we ask our clients to participate in identifying the level of service, which will provide them with an acceptable level of risk.

Kleinfelder performed this HMCS consistent with the proposed scope subsequently approved by RCTC and STV. No warranty, either expressed or implied, is made. Environmental issues not specifically addressed in this report were beyond the scope of our services and not included in our evaluation.

This report may be used only by the RCTC and STV and only for the purposes stated within a reasonable time from its issuance, *but in no event later than 1 year from the date of the report*. Land or facility use, on- and off-site conditions, regulations, or other factors may change over time, and additional work may be required with the passage of time. Since site activities and regulations beyond our control could change at any time after the completion of this report, our observations, findings, and opinions can be considered valid only as of the date of the Site visit. This report does not provide Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) “Innocent Owner” protections (ASTM E1527-05 Standard, Section 4.6). Any party other than RCTC and STV who wishes to use this report shall notify Kleinfelder of such intended use. Based on the intended use of the report, Kleinfelder may require that additional work be performed and that an updated report be issued. Non-compliance with any of these requirements by RCTC and STV or anyone else will release Kleinfelder from any liability resulting from the use of this report by any unauthorized party, and RCTC and STV agrees to defend, indemnify, and hold harmless Kleinfelder from any claim or liability associated with such unauthorized use or non-compliance.

1.5 SPECIAL TERMS AND CONDITIONS

No special terms and conditions in addition to those discussed previously were agreed to by RCTC and STV or Kleinfelder in Work Order No. 2 provided by STV, dated February 19, 2008.

2.0 SETTING

Presented in this section is a description of the condition of the Study Area at the time of the HMCS. The Site Vicinity Map is shown on [Plate 1](#). [Tables 1](#) through 3 summarize the area description and land use, physical characteristics, and adjoining properties.

2.1 SITE DESCRIPTION/LAND USE

The Site consists of an approximately 22 mile Corridor along an existing railroad line and eight proposed station locations. For purposes of this report, the Corridor has been divided into numbered Segments 1 through 7, descending from north to south. The Study Area for this assessment includes off-Site properties located within a 500-foot distance of the Corridor, the Corridor, proposed connector segment, and proposed stations. [Table 1](#) provides a description of the Corridor segments, proposed stations, and proposed connector segment along with associated land use. Information presented in this section was obtained from review of various maps (such as topographic maps and tax assessor maps), aerial photographs, public records at city and/or county offices, interviews, and information provided by RCTC and STV.

**Table 1
Site Description and Land Use**

Segments	Description/Land Use
Segment 1 – Spring Street to Columbia Avenue	
Corridor	Segment 1 consists of the northern most portion of the Corridor from the proposed Citrus Connection located south of Spring Street, continuing south along the existing railroad tracks to, and including, the proposed Palmyrita Station. Segment 1 terminates at Columbia Avenue. Land use within the vicinity of Segment 1 is predominantly industrial and residential. Land use specific to proposed stations (Citrus Connection and Palmyrita Stations) within Segment 1 is described below.
Proposed Citrus Connection	The proposed Citrus Connection consists of vacant land between Spring Street on the north and just south of Springbook Wash, which traverses in an east-west direction along the southern portion of the proposed Citrus Connection. No structures are currently located on the proposed Citrus Connection property.
Proposed Palmyrita Station	The proposed Palmyrita Station consists of a vacant industrial building surrounded by vacant land that was formerly used for agricultural purposes (orange groves). A single row of orange trees is currently located around the perimeter of the proposed Palmyrita Station property.

**Table 1 (Continued)
Site Description and Land Use**

Segments	Description/Land Use
Segment 2 – Columbia Avenue to Mount Vernon Avenue	
Corridor	Segment 2 consists of that portion of the Corridor along the existing railroad tracks from Columbia Avenue and continuing south, up to and including the proposed UCR Station, terminating at Mount Vernon Avenue. Land use in the vicinity of Segment 2 is predominantly commercial and residential. Land use specific to the proposed UCR Station is described below.
Proposed UCR Station	The proposed UCR Station consists of vacant land with the railroad tracks traversing the approximate center. Neighboring residences to the north of the proposed UCR Station have encroached onto the eastern portion of the property and are using this area for storage purposes, a basketball court, and gardens.
Segment 3 – Mount Vernon Avenue to Box Springs Road (Fair Isle Drive)	
Corridor	Segment 3 consists of that portion of the Corridor along the Existing railroad tracks from Mount Vernon Avenue and continuing east, then south, to Box Springs Road (Fair Isle Drive). Segment 3 includes the proposed Fair Isle Station to the north of Box Springs Road (Fair Isle Drive). Land use within the vicinity of Segment 3 is predominantly residential and vacant land. Land use specific to the proposed Fair Isle Station is described below.
Proposed Fair Isle Station	The proposed Fair Isle Station consists of undeveloped land. Outcrops of boulders and evidence of alluvial deposits were observed at the proposed Fair Isle Station property.
Segment 4 – Box Springs Road (Fair Isle Drive) to Cactus Avenue	
Corridor	Segment 4 consists of that portion of the Corridor along the Existing railroad tracks from Box Springs Road (Fair Isle Drive) and continuing south to Cactus Avenue. Segment 4 consists of the proposed March Field Station between Alessandro Boulevard to the north and Cactus Avenue to the south. Land use in the vicinity of Segment 4 is predominantly commercial and vacant land. Land use specific to the proposed March Field Station is described below.
Proposed Moreno Valley/ March Field Station	The proposed Moreno Valley/March Field Station consists of vacant land.
Segment 5 – Cactus Avenue to Cajalco Road	
Corridor	Segment 5 consists of that portion of the Corridor along the Existing railroad tracks from Cactus Avenue to Cajalco Road. Segment 5 includes the proposed Ramona Station located immediately south of the Cajalco Expressway and west of Interstate 215 (I-215). Land use in the vicinity of Segment 5 is predominantly vacant land with some commercial and industrial development. Land use specific to the proposed Ramona Station is described below.
Proposed Ramona Station	The proposed Ramona Station consists of vacant land.

**Table 1 (Continued)
Site Description and Land Use**

Segments	Description/Land Use
Segment 6 – Cajalco Road to 4th Street (Highway 74)	
Corridor	Segment 6 consists of that portion of the Corridor along the Existing railroad tracks from Cajalco Road to 4 th Street (Highway 74) in downtown Perris. Segment 6 includes the proposed Downtown Perris Station located between 1st Street on the north, and just north of 4 th Street on the south. Land use in the vicinity of Segment 6 consists of vacant land and commercial development. Land use specific to the proposed Downtown Perris Station is described below.
Proposed Downtown Perris Station	The proposed Downtown Perris Station consists of four parcels. The southwestern parcel is occupied by two vacant commercial structures. The remaining parcels consist of vacant land surrounding the railroad tracks.
Segment 7 – 4th Street (Highway 74) to Interstate 215	
Corridor	Segment 7 consists of that portion of the Corridor along the Existing railroad tracks from 4 th Street (Highway 74) and continuing south then east to I-215. Segment 7 includes the proposed South Perris Station located immediately west of I-215 and north of Bonnie Drive. Land use in the vicinity of Segment 7 is a mixed use of residential, commercial, industrial, and vacant land. Land use specific to the proposed South Perris Station is described below.
Proposed South Perris Station	The proposed South Perris Station consists of vacant land.

2.2 PHYSICAL CONDITIONS

The physical conditions of the Corridor by segment are discussed in the following sections.

2.2.1 Segment 1 – Spring Street to Columbia Avenue

Segment 1 of the PVL Corridor study ranges in elevation from approximately 937 feet above mean sea level (msl) to approximately 968 feet above msl. The general topographic relief in the segment vicinity is relatively flat, with a gentle slope toward the west-northwest (Environmental Data Resources [EDR], 2008b). Soils within the immediate vicinity of the segment consist of sandy loam and coarse sandy loam. These soils are considered hydrologic class B soils. Class B soils have moderate infiltration rates, and include moderately well and well-drained soils with moderately coarse textures (EDR, 2008a; Soil Survey Geographic Database [SSURGO]).

No oil and gas fields were identified within the 500-foot search distance of the Corridor (Division of Oil, Gas, and Geothermal Resources [DOGGR], 2007).

Information about regional geology associated with Segment 1 is presented on [Table 2a](#). This information was obtained from published data and maps, interviews with public agencies, or from previous investigations conducted by Kleinfelder in the vicinity of the segment.

**Table 2a
Regional Geology and Hydrogeology – Segment 1**

Physical Parameter	Information/Comments
REGIONAL GEOLOGY (Sources: Preliminary Geologic Map of the Riverside East 7.5' Quadrangle, Riverside County, California, scale 1:24,000, Morton, 2001; Western Municipal Water District [WMWD], 2007; Dibblee, 2003)	Segment 1 is located within the Riverside Basin (WMWD, 2007), which is located in the northern part of the Peninsular Ranges Province within the northern part of the Perris block, between the Elsinore and San Jacinto Fault Zones (Morton, 2001). Regional mapping indicates the surficial sediments underlying Segment 1 are primarily Pleistocene alluvial deposits derived from local terrains of plutonic rocks. Alluvial deposits include tan to light reddish brown sand and minor gravel dissected by stream channels (Dibblee, 2003).
DEPTH TO REGIONAL GROUNDWATER (Source: WMWD Fall 2007 Cooperative Well Measuring Program)	Based on depth to water data available from nearby wells, groundwater beneath Segment 1 is anticipated to exceed 100 feet below ground surface (bgs) (WMWD, 2007). Fluctuations of the groundwater level, localized zones of perched water, and increased soil moisture content should be anticipated during and following the rainy season. Irrigation of landscaped areas on or adjacent to the segment can also cause a fluctuation of local groundwater levels.
DIRECTION OF ANTICIPATED FLOW¹ (Source: EDR, 2008a)	Groundwater flow in the area is reported to be west-northwest.
REGIONAL GROUNDWATER QUALITY PROBLEMS (Sources: EDR, 2008a; City of Riverside Public Utilities, 2007)	Regional groundwater problems were not identified in the EDR report (EDR, 2008a). Water quality parameters along this area meet state regulations (City of Riverside Public Utilities, 2007).
WATER SUPPLY (Source: EDR, 2008a)	The well search revealed no wells within an approximate 0.5-mile distance of the segment. A total of twelve water wells were identified between 0.5-mile and 1.0-mile of Segment 1; however, no public supply wells were mapped by EDR.
FLOOD ZONE DESIGNATION (Sources: EDR, 2008a; Federal Emergency Management Agency [FEMA], 2008)	The segment vicinity is designated as being in a "Zone C" flood zone according to the Flood Insurance Rate Map (FIRM). Zone C is assigned to areas where minimal flooding occurs.

¹ Groundwater flow direction is based on regional information sources. Segment-specific conditions may vary due to a variety of factors including geologic anomalies, utilities, nearby pumping wells (if present), and other developments.

2.2.2 Segment 2 – Columbia Avenue to Mount Vernon Avenue

Segment 2 of the PVL Corridor study ranges in elevation from approximately 950 feet above msl to approximately 1,193 feet above msl. The general topographic relief in the segment vicinity is relatively flat, with a gentle slope toward the west-northwest (EDR, 2008b). Soils within the immediate vicinity of the segment consist of sandy loam and coarse sandy loam. These soils are considered hydrologic class B soils. Class B soils have moderate infiltration rates, and include moderately well and well-drained soils with moderately coarse textures (EDR, 2008a; SSURGO).

No oil and gas fields were identified within the 500-foot search distance of the Corridor (DOGGR, 2007).

Information about regional geology associated with Segment 2 is presented on [Table 2b](#). This information was obtained from published data and maps, interviews with public agencies, and/or from previous investigations conducted by Kleinfelder in the vicinity of the segment.

Table 2b
Regional Geology and Hydrogeology – Segment 2

Physical Parameter	Information/Comments
REGIONAL GEOLOGY (Sources: Preliminary Geologic Map of the Riverside East 7.5' Quadrangle, Riverside County, California, scale 1:24,000, Morton, 2001; WMWD, 2007; Dibblee, 2003)	Segment 2 is located within the Riverside Basin (WMWD, 2007), which is located in the northern part of the Peninsular Ranges Province within the northern part of the Perris block, between the Elsinore and San Jacinto Fault Zones (Morton, 2001). Regional mapping indicates the surficial sediments underlying Segment 2 are primarily Pleistocene alluvial deposits derived from local terrains of plutonic rocks. Alluvial deposits include tan to light reddish brown sand and minor gravel dissected by stream channels (Dibblee, 2003). To the east of Segment 2 are the Box Springs Mountains, which are composed of biotite granodiorite and tonalite (Dibblee, 2003; Morton, 2001).
DEPTH TO REGIONAL GROUNDWATER (Source: WMWD, 2007)	Depth to water data was available from four nearby wells located within a 0.5- to 1-mile radius of Segment 2. Based on groundwater data from three of the four wells, depth to groundwater beneath Segment 2 is anticipated to exceed 100 feet bgs. However, depth to groundwater in an agricultural well nearby indicates a depth to groundwater of 63.5 feet bgs (WMWD, 2007). Fluctuations of the groundwater level, localized zones of perched water, and increased soil moisture content should be anticipated during and following the rainy season. Irrigation of landscaped areas on or adjacent to the segment can also cause a fluctuation of local groundwater levels.
DIRECTION OF ANTICIPATED FLOW¹ (Source: EDR, 2008a)	Groundwater flow in the area is reported to be west-northwest.
REGIONAL GROUNDWATER QUALITY PROBLEMS (Sources: EDR, 2008a; Riverside Public Utilities, 2007)	Regional groundwater problems were not identified in the EDR report (EDR, 2008a). Water quality parameters along this area meet state regulations (City of Riverside Public Utilities, 2007).
WATER SUPPLY (Source: EDR, 2008a)	The well search revealed no wells within an approximate 0.5-mile radius of the segment. A total of seven water wells were identified between 0.5-mile and 1.0-mile of Segment 2; however, no public supply wells were mapped by EDR.
FLOOD ZONE DESIGNATION (Sources: EDR, 2008a; FEMA, 2008)	The segment vicinity is designated as being in a "Zone C" flood zone according to the FIRM. Zone C is assigned to areas where minimal flooding occurs.

¹ Groundwater flow direction is based on regional information sources. Segment-specific conditions may vary due to a variety of factors including geologic anomalies, utilities, nearby pumping wells (if present), and other developments.

2.2.3 Segment 3 – Mount Vernon Avenue to Box Springs Road (Fair Isle Drive)

Segment 3 of the PVL Corridor study ranges in elevation from approximately 1,193 feet above msl to approximately 1,452 feet above msl. The general topographic relief in the segment vicinity slopes toward the west-northwest (United States Geological Survey [USGS], 1980). Soils within the immediate vicinity of the segment consist of sandy loam (D.E. Beaudette and A.T. O'Geen, 2008).

No oil and gas fields were identified within the 500-foot search distance of the Corridor (DOGGR, 2007).

Information about regional geology associated with Segment 3 is presented on [Table 2c](#). This information was obtained from published data and maps, interviews with public agencies, and/or from previous investigations conducted by Kleinfelder in the vicinity of the segment.

Table 2c
Regional Geology and Hydrogeology – Segment 3

Physical Parameter	Information/Comments
REGIONAL GEOLOGY (Sources: Preliminary Geologic Map of the Riverside East 7.5' Quadrangle, Riverside County, California, scale 1:24,000, Morton, 2001; WMWD, 2007; Dibblee 2003)	Segment 3 is located within the Riverside Basin (WMWD, 2007), which is located in the northern part of the Peninsular Ranges Province within the northern part of the Perris block, between the Elsinore and San Jacinto Fault Zones (Morton, 2001). Regional mapping indicates surficial sediments underlying Segment 3 are primarily Pleistocene alluvial deposits derived from local terrains of plutonic rocks. Alluvial deposits include tan to light reddish brown sand and minor gravel dissected by stream channels (Dibblee, 2003). Biotite hornblende tonalite is also prevalent in the immediate segment vicinity along the south side of the Box Springs Mountains (Morton, 2001).
DEPTH TO REGIONAL GROUNDWATER (Source: WMWD, 2007)	Depth to water data was available from three nearby wells (WMWD, 2007). Based on data from these three wells, depth to groundwater is anticipated to be greater than 100 feet bgs; however, groundwater depth was measured between 8.62 and 24.85 feet bgs at 20775 Box Springs Road. Fluctuations of the groundwater level, localized zones of perched water, and increased soil moisture content should be anticipated during and following the rainy season. Irrigation of landscaped areas on or adjacent to the segment can also cause a fluctuation of local groundwater levels.
DIRECTION OF ANTICIPATED FLOW¹ (Source: Eastern Municipal Water District [EMWD], 2008)	Based on groundwater level contours, groundwater flow in the immediate vicinity of the segment is reported to be to the southeast (EMWD, 2008).
REGIONAL GROUNDWATER QUALITY PROBLEMS (Sources: EDR, 2008a; EMWD, 2007)	Regional groundwater problems were not identified in the EDR report (EDR, 2008a). According to the water quality report, water quality parameters met state regulations (EMWD, 2007).
WATER SUPPLY (Source: GeoTracker, 2008)	The well search revealed no wells within an approximate 0.5-mile radius of the segment.
FLOOD ZONE DESIGNATION (Source: EDR, 2008a)	No flood zones are located within a 0.5-mile of the segment.

¹ Groundwater flow direction is based on regional information sources. Segment-specific conditions may vary due to a variety of factors including geologic anomalies, utilities, nearby pumping wells (if present), and other developments.

2.2.4 Segment 4 – Box Springs Road (Fair Isle Drive) to Cactus Avenue

Segment 4 of the PVL Corridor study ranges in elevation from approximately 1,452 feet above msl to approximately 1,537 feet above msl. The general topographic relief in the segment vicinity slopes toward the south-southeast (USGS, 1980). Soils within the immediate vicinity of the segment consist of sandy loam (D.E. Beaudette and A.T. O'Geen, 2008).

No oil and gas fields were identified within the 500-foot search distance of the segment (DOGGR, 2007).

Information about regional geology associated with Segment 4 is presented on [Table 2d](#). This information was obtained from published data and maps, interviews with public agencies, and/or from previous investigations conducted by Kleinfelder in the vicinity of the segment.

**Table 2d
Regional Geology and Hydrogeology – Segment 4**

Physical Parameter	Information/Comments
REGIONAL GEOLOGY (Sources: Preliminary Geologic Map of the Riverside East 7.5' Quadrangle, Riverside County, California, scale 1:24,000, Morton, 2001; WMWD, 2007; Dibblee, 2003)	Segment 4 is located within the Riverside Basin (WMWD, 2007), which is located in the northern part of the Peninsular Ranges Province within the northern part of the Perris block, between the Elsinore and San Jacinto Fault Zones (Morton, 2001). Regional mapping indicates the surficial sediments underlying the segment are primarily Pleistocene alluvial deposits derived from local terrains of plutonic rocks. Alluvial deposits include tan to light reddish brown sand and minor gravel dissected by stream channels (Dibblee, 2003). Biotite hornblende tonalite is also prevalent in the immediate segment vicinity along the south side of the Box Springs Mountains (Morton, 2001)
DEPTH TO REGIONAL GROUNDWATER (Source: WMWD, 2007)	Based on available depth to groundwater data, depth to groundwater beneath the segment is anticipated to exceed 100 feet bgs (WMWD, 2007); however, groundwater depths were measured between 19.17 and 23.64 feet bgs at 1596 Nandina Avenue. Fluctuations of the groundwater level, localized zones of perched water, and increased soil moisture content should be anticipated during and following the rainy season. Irrigation of landscaped areas on or adjacent to the segment can also cause a fluctuation of local groundwater levels.
DIRECTION OF ANTICIPATED FLOW¹ (Source: EMWD, 2008)	Based on groundwater level contours, groundwater flow in the immediate vicinity of the segment is anticipated to be to the southeast (EMWD, 2008).
REGIONAL GROUNDWATER QUALITY PROBLEMS (Sources: EDR, 2008a; EMWD, 2007)	Regional groundwater problems were not identified in the EDR report (EDR, 2008a). According to the water quality report, water quality parameters met state regulations (EMWD, 2007).
WATER SUPPLY (Source: GeoTracker, 2008)	The well search revealed no wells within an approximate 0.5-mile radius of the segment.
FLOOD ZONE DESIGNATION (Source: EDR, 2008a)	No flood zones are located within a 0.5-mile of the segment.

¹ Groundwater flow direction is based on regional information sources. Segment-specific conditions may vary due to a variety of factors including geologic anomalies, utilities, nearby pumping wells (if present), and other developments.

2.2.5 Segment 5 – Cactus Avenue to Cajalco Road

Segment 5 of the PVL Corridor study ranges in elevation from approximately 1,498 feet above msl to approximately 1,509 feet above msl. The general topographic relief in the segment vicinity is relatively flat, with a gentle slope toward the east-northeast (EDR, 2008b). Soils within the immediate vicinity of the segment consist of sandy loam and coarse sandy loam. These soils are considered hydrologic class B soils. Class B soils have moderate infiltration rates, and include moderately well and well-drained soils with moderately coarse textures (EDR, 2008a, SSURGO).

No oil and gas fields were identified within the 500-foot search distance of the Corridor (DOGGR, 2007).

Information about regional geology associated with Segment 5 is presented on [Table 2e](#). This information was obtained from published data and maps, interviews with public agencies, and/or from previous investigations conducted by Kleinfelder in the vicinity of the segment.

Table 2e
Regional Geology and Hydrogeology – Segment 5

Physical Parameter	Information/Comments
REGIONAL GEOLOGY (Sources: Preliminary Geologic Map of the Steele Peak 7.5' Quadrangle, Riverside County, California, scale 1:24,000, Morton, 2002; Dibblee, 2003;)	Segment 5 is located in the northern part of the Peninsular Ranges Province within the central part of the Perris block, between the Elsinore and San Jacinto Fault Zones. Regional mapping indicates the surficial sediments underlying Segment 5 are primarily Holocene alluvial deposits (unconsolidated and undissected) characterized by alluvial sand and clay of valley areas, covered with gray clay soil. The segment is underlain by Cretaceous and older basement rocks. Cretaceous plutonic rocks are part of the composite Peninsular Ranges batholith. Biotite-hornblende tonalite of the relatively large Val Verde pluton dominates the northeastern half of the Steele Peak quadrangle. Approximate location has a potassium-argon age of 102 million years (Dibblee, 2003; Morton, 2002).
DEPTH TO REGIONAL GROUNDWATER (Sources: WMWD, 2007; Metropolitan Water District [MWD], 2007)	Based on available depth to groundwater, depth to groundwater beneath the segment is anticipated to exceed 50 feet bgs (WMWD, 2007; MWD, 2007). Fluctuations of the groundwater level, localized zones of perched water, and increased soil moisture content should be anticipated during and following the rainy season. Irrigation of landscaped areas on or adjacent to the Segment can also cause a fluctuation of local groundwater levels.

Table 2e (Continued)
Regional Geology and Hydrogeology – Segment 5

Physical Parameter	Information/Comments
DIRECTION OF ANTICIPATED FLOW ¹ (Sources: EDR, 2008a; MWD, 2007; Earth Tech, 2003)	Groundwater flow in the area is anticipated to be variable. Based on topography, groundwater flow direction is anticipated to be to the east-northeast (EDR, 2008b). Additionally, groundwater flow direction mapped for the West San Jacinto Basins for spring 2008 depict groundwater flow primarily to the southeast in the vicinity of Segment 5 (MWD, 2007). Information obtained regarding March Air Reserve Base (MARB) describes complex groundwater flow directions at the Main Base. Based on depth-to-groundwater measurements only, the predominant groundwater flow direction over most of the Main Base is generally toward the southeast. Mounding of shallow groundwater in this area has occurred due to significant recharge from the unlined Heacock Storm Drain along the eastern base boundary. A groundwater divide is situated in the MARB Site 2/27 area (near the north end of the airfield). To the north of MARB Site 2/27 groundwater flows to the northwest, while flow is to the southeast south of MARB Site 2/27 (Earth Tech, 2003).
REGIONAL GROUNDWATER QUALITY PROBLEMS (Sources: EDR, 2008a; Earth Tech, 2003)	Regional groundwater problems were not identified in the EDR report (EDR, 2008a). MARB has several contaminated sites from fuels, oils, solvents, household wastes, construction rubble, and other contaminants. Operable Unit 1 has the most widespread contaminate plume thought to originate from solvent spills, with the most persistent contaminate being trichloroethene (TCE). However, the groundwater direction has spread contamination to the south and east well outside of the Study Area. Other sites have been remediated or are in active remediation (Earth Tech, 2003).
WATER SUPPLY (Sources: GeoTracker, 2008; EDR, 2008a)	The well search revealed no wells within an approximate 0.5-mile radius of Segment 5. Two water wells were mapped by EDR as being greater than 0.5-mile from the segment. No public supply wells were identified to be within a 1-mile radius of the segment on the EDR map.
FLOOD ZONE DESIGNATION (Source: EDR, 2008a; FEMA, 2008)	No flood zones are located within a 0.5-mile of the Segment (EDR, 2008a). (Note: Mapping of FEMA flood zones is not presented within the boundaries of MARB)

¹ Groundwater flow direction is based on regional information sources. Segment-specific conditions may vary due to a variety of factors including geologic anomalies, utilities, nearby pumping wells (if present), and other developments.

2.2.6 Segment 6 – Cajalco Road to 4th Street (Highway 74)

Segment 6 of the Perris Valley Line Corridor study ranges in elevation from approximately 1,509 feet above msl to approximately 1,546 feet msl. The general topographic relief in the segment vicinity is relatively flat, with a gentle slope toward the east-northeast (EDR, 2008b). Soils within the immediate vicinity of the segment consist of sandy loam and coarse sandy loam. These soils are considered hydrologic class B soils. Class B soils have moderate infiltration rates, and include moderately well and well-drained soils with moderately coarse textures (EDR, 2008a; SSURGO).

No oil and gas fields were identified within the 500-foot search distance of the Corridor (DOGGR, 2007).

Information about regional geology associated with Segment 6 is presented on [Table 2f](#). This information was obtained from published data and maps, interviews with public agencies, and/or from previous investigations conducted by Kleinfelder in the vicinity of the segment.

Table 2f
Regional Geology and Hydrogeology – Segment 6

Physical Parameter	Information/Comments
REGIONAL GEOLOGY (Sources: Preliminary Geologic Map of the Steele Peak 7.5' Quadrangle, Riverside County, California, scale 1:24,000, Morton, 2002; Dibblee, 2003)	Segment 6 is located in the northern part of the Peninsular Ranges Province within the central part of the Perris block, between the Elsinore and San Jacinto Fault Zones. Regional mapping indicates the surficial sediments underlying the segment are primarily Holocene alluvial deposits (unconsolidated and undissected) characterized by alluvial sand and clay of valley areas, covered with gray clay soil. The segment is underlain by Cretaceous and older basement rocks. Cretaceous plutonic rocks are part of the composite Peninsular Ranges batholith. Biotite-hornblende tonalite of the relatively large Val Verde pluton dominates the northeastern half of the Steele Peak quadrangle. Approximate location has a potassium-argon age of 102 million years (Dibblee, 2003; Morton, 2002).
DEPTH TO REGIONAL GROUNDWATER (Sources: WMWD, 2007; MWD, 2007)	The depth to groundwater in nearby wells indicate that groundwater beneath the segment is likely greater than 100 feet bgs north of Nuevo Road and approximately 60 feet bgs at the southern portion of Segment 6. Fluctuations of the groundwater level, localized zones of perched water, and increased soil moisture content should be anticipated during and following the rainy season. Irrigation of landscaped areas on or adjacent to the segment can also cause a fluctuation of local groundwater levels.
DIRECTION OF ANTICIPATED FLOW¹ (Source: MWD, 2007)	Based on contours from spring 2005, groundwater flows to the southeast north of Nuevo Road and to the northeast south of Nuevo Road.
REGIONAL GROUNDWATER QUALITY PROBLEMS (Source: EDR, 2008a; EMWD, 2008)	Regional groundwater problems were not identified in the EDR report (EDR, 2008a). Based on information obtained from the EMWD website, water quality along the Corridor meets state and federal Maximum Contaminant Levels (Personal conversation with Mr. John Daverin of EMWD).
WATER SUPPLY (Source: GeoTracker, 2008; EDR, 2008a)	The well search revealed no wells within an approximate 0.5-mile radius of the segment. Two water wells were mapped by EDR as being greater than 0.5 mile from the segment. No public supply wells were identified to be within a 1-mile radius of the segment on the EDR map.
FLOOD ZONE DESIGNATION (Source: EDR, 2008a; FEMA, 2008)	Most of Segment 6 is outside of the 500-year flood zone; however, the southern extent of the segment is designated as being within the 100-year flood zone. The flood zone is designated as "Zone AE" flood hazard zone and is defined as an area of 100-year floods where the base flood elevation has been determined (FEMA, 2008).

¹ Groundwater flow direction is based on regional information sources. Segment-specific conditions may vary due to a variety of factors including geologic anomalies, utilities, nearby pumping wells (if present), and other developments.

2.2.7 Segment 7 – 4th Street (Highway 74) to Interstate 215

Segment 7 of the PVL Corridor study ranges in elevation from approximately 1,414 feet above msl to approximately 1,452 feet above msl. The general topographic relief in the segment vicinity is relatively flat, with a gentle slope toward the east-southeast (EDR, 2008b). Soils within the immediate vicinity of the segment consist of fine sandy loam, very fine sandy loam, and silty clay. These soils are considered hydrologic class C and D soils, respectively. Class C soils have slow infiltration rates and include layers, which impede the downward movement of water. Class D soils have very slow infiltration rates, are characterized by clayey soils, and have a high water table or are shallow to an impervious layer (EDR, 2008a).

No oil and gas fields were identified within the 500-foot search distance of the Corridor (DOGGR, 2007).

Information about regional geology associated with Segment 7 is presented on [Table 2g](#). This information was obtained from published data and maps, interviews with public agencies, and/or from previous investigations conducted by Kleinfelder in the vicinity of the segment.

Table 2g
Regional Geology and Hydrogeology – Segment 7

Physical Parameter	Information/Comments
REGIONAL GEOLOGY (Sources: Preliminary Geologic Map of the Perris Quadrangle, Riverside County, California, scale 1:24,000, Morton, 2003; Dibblee, 2003)	Segment 7 is located within the Perris Valley Basin. The Perris Valley Basin resides in the central portion of the Perris Block, within the northern part of the Peninsular Ranges geomorphic province of California. The Peninsular Ranges are a northwest-southeast oriented complex of mountain ranges and valleys formed by sub-unit blocks that are separated by similarly trending strike-slip faults. Regional mapping indicates the surficial sediments underlying the segment are primarily Holocene alluvial fan deposits characterized by alluvial sand and clay of valley areas (Dibblee, 2003; Morton, 2003).
DEPTH TO REGIONAL GROUNDWATER (Source: WMWD, 2007)	The depth to groundwater in nearby wells indicates that groundwater beneath the segment is likely between 55 and 65 feet bgs. Fluctuations of the groundwater level, localized zones of perched water, and increased soil moisture content should be anticipated during and following the rainy season. Irrigation of landscaped areas on or adjacent to the segment can also cause a fluctuation of local groundwater levels.
DIRECTION OF ANTICIPATED FLOW¹ (Source: MWD, 2007)	The estimated direction of groundwater flow is to the west-northwest, based on spring 2005 water level contours for the west San Jacinto Basins (MWD, 2007).
REGIONAL GROUNDWATER QUALITY PROBLEMS (Sources: EDR, 2008a, EMWD, 2007)	Regional groundwater quality problems and regional impairments to water quality were not revealed during Kleinfelder's assessment (EDR, 2008a). The segment is located within the EMWD service area. A copy of the Water Quality Report was obtained from the EMWD internet site. In summary, water quality meets federal and state drinking water standards (EMWD, 2007).
WATER SUPPLY (Source: EDR, 2008a)	Water is supplied by the EMWD. The well search revealed no wells within an approximate 0.5-mile radius of the segment. One water well was mapped by EDR as being greater than 0.5-mile from the segment. No public supply wells were identified to be within a 1-mile radius of the segment on the EDR map.
FLOOD ZONE DESIGNATION (Sources: EDR, 2008a; FEMA, 2008)	According to the EDR regulatory agency database search report, the segment is located within the 100-year flood zone. The segment is referenced as being located within a "Zone AE" flood hazard zone as designated by FEMA (FEMA, 2008). Zone AE is defined as an area of 100-year floods where the base flood elevation has been determined (FEMA, 2008).

¹ Groundwater flow direction is based on regional information sources. Segment-specific conditions may vary due to a variety of factors including geologic anomalies, utilities, nearby pumping wells (if present), and other developments.

2.3 ADJOINING AREA LAND USE

Kleinfelder performed a brief windshield survey of the properties immediately adjoining the Corridor, proposed connector, and proposed stations between April 14, 2008 and April 18, 2008. A summary of the surrounding properties is presented in [Table 3](#).

**Table 3
Adjoining Land Use**

Segment	Land Use Description
Segment 1	<p>Vacant land adjoins Segment 1 to the north, followed by Villa Street and a tractor trailer storage yard.</p> <p>Segment 1 is bound by single-family residences to the east from Spring Street to Citrus Street. Industrial and commercial facilities (i.e., mobile home fabricator, West Coast Wire and Steel, and Sabert) and vacant land bound Segment 1 to the east, south of Citrus Street to Columbia Avenue. Railroad tracks are located immediately east of Segment 1 between Palmyrita and Columbia Avenues, followed by a commercial facility (Sabert) and vacant land.</p> <p>A main railroad line (mainline) adjoins Segment 1 to the west, beyond which are industrial/commercial buildings (i.e. Apprenticeship Training Center, and vacant land from Spring Street to Citrus Street. Hunter Business Park, commercial facilities, and an orange grove bound Segment 1 to the west from Citrus Street south to Columbia Avenue.</p>
Segment 2	<p>Segment 2 is bound to the east by a drainage basin and vacant land to the east from Columbia Avenue and south to approximately Spruce Street. As the segment bends from a north-south into an east-west alignment, residences primarily adjoin Segment 2 to the east-northeast from Spruce Street to Mount Vernon Avenue.</p> <p>Segment 2 is bound to the west by vacant land and industrial buildings from Columbia Avenue south to Spruce Street. Residences bound Segment 2 to the west from Spruce Street to Mount Vernon Avenue, with the exception of an Econo Wash and Laundry facility, Complete Auto Service facility, and UCR located from approximately Blaine Street south to Valencia Drive.</p>
Segment 3	<p>As the alignment turns to a more north-south direction, vacant land and land used for residential purposes bound Segment 3 to the east and west. A stream parallels Segment 3 to the west near the southern end.</p>
Segment 4	<p>Segment 4 is bound to the east by vacant land until it crosses beneath I-215. Thereafter, a drainage basin, vacant land, and commercial/industrial buildings bound Segment 4 to the east, south to approximately Eucalyptus Avenue. I-215 bounds Segment 4 to the east from Eucalyptus Avenue, south to approximately Alessandro Boulevard. Vacant land is situated east of Segment 4 followed by I-215 from Alessandro Boulevard to Cactus Avenue.</p> <p>Vacant land lies immediately west of the northern portion of Segment 4 to Box Springs Road, followed by the I-215, commercial/industrial facilities along Sycamore Canyon Boulevard, and the Raceway Autoplex. The Raceway Autoplex and vacant land bounds that portion of the Segment 4 immediately south of the I-215, followed by commercial/industrial buildings to approximately Alessandro Boulevard. Vacant land bounds Segment 4 to the west, south of Alessandro Boulevard to Cactus Avenue.</p>

**Table 3
Adjoining Land Use**

Segment	Land Use Description
Segment 5	<p>Segment 5 is bound by vacant land from Cactus Avenue south to approximately Van Buren Boulevard to the west and east. Residential areas are situated further west of the adjoining vacant land, and the I-215 followed by primarily vacant land is situated further east of the adjoining vacant land. Approximately five silos of unknown content were observed in the vicinity of the business Cass Construction. A cemetery, vacant land, and a sewer plant adjoin Segment 5 to the west south of Van Buren Boulevard to Oleander Avenue. A former auction area, vacant land, industrial facilities, and a detention basin adjoin Segment 5 to the west, south of Oleander Avenue south to Cajalco Road. A gasoline station and fast food restaurant are located west of Segment 5 and south of Cajalco Expressway adjoining the proposed Ramona Station to the west.</p> <p>Vacant land is situated immediately east of Segment 5 and south of Van Buren Boulevard, followed by I-215 and the March Field Air Museum and MARB airfield. Vacant land is located east of I-215 south to approximately Nandina Avenue. From Nandina Avenue and south to approximately Cajalco Road, commercial and industrial facilities, and vacant land are located to the east of I-215.</p>
Segment 6	<p>Segment 6 is bound to the east by I-215 and vacant land from Cajalco Road south to approximately Nuevo Road. South of Nuevo Road (to the east of Segment 6) is a commercial/industrial facility, vacant land then residences to approximately the I-215, 'D' Street off ramp. Commercial facilities generally bound the remaining portion of Segment 6 to the south.</p> <p>Industrial/commercial facilities (i.e., California Truss Company, Inc., lumber company, McNally Enterprises Feed Division, JM Eagle, Cal Val, batch plant, McKinson Brick outlet, Salvation Army, rehabilitation center, office buildings) and vacant land bound Segment 6 to the west from Cactus Avenue to Harvell. South of Harvell is 'A' Street, an EMWD Pumping Plant, school buildings, offices, vacant land, and a school field to approximately the I-215 'D' Street off-ramp. The remaining area west of Segment 6 consists primarily of residences with some commercial facilities to approximately Highway 74.</p>
Segment 7	<p>Segment 7 is bound to the east by vacant land and commercial facilities south to 'D' Street, and to the west predominantly by vacant land, 'C' Street and residences. The Corridor shifts in an east-west direction at approximately 'D' Street. This portion of Segment 7 is then bound to the north by commercial facilities, followed by residences to Perris Boulevard. Vacant land bounds Segment 7 to the south, with residences beyond to Goetz Road.</p> <p>Vacant land bounds Segment 7 to the north with industrial facilities near Johnson Avenue and Ellis Avenue. Vacant land adjoins the remaining northern areas of Segment 7 east to I-215 where it intersects Highway 74. Case Road followed by vacant land and the Perris Valley Airport, bounds Segment 7 to the south from Goetz Road to Murrieta Road. Approaching I-215 a detention basin and the Perris Valley Water Reclamation Facility reside to the south.</p> <p>Approximately twenty-six (26) 55-gallon drums were observed on an adjoining vacant property to the east of Segment 7 (near 'D' Street), located immediately north of 1st Street in the downtown Perris area. The drums appeared to be associated with remediation that has taken place at this location. In addition, two 55-gallon drums were observed on this property, immediately adjoining to the Corridor. The drums were labeled "SBC Environmental," and appeared to be associated with remediation at this property. The contents of the drums were not listed. No leaking or staining was observed on or beneath the drums.</p>

3.0 HISTORICAL USE OF THE CORRIDOR AND ADJOINING PROPERTIES

The history of the Corridor, proposed connector, and proposed stations was researched to identify obvious uses. Historical land use was researched to the first developed use, or back to 1940, whichever was earlier or readily available.

3.1 AERIAL PHOTOGRAPHS

A review of historical aerial photography may suggest past activities at a site that may not be documented by other means, or observed during a site visit. The effectiveness of this technique depends on the scale and quality of the photographs and the available coverage. Aerial photographs were obtained from several historical photograph collections through EDR (EDR, 2008c). Aerial photographs covering 60 years were available during the timeframe that this report was being prepared. A tabulation of the aerial photographs reviewed for the Corridor is presented in [Table 4](#). Copies of the reviewed aerial photographs are included in [Appendix A](#).

Table 4
Historical Aerial Photographs Reviewed

Date	Approximate Scale	Type	Source	Quality
1931	1" = 333"	Black and White Monoscopic	Fairchild	Good
1931*	1" = 1000'	Black and White Monoscopic	Fairchild	Good
1938	1" = 555'	Black and White Monoscopic	Laval	Good
1938	1" = 1000'	Black and White Monoscopic	Laval	Good
1953	1" = 555'	Black and White Monoscopic	Pacific Air	Good
1953	1" = 1000"	Black and White Monoscopic	Pacific Air	Good
1963	1" = 333'	Black and White Monoscopic	Mark Hurd	Good
1967	1" = 1000'	Black and White Monoscopic	Western	Good
1977	1" = 666'	Black and White Monoscopic	Teledyne	Good
1977**	1" = 1000'	Black and White Monoscopic	Teledyne	Good
1980	1" = 1000	Black and White Monoscopic	AMI	Good
1989	1" = 666'	Black and White Monoscopic	USGS	Good
1989	1" = 1000'	Black and White Monoscopic	USGS	Good
1994	1" = 666'	Black and White Monoscopic	USGS	Good
1994	1" = 1000'	Black and White Monoscopic	USGS	Good
2002	1" = 666'	Black and White Monoscopic	USGS	Good
2002	1" = 1000'	Black and White Monoscopic	USGS	Good

Notes: Aerial photographs only provide information on indications of land use and no conclusions regarding the release of hazardous substances can be drawn from the review of photographs alone.

* North on photograph is incorrectly defined; the arrow points to the northwest, rather than north.

** Scale is defined as 1"=1000' on photograph, but appears to be 1"=666'.

The Site boundaries were approximated during the early years because physical features were not always readily apparent.

3.1.1 Segment 1 – Spring Street to Columbia Avenue

- **Corridor** – With the exception of railroad tracks, no structures were apparent within Segment 1 between Spring Street on the north and Columbia Avenue on the south, in the photographs reviewed from 1931 through 2002.
- **Proposed Citrus Connection** – The proposed Citrus Connection appeared to be used for agriculture (groves) in the 1931 through 1963 aerial photographs, and appeared as vacant land in the 1977 through 2002 aerial photographs. A creek, known as “Springbook Wash,” was apparent at the southern portion of the proposed Citrus Connection in each of the aerial photographs and traverses the parcel in an east-west direction. In the 2002 aerial photograph, unimproved roads were apparent at the northern portion of the parcel.
- **Proposed Palmyrita Station** – Although difficult to see due to the small scale, a residential-size structure appeared to have been located at the southwestern corner of the proposed Palmyrita Station in the 1938 and 1953 photographs. The northern half of the existing structure and office area adjoining it to the north was apparent on the 1967 and 1977 aerial photographs. Due to the small scale of the aerial photograph, it is not clear whether a cooling tower currently present on the parcel is shown in these photographs. The remaining areas of the proposed Palmyrita Station were used for agriculture (groves). In the 1989, 1994 and 2002 aerial photographs, the southern half of the existing building on the proposed Palmyrita Station parcel was apparent with the parking lot evident east of the building. The existing cooling tower was apparent. The existing parking lot was apparent in these photographs. However, due to the small scale, it is unclear whether an existing fenced area at the southeastern corner of the parking lot is present. The remaining areas of the proposed Palmyrita Station parcel appeared to be used for agriculture (groves).
- **Surrounding Area (1931, 1938, and 1953)** – A railroad is apparent immediately west of the proposed Citrus Connection . Land bordering the southern perimeter of the proposed Citrus Connection parcel and south of the creek appears agricultural with a small structure in the southwest corner. Vacant land was apparent

immediately east of the proposed Citrus Connection parcel, beyond the railroad tracks, with residential-size structures and some agricultural areas located farther to the east, northeast, and southeast. Vacant land or land used for agricultural purposes appeared to the south, north, and west of the proposed Citrus Connection parcel. The immediate vicinity along the Corridor in Segment 1 and in the vicinity of the proposed Palmyrita Station appears agricultural.

- **Surrounding Area (1963)** – Increased development was apparent in the immediate vicinity of Segment 1. Residential development was apparent east of the proposed Citrus Connection parcel, beyond the railroad tracks. A commercial-size structure was apparent west of the proposed Citrus Connection parcel, beyond the railroad tracks, at the present day 1180 Spring Street location. Increased commercial and residential development appeared northwest of the proposed Citrus Connection . Land used for agriculture (groves) was apparent adjoining the proposed Citrus Connection to the north and south, and along the Corridor in Segment 1 from Citrus to Palmyrita Avenue. A commercial structure was apparent at the northeast corner of Palmyrita Avenue and the Corridor. Agricultural land was apparent to the east, south and west of the proposed Palmyrita Station and a commercial structure was apparent to the southwest of the proposed Palmyrita Station.
- **Surrounding Area (1977)** – The vicinity appeared similar to that apparent on the 1963 aerial photograph. However, increased development was apparent to the east of Segment 1 from Spring Street to Palmyrita Avenue.
- **Surrounding Area (1989, 1994, and 2002)** – The vicinity appeared similar to that apparent on the 1977 aerial photograph. However, increased development was apparent to the west of the proposed Palmyrita Station parcel in 1989 and 1994, and to the east in 2002.

Based on a review of historical aerial photographs, the agricultural use of the proposed Citrus Connection parcel from at least 1931 through at least 1963, the proposed Palmyrita Station from at least 1931 through 2002, and along Segment 1 from at least 1931 through 2002, pose potential environmental concerns to the Site. No other environmental concerns were apparent on the aerial photographs reviewed.

3.1.2 Segment 2 – Columbia Avenue to Mount Vernon Avenue

- **Corridor** – With the exception of the railroad tracks, no structures were apparent within Segment 2 between Columbia Avenue on the north, and Mount Vernon Avenue on the south, in the aerial photographs reviewed from 1931 through 2002.
- **Proposed UCR Station** – No structures were apparent on the proposed UCR Station parcel in the photographs reviewed from 1931 through 2002. However, evidence of encroachment onto the northern portion of the proposed UCR Station from the adjoining residences to the north was apparent in the 1977, 1989, and 2002 aerial photographs.
- **Surrounding Area (1931, 1938, and 1953)** – Vacant and agricultural land was apparent in the immediate vicinity of Segment 2 in the 1931, 1938 and 1953 aerial photographs. The proposed UCR Station was bound by agricultural land (groves) to the north and south. Scattered structures were apparent in 1953 to the west of the Segment 2 alignment.
- **Surrounding Area (1967)** – Increased development was apparent at the southwest corner of the alignment and Columbia Avenue. An aboveground water tank was apparent at a higher elevation on the hills to the east of the northern portion of Segment 2. Residences appear to adjoin the proposed UCR Station to the north. Scattered residences and UCR were apparent south of Segment 2. A commercial structure was apparent at the northwest corner of Linden Street and the Corridor.
- **Surrounding Area (1977, 1989, 1994, and 2002)** – The immediate area along the Segment 2 alignment was similar to that apparent on the 1967 aerial photograph. Increased residential development was evident to the north and south. The UCR campus (south) appeared to have expanded.

Based on a review of historical aerial photographs, no environmental concerns were apparent on the aerial photographs reviewed.

3.1.3 Segment 3 – Mount Vernon Avenue to Box Springs Road (Fair Isle Drive)

- **Corridor** – With the exception of the railroad tracks, no structures were apparent within Segment 3 between Mount Vernon Avenue to the north and Box Springs

Road (Fair Isle Drive) to the south in the aerial photographs reviewed from 1931 through 2002.

- **Proposed Fair Isle Station** – The proposed Fair Isle Station appeared as vacant land in the 1931 through 2002 aerial photographs.
- **Surrounding Area (1931, 1938 and 1953)** – The immediate vicinity along Segment 3 was vacant land in the 1931, 1938 and 1953 aerial photographs. Scattered residences were apparent to the west of the Corridor in 1953.
- **Surrounding Area (1967, 1977, 1989, and 2002)** – Residences were apparent to the north and south of Segment 3 at its northern end, and along the Segment 3 alignment to the west. Vacant land was apparent to the east of Segment 3 and along portions to the west. Scattered residences were apparent in the hills further west of Segment 3 in the 1989 and 2002 aerial photographs.

Based on a review of historical aerial photographs, no environmental concerns were apparent on the aerial photographs reviewed.

3.1.4 Segment 4 – Box Springs Road (Fair Isle Drive) to Cactus Avenue

- **Corridor** – The existing railroad tracks between Alessandro Boulevard and Cactus Avenue were not apparent in the 1938 through 1989 aerial photographs from approximately Eastridge Avenue/Eucalyptus Avenue to Cactus Avenue, because the railroad and existing I-215 were realigned in this area sometime between 1989 and 1994. The railroad tracks were evident in its current configuration as evidenced on the 1994 and 2002 aerial photographs. No structures were apparent within Segment 4 between Box Springs Road (Fair Isle Drive) to the north and Cactus Avenue to the south in the 1938 through 2002 aerial photographs.
- **Proposed March Field Station** – The proposed March Field Station appeared as vacant land in the 1938 aerial photograph. In the 1953 aerial photograph, three rectangular structures were apparent at the approximate location of the proposed March Field Station and a railroad spur was evident between the buildings. Only one of the three rectangular buildings was apparent on the proposed March Field Station in the 1967 through 2002 aerial photographs.

- **Surrounding Area (1938)** – Vacant land was apparent in the immediate vicinity of Segment 4 in the 1938 aerial photograph. A commercial size structure was apparent west of the Corridor immediately north of Highway 60. Agricultural land (hay stacks) was apparent east and west of the Segment 3 alignment, south of Highway 60, followed by vacant land.
- **Surrounding Area (1953)** – Commercial structures were apparent to the east and west of Segment 4 to the north and south of Highway 60. Highway 395 was reconfigured and was apparent east of the Corridor. Vacant land bounds Segment 4 to approximately Eucalyptus Street. Structures were apparent immediately west of the Corridor to the north of Eucalyptus Street. Structures were located further west of Eucalyptus Street. According to a 1953 topographic map, these structures were associated with March Field Radio Range Station. Several structures and the old railroad alignment were apparent south of Eucalyptus Street and east of the alignment to Alessandro Boulevard. A residential development was apparent east of Highway 395 from Eucalyptus Street south to Alessandro Boulevard. A commercial structure was apparent at the southeast corner of Highway 395 and Alessandro Boulevard. Three rectangular structures were apparent to the north of Cactus Avenue, immediately east of the current railroad alignment. A railroad spur was apparent between these buildings. The current Cactus Avenue was not evident.
- **Surrounding Area (1967)** – The immediate vicinity was similar to that apparent in the 1953 aerial photograph. However, the radio range station was not evident, additional structures were apparent east of the existing railroad alignment south of Eucalyptus Street, and two of the rectangular structures were no longer evident to the north of Cactus Avenue (immediately east of the existing railroad alignment). The existing Cactus Avenue was apparent.
- **Surrounding Area (1977)** – The immediate vicinity was similar to that apparent in the 1967 aerial photograph. Evidence of commercial development was apparent north of Eucalyptus Avenue to the west of Segment 4. Large structures were apparent further east of the railroad alignment, beyond Highway 395.
- **Surrounding Area (1989)** – The immediate vicinity was similar to that apparent in the 1977 aerial photograph with increased commercial structures evident to the east and west of the Corridor, north of Eucalyptus Street. In addition, a commercial

structure was apparent at the southwest corner of Eucalyptus Street and the alignment.

- **Surrounding Area (1994)** – The southern portion of Segment 4 was the only portion shown in the 1994 aerial photograph and was similar to that apparent in the 1989 aerial photograph. However, the railroad tracks had been realigned and the existing alignment was apparent.
- **Surrounding Area (2002)** – The immediate vicinity was similar to that apparent in the 1989 aerial photograph.

Based on a review of historical aerial photographs, the former structures and railroad spur south of Alessandro Boulevard potential environmental concerns, based on unknown historical usage and association with March Air Force Base (MAFB), now March Air Reserve Base (MARB). No other environmental concerns were apparent on the aerial photographs reviewed.

3.1.5 Segment 5 – Cactus Avenue to Cajalco Road

- **Corridor** – The existing railroad alignment between Cactus Avenue and Eschscholtzia Avenue (further south) were not apparent in the 1938 through 1989 aerial photographs because the railroad and existing I-215 were realigned in this area sometime between 1989 and 1994. The railroad alignment was evident in its current configuration as evidenced on the 1994 and 2002 aerial photographs. No structures were apparent within Segment 5 between Cactus Avenue to the north, and Cajalco Road to the south in the 1938 aerial photograph. However, structures were apparent immediately south of Cactus Avenue and immediately west of the old railroad alignment. These structures would have been located within the existing railroad alignment at that location as evidenced in the 1953 through 1989 aerial photographs. In the 1994 and 2002 aerial photographs, the new railroad alignment was apparent and no structures were present at that location.
- **Proposed Ramona Station** – The proposed Ramona Station appeared as vacant land in the 1938 through 2002 aerial photographs.
- **Surrounding Area (1938)** – Vacant land was apparent to the east and west of Segment 5. Scattered residences were apparent to the east of Highway 395. Highway 395 appeared as a two-way highway and was not shown in its present-day

configuration. MAFB (now MARB) was apparent in the distance to the east of Highway 395 to approximately Oleander Avenue. Vacant land was evident to the west of Segment 5 and scattered residences were evident to the east, beyond Highway 395.

- **Surrounding Area (1953)** – By 1953, the area to the west of Segment 5 was developed with numerous residential and commercial size structures that appeared to be associated with MAFB, from approximately Cactus Avenue and south to approximately Oleander Avenue. Warehouse size buildings in this area appeared to adjoin the Corridor to the west. The old railroad tracks followed by Highway 395 were apparent east of the existing railroad alignment, beyond which was vacant land associated with MAFB. Three aboveground storage tanks (ASTs), an airfield, and other structures associated with MAFB were apparent beyond this vacant land. ASTs were evident west of the Corridor near the northwest corner of Oleander Avenue and Highway 395. Vacant land and scattered residential and commercial structures were apparent to the east and west of the railroad alignment to Cajalco Road.
- **Surrounding Area (1967)** – Highway 395 appears to have been widened. The immediate vicinity to the east and west of the Corridor was similar to that apparent in the 1953 aerial photograph, with an area west of the Corridor developed with a residential area (referred to as Arnold Heights). Commercial development was evident near the intersection of Oleander Avenue and Highway 395. No structures were apparent on the proposed Ramona Station parcels.
- **Surrounding Area (1977)** – The immediate site vicinity was similar to that apparent in the 1967 aerial photograph. However, the residential and commercial structures south of the Arnold Heights residential area were no longer apparent and the area appeared to be mostly vacant. Evidence of the existing sewer plant located west of the Corridor and north of Oleander Avenue was apparent. ASTs and a pond (dry) were evident at this sewer plant.
- **Surrounding Area (1989)** – The immediate site vicinity was similar to that apparent in the 1977 aerial photograph. However, the area south of the Arnold Heights residential area was now developed with the existing cemetery, and the pond at the sewer plant appeared to be filled. The proposed Ramona Station parcels appeared to be vacant land.

- **Surrounding Area (1994 and 2002)** – The northern portion of Segment 5 was bound by fewer structures due to a reconfiguration of I-215 on- and off-ramps at Alessandro Boulevard and Cactus Avenue. The existing March Field Air Museum, east of Highway 395, was apparent across from the existing cemetery. Increased development was apparent east of Highway 395. The existing Cajalco Expressway was apparent and the proposed Ramona Station parcels appeared to be undergoing grading. No structures were apparent west of the Corridor in the vicinity of the Cajalco Expressway. In 2002, a commercial development was apparent south of Cajalco Road.

Based on a review of historical aerial photographs, the commercial structures associated with MAFB (now MARB) formerly located on Segment 5 and the immediately adjoining railroad tracks potential environmental concerns, based on their apparent association with MAFB and unknown usage. No other environmental concerns were apparent on the aerial photographs reviewed.

3.1.6 Segment 6 – Cajalco Road to 4th Street (Highway 74)

- **Corridor** – No structures were apparent within Segment 6 between Cajalco Road to the north, and 4th Street (Highway 74) to the south, with the exception of the railroad tracks and a Passenger and Freight Depot (as identified on the Sanborn Maps, [Section 3.3](#)) located immediately north of 4th Street to the east of the alignment in the photographs reviewed.
- **Proposed Downtown Perris Station** – Two commercial size structures were apparent immediately north of 4th Street (Highway 74) through 1953. A portion of the southernmost structure and the structure to the north of it were apparent on the proposed Downtown Perris Station in the 1967 through 2002 aerial photographs.
- **Surrounding Area (1938, 1953 and 1967)** – Vacant land bounded Segment 6 to the east and west with scattered residences in each direction along the Corridor south to downtown Perris. Commercial size structures were evident immediately east of the Corridor through the downtown Perris area and south to 4th Street (Highway 74). The area west of the Corridor appeared to be predominantly residential in use.
- **Surrounding Area (1967)** – In 1967, five ASTs were apparent west of the Corridor at Rider Street. The remaining vicinity appeared similar to that apparent in the 1953 aerial photograph.

- **Surrounding Area (1977, 1980, 1989, 1994, and 2002)** – Industrial size buildings were apparent west of Segment 6 at Van Buren Boulevard and Orange Avenue. The remaining vicinity appeared similar to that apparent in the 1967 aerial photograph. Increased development was apparent north of the downtown Perris area south of Harvell Street to the east and west of Segment 6 in the 1994 aerial photograph. Increased development occurred in 2002 to the east and west of the Corridor.

Based on a review of historical aerial photographs, no environmental concerns were apparent on the aerial photographs reviewed.

3.1.7 Segment 7 – 4th Street (Highway 74) to Interstate 215

- **Corridor** – With the exception of the railroad tracks, no structures were apparent within Segment 7 between 4th Street (Highway 74) to the north and I-215 to the south-southwest in photographs reviewed from 1931 to 2002.
- **Proposed South Perris Station** - The proposed South Perris Station appeared to be a graded parcel of land in the 1938 through 2002 aerial photographs.
- **Surrounding Area (1938)** – Segment 7 was bound to the east and west by commercial and residential structures at its northern end through the downtown Perris area. The alignment changed direction to the southeast near Commercial Street. Vacant land was apparent to the north and south of the alignment from Commercial Street to I-215. The immediate vicinity surrounding the proposed South Perris Station appeared to be used for agricultural purposes. Mapes Road bordered the northern portion of the proposed South Perris Station and appeared to be unpaved. Case Road and Watson Road, located south of the proposed South Perris Station, were present and appeared to be unpaved. An unpaved road under construction, oriented in a north-south direction east of the proposed South Perris Station, appeared in the general area of the current I-215 layout. Structures were apparent within areas of graded land farther to the south, east and north of the proposed South Perris Station and appeared to be associated with agricultural farms. The San Jacinto River, crossing Segment 7 toward its southern end, was apparent and appeared to be unlined.
- **Surrounding Area (1953)** – The immediate vicinity surrounding Segment 7 was similar to that apparent in the 1938 aerial photograph. However, a large pond

(shown on topographic maps as a sewer disposal pond) was shown north of the Corridor, north of Ellis Avenue. A roadway in the general area of I-215 was apparent east of the proposed South Perris Station and appeared to be paved. Bonnie Road was partially evident bordering the southern portion of the proposed South Perris Station.

- **Surrounding Area (1967)** – The northern portion of Segment 7 was similar to that apparent in the 1953 aerial photograph. The remaining portion of Segment 7 was shown traversing through agricultural and vacant land to its southern end. Additional sewer disposal ponds were apparent north of Ellis Avenue. Perris Canal was apparent, oriented in a southwest-northeast direction west of the South Perris Station. The Perris Canal appeared to be used to redirect water from the San Jacinto River, which on the 1967 photograph appeared to be dry. New on- and off-ramps appeared to have been constructed east of the proposed South Perris Station, which directed vehicles from the original alignment of the freeway to Case Road, south of the proposed South Perris Station. Bonnie Drive appeared as an unpaved road.
- **Surrounding Area (1980)** – The northern portion of Segment 7 was similar to that apparent in the 1967 aerial photograph. Commercial structures were apparent along Commercial Street to the north. Commercial structures were also apparent south of Ellis Avenue immediately adjoining the northern side of the Corridor. A small cluster of buildings was apparent at the southeast corner of Case Road and the freeway. The freeway appeared to be widened to a four-lane freeway. A large building appeared southeast of the South Perris Station, and to the east of I-215.
- **Surrounding Area (1989)** – The immediate vicinity surrounding Segment 7 was similar to that apparent in the 1980 aerial photograph. A cluster of buildings was apparent to the southwest of the proposed South Perris Station, south of Case Road and north of Watson Road, at the existing Perris Valley Water Reclamation facility. Retention and/or settling ponds were apparent surrounding the buildings.
- **Surrounding Area (1994)** – A pile of what appeared to be construction material was evident southeast of the proposed South Perris Station and east of I-215. A large water feature was apparent northeast of the proposed South Perris Station and east of I-215. The construction of buildings was apparent south of the water feature located east of I-215. The existing Perris Valley Water Reclamation facility

appeared to have expanded to the east with what looked to be large coagulation tanks and other water features.

- **Surrounding Area (2002)** – The Perris Valley Water Reclamation facility appeared to have added retention ponds south of the Corridor; however, the northeastern most part of the facility now encroached upon the Study Area. New structures were apparent east of the proposed South Perris Station and I-215. Large buildings with circular parking areas were apparent on land northeast of the proposed South Perris Station and just south of the large water feature.

Based on a review of historical aerial photographs, with the exception of the reclamation facility at the southern part of the Study Area, no environmental concerns were apparent on the aerial photographs reviewed.

3.2 HISTORICAL TOPOGRAPHIC MAP REVIEW

Kleinfelder obtained information regarding historical topographic maps of the Site vicinity from 1901 through 1980 (EDR, 2008b). The topographic maps reviewed for this assessment are listed below in [Table 5](#). Copies of the maps are included in [Appendix A](#).

**Table 5
Historical Topographic Maps Reviewed**

Year	Quadrangle	Series	Scale
1901	San Bernardino	15 minute	1:62,500
1901	Southern CA Sheet 1	60 minute	1:250,000
1901	Elsinore	30 minute	1:125,000
1901 (2 maps)	Riverside	15 minute	1:62,500
1943	Riverside Vicinity	7.5 minute	1:31,680
1943	Perris	15 minute	1:62,500
1947 (2 maps)	Riverside	15 minute	1:50,000
1953 (3 maps)	Riverside East	7.5 minute	1:24,000
1953	Steele Peak	7.5 minute	1:24,000
1953 (3 maps)	Perris	7.5 minute	1:24,000
1954	San Bernardino	15 minute	1:62,500
1954	San Bernardino South	7.5 minute	1:24,000
1967 (4 maps)	Riverside East	7.5 minute	1:24,000
1967	San Bernardino South	7.5 minute	1:24,000
1967 (3 maps)	Perris	7.5 minute	1:24,000
1967	Steele Peak	7.5 minute	1:24,000
1973, photo revised from 1967	San Bernardino South	7.5 minute	1:24,000
1973, photo revised from 1967 (4 maps)	Riverside East	7.5 minute	1:24,000
1973, photo revised from 1967 (3 maps)	Perris	7.5 minute	1:24,000
1973, photo revised from 1967	Steele Peak	7.5 minute	1:24,000
1980, photo revised from 1967	San Bernardino South	7.5 minute	1:24,000

3.2.1 Segment 1 – Spring Street to Columbia Avenue

- **Site** – On the 1901 topographic maps, the railroad alignment was visible and designated as the Southern California Rail Road (San Bernardino and Temecula Line). On the 1943 topographic map, the rail corridor was designated as Atchison Topeka and Santa Fe (AT&SF), which remained visible through the 2002 topographic map. Segment 1 was not depicted on the 1947 and 1953 topographic maps provided by EDR.

On the 1901 through 1980 topographic maps, the proposed Citrus Connection was shown as vacant land and land used for agricultural purposes. Structures were not shown on the proposed Citrus Connection parcel in the historical topographic maps.

A stream, referred to as “Springbook Wash” was shown traversing the southern portion of the proposed Citrus Connection and Corridor.

The proposed Palmyrita Station parcel was shown as undeveloped land on the 1901 map and was shown as agricultural land (groves) on the 1954 through 1980 topographic maps. A residential size structure was depicted at the southwestern corner of the proposed Palmyrita Station parcel on the 1954 map. The northern half of the existing building at the proposed Palmyrita Station was depicted (among the groves) on the 1967 and 1973 topographic maps. The 1980 topographic map depicts the existing structure on the proposed Palmyrita Station parcel and agricultural groves. No other structures were shown on the topographic maps provided for Segment 1.

- **Surrounding Properties** – The immediate vicinity was depicted as vacant land on the 1901 and 1943 maps. By 1954, the immediate vicinity was used predominantly for agricultural purposes with residential size structures shown adjoining the Corridor east of the proposed Citrus Connection , and west of the proposed Citrus Connection . The 1967 through 1980 maps depicted agricultural land in the vicinity of Segment 1 with some commercial size facilities west of the proposed Citrus Connection and south of Citrus Street.

Based on a review of historical topographic maps, other than agricultural land depicted on portions of the proposed Citrus Connection and Palmyrita station parcels, no environmental concerns were apparent along the Corridor or on the surrounding properties that suggest evidence of environmental conditions of concern.

3.2.2 Segment 2 – Columbia Avenue to Mount Vernon Avenue

- **Site** – The rail Corridor, encompassing the proposed UCR Station, was shown on 1901 through 1973 topographic maps, but no structures were located within Segment 2. Railroad designations are described in detail under Segment 1. The proposed UCR Station was in an area referred to as Lemona. The 1947 and 1953 topographic maps depicted the proposed UCR Station as agriculture (groves); however, it was depicted as vacant land thereafter. The 1980 topographic map provided by EDR does not cover Segment 2.

- **Surrounding Properties** – The immediate vicinity was depicted as vacant land on the 1901 and 1943 maps. The Box Springs Mountains were shown to the east. Gage Canal was shown crossing the northern portion of Segment 2 near Indianapolis Avenue. University of California Citrus Experiment Station was shown south of the segment. By 1947, scattered residential development was shown, with an area referred to as Canyon Crest Heights located north of Linden Avenue. In addition, some agricultural groves were depicted adjoining portions of the Corridor.

The 1953 map was similar to the 1947 map. Two oil tanks were depicted immediately west of Segment 2, north of Linden Street, and north of Canyon Crest Heights. The UCR campus was shown south of Canyon Crest Heights.

In 1967, increased residential development was depicted in the immediate vicinity. The oil tanks shown on the 1953 map were no longer shown and a commercial building was in their place. Watkins Avenue was depicted south of the proposed UCR Station, beyond which was the UCR campus.

On the 1973 map, the vicinity appeared generally as it did on the 1967 map with some increased residential development. The vicinity was not depicted on the 1980 map provided by EDR.

Based on a review of historical topographic maps, the former oil tanks west of Segment 2 at Linden Avenue represent a potential environmental concern to the Corridor, as does agricultural usage in the vicinity of the UCR Station. No other environmental concerns were apparent on the topographic maps reviewed.

3.2.3 Segment 3 – Mount Vernon Avenue to Box Springs Road (Fair Isle Drive)

- **Site** – The rail Corridor was shown on the 1901 through 1973 topographic maps, but no structures were located within Segment 3. Railroad designations are dictated under Segment 1. The 1943, 1954, and 1980 topographic maps provided by EDR do not cover Segment 3. Segment 3 was depicted within an area of undeveloped land and land used for residential purposes within Box Springs Canyon. The 1947 and 1953 topographic maps showed Segment 3 as agriculture (groves).
- **Surrounding Properties** – The immediate vicinity was depicted as vacant land on the 1901 and 1943 maps. A few scattered residences were shown on the 1943 map. In addition, Highway 395 and Highway 60 were shown west of Segment 3.

The Box Springs Mountains were shown to the east-northeast. Agriculture (groves) was shown surrounding the alignment on the 1947 and 1953 topographic maps.

In 1953, scattered residences were depicted in the vicinity of Segment 3. Commercial buildings near Highway 60 were shown at the southern end of Segment 3.

The 1967 and 1973 maps depict increased residential developed in the vicinity of Segment 3 north of the northern end, and to the west.

Based on a review of historical topographic maps, with the exception of adjacent agriculture (groves), no environmental concerns were shown along the alignment or on the surrounding properties.

3.2.4 Segment 4 – Box Springs Road (Fair Isle Drive) to Cactus Avenue

- **Site** – The railroad Corridor was shown on 1901 through 1973 topographic maps, but not shown in the current alignment from approximately Alessandro Boulevard to Cactus Avenue because the alignment was reconfigured some time between 1989 and 1994. A residential size structure may have been located within the Corridor (or immediately adjacent) north of Alessandro Boulevard on the 1947 map. No structures were depicted within Segment 4 on the 1953 through 1973 maps. Segment 4 was not shown on the 1943, 1954, or 1980 topographic maps provided by EDR.
- **Surrounding Properties** – The immediate vicinity was depicted as vacant land on the 1901 map. On the 1947 map, residential size structures were shown west of the northern end of Segment 4 to the north and south of Highway 60. Vacant land was depicted in the vicinity of the Segment 4 up to approximately the Box Springs area, where numerous residences were shown to the east of Highway 395 (near Cottonwood Avenue, and north of Alessandro Boulevard). The vicinity south of Alessandro Boulevard was shown as vacant land to approximately Cactus Avenue (not shown on the 1947 map). Camp Haan military reserve (later attached to MARB) was located immediately south of Segment 4.

On the 1953 map, the vicinity was similar to that shown on the 1947 map with additional structures shown at the northern end of the Corridor north of Highway 60, and additional residences shown east of I-215 in the Edgemont area (formerly

labeled as the Box Springs area). In addition, residences were depicted immediately west of Segment 4 between Cottonwood Avenue and Alessandro Boulevard. Unnamed roads associated with the MARB were located south of Segment 4 and west of what was depicted as the Escondido Freeway. A pipeline was shown crossing the Corridor to the north of the approximate Cactus Avenue location (not shown on the 1953 map).

On the 1967 map, the area in the vicinity of Segment 4 was similar to that shown on the 1953 map. Although no residences were shown in the Edgemont area (east of Highway 60), this area was depicted as a developed, urban area. The residences immediately west of the Corridor between Cottonwood Avenue and Alessandro Boulevard were shown. A sewage disposal facility was depicted further west of Segment 4 at the western terminus of Cottonwood Avenue. Commercial size structures were shown at the southeast corner of Alessandro Boulevard and I-215. A pipeline was shown crossing the Corridor to the north of Cactus Avenue (shown). A railroad spur, branching from the tracks within the Corridor, was shown to the west of the Corridor. No structures were depicted in the vicinity of this railroad spur.

On the 1973 map, the northern end of Segment 4 was similar to the 1967 map. Six commercial size structures were shown west of Segment 4 along Fischer Road. A few smaller commercial size structures were located immediately east and west of the Corridor to the north of Eucalyptus Avenue. The previously noted sewage disposal facility was shown at the western terminus of Cottonwood Avenue west of Segment 4, and a sewage pond was shown at this location. A pipeline was shown traversing in an east-west direction immediately north of the sewage disposal facility approaching the Segment 4 Corridor at Cottonwood Avenue; however, the pipeline was not shown crossing or paralleling the Corridor. Residences were still depicted west of Segment 4 between Cottonwood Avenue and Alessandro Boulevard, and the Edgemont area was depicted as a developed, urban area. The area southeast of Alessandro Boulevard and Highway 395, and the area south of the Corridor between Alessandro Boulevard and Cactus Avenue were generally the same as what was depicted on the 1967 map.

Based on a review of historical topographic maps, no environmental concerns were shown along the Corridor or on the surrounding properties.

3.2.5 Segment 5 – Cactus Avenue to Cajalco Road

- **Site** – The rail Corridor was depicted within the Corridor with no structures or improvements shown on the topographic maps from 1901 through 1973. Railroad designations are detailed under Segment 1. Segment 5 was not shown on the 1943, 1954, and 1980 topographic maps provided by EDR.
- **Surrounding Properties** – The immediate vicinity west of Segment 5 was depicted on the 1947 map with numerous unnamed roads west of Segment 5. These roads were shown as part of Camp Haan associated with the MAFB (now MARB) from approximately Cactus Avenue on the north to approximately Oleander Street on the south. Further south of Camp Haan was a Forest Service Fire Station and vacant land to Cajalco Road, with a few scattered residences shown. No structures were shown in the immediate vicinity east of Highway 395. However, this area was shown as part of the MAFB. Vacant land was shown east of Highway 395 south of the MAFB to approximately Cajalco Road with a few residences shown.

The 1953 map depicted numerous structures immediately west of Segment 5 from Cactus Avenue to just south of Eschscholtzia Street (shown east of Highway 395). Further south was a residential area referred to as Arnold Heights shown as part of the MAFB. Mostly vacant land adjoined the Corridor to the south of Van Buren to Cajalco Road with a few scattered residences. March Field and numerous structures beyond, associated with MAFB, were located east of Highway 395. Vacant land predominantly bounded Highway 395, south of MAFB, with scattered residences along Nandina Avenue, Oleander Avenue, Markhem Street, and Patterson Avenue.

The 1967 and 1973 maps depicted the area in the vicinity of Segment 5 generally the same as was shown on the 1953 map. Additional structures were apparent adjoining the west of the Site between Nandina Avenue and at Oleander Avenue. Increased residential development was apparent east of Highway 395 from Oleander Avenue south to Markham Street. A well was shown immediately west of the Corridor between Perry Street and Martin Street. A pumping station was depicted at the southeast corner of Highway 395 and Morgan Street.

Based on a review of historical topographic maps, with the exception of Camp Haan, no environmental concerns were shown within the Corridor or on the surrounding properties.

3.2.6 Segment 6 – Cajalco Road to 4th Street (Highway 74)

- **Site** – The rail Corridor within Segment 6 was shown beginning on the 1901 map. Railroad designations are described in detail under Segment 1. The 1943 topographic map depicted the railroad paralleling Highway 395 from Cajalco Road south to 4th Street. Based on the scale of the map, it was unclear whether structures were located within the Corridor or adjacent to the Corridor through the downtown Perris area. A station building was located within the Corridor immediately north of 4th Street, as depicted on the 1953, 1967, and 1973 maps. The 1943, 1954, and 1980 topographic maps provided by EDR do not cover Segment 6.
- **Surrounding Properties** – Vacant land was shown in the vicinity of Segment 6 on the 1901 topographic map. Downtown Perris was depicted with numerous streets; however, due to the scale of the map, details of the properties within the downtown area were not shown.

The 1943 map depicted the immediate vicinity of Segment 6 as vacant land with scattered residences from Cajalco Road to the downtown Perris area. Numerous structures were shown in the vicinity of the Corridor throughout the downtown area to Highway 74.

In 1953, the immediate vicinity was depicted primarily as vacant land with scattered residences from Cajalco Road south to Nuevo Road. The Val Verde Tunnel crossed beneath Highway 395 between Morgan Street to the north and Rider Street to the south. Numerous residences were depicted south of Nuevo Road to the east of Highway 395. A high school was shown at the northeast corner of San Jacinto Avenue and 'D' Street. A gas tank was depicted south of San Jacinto Avenue west of Perris Boulevard, outside of the Study Area. The downtown Perris area was depicted as a developed urban area. However, few structures were shown in this area.

The 1967 map depicted vacant land primarily in the immediate vicinity of Segment 6 with scattered residences from Cajalco Road to Nuevo Road. A pumping station was shown at the southeast corner of Highway 395 and Morgan Street. Granite Spur branched from the railroad tracks within the Corridor to the west. Val Verde Tunnel crossed Highway 395 immediately south of Granite Spur. Structures associated with Mayer Farms were depicted to the west of the Corridor immediately north of Orange Avenue. A large structure was shown to the west of the Corridor south of Orange Avenue. Numerous structures were located adjoining the Corridor near San Jacinto Street. The downtown Perris area was depicted as a developed, urban area.

The properties in the immediate vicinity of Segment 6 were depicted generally the same way as shown on the 1967 map.

Based on a review of historical topographic maps, no environmental concerns were shown within the Corridor or on the surrounding properties.

3.2.7 Segment 7 – 4th Street (Highway 74) to Interstate 215

- **Site** – The rail Corridor within Segment 7 was shown on the 1901 through 1973 topographic maps, but no structures were shown located within Segment 7. Railroad designations are described in detail under Segment 1. The San Jacinto River crossed beneath the tracks just northwest of Murrieta Road. The 1943, 1954, and 1980 topographic maps provided by EDR do not cover Segment 7.
- **Surrounding Properties** – The northern most portion of Segment 7 in 1901 was shown in the downtown Perris area, where numerous roads were depicted. However, because of the scale of the map, details regarding structures were not shown. In 1943, numerous structures were depicted in the downtown Perris area in the vicinity of Segment 7 to approximately 8th Street. Scattered residences and vacant land were depicted along the remaining portion of Segment 7 to the southern end.

On the 1953 map, the northern portion of Segment 7 was depicted in the developed urban area of downtown Perris. Scattered residences were shown in the vicinity of 8th Street and Commercial Street. A sewage disposal pond was shown north of Segment 7 north of Ellis Avenue and east of Goetz Road. A commercial size structure was depicted adjoining the Corridor at the intersection of Highway 74 and

Ellis Avenue. The remaining vicinity along Segment 7 was depicted as vacant land. The San Jacinto River was shown as an unlined river crossing Segment 7 northwest of Murrieta Road.

On the 1967 and 1973 maps, the vicinity was similar to that shown on the 1953 map with increased development near 8th Street and Commercial Street. Additional sewage disposal ponds were depicted north of Ellis Avenue and east of Goetz Road north of the Study Area. The sewage disposal facility located north of Ellis Avenue and east of Goetz Road is located in a crossgradient direction from the Corridor is not considered an environmental concern solely based on its presence on the topographic map. An additional commercial size structure was shown near the intersection of Highway 74 and Ellis Avenue. The San Jacinto River was depicted as a channelized river. The remaining areas in the vicinity of Segment 7 were shown as vacant land.

Based on a review of historical topographic maps, no environmental concerns were shown along the Corridor or on the surrounding properties.

3.3 SANBORN FIRE INSURANCE MAPS

Sanborn Fire Insurance Maps provide historical land use information for some metropolitan areas and small, established towns. Kleinfelder requested a search of Sanborn Fire Insurance Maps by EDR (EDR, 2008d). Sanborn Fire Insurance Maps for the years 1890, 1892, 1896, 1907, 1914, 1926, and 1929, were available for portions of Segment 6 and Segment 7 of the Corridor. Available Sanborn maps are included in [Appendix A](#). The following is a summary of the Sanborn maps reviewed.

3.3.1 Segment 6 – Cajalco Road to 4th Street (Highway 74)

- **1890** – The 1890 Sanborn map depicted that portion of Segment 6 from 3rd Street south to 4th Street. A Passenger and Freight Depot building was located within the Corridor to the north of 4th Street. A main track and side track were shown. Vacant land and ‘D’ Street were shown to the east. Development along the east side of ‘D’ Street included a hotel, offices and commercial facilities. A grain warehouse was located adjoining to the east of the proposed Downtown Perris Station near 3rd Street and included a portable charcoal boiler. A machinery cleaning area was depicted within this grain warehouse. The vicinity to the west of Segment 6 was not shown.

- **1892** – The 1892 Sanborn map depicted that portion of Segment 6 from 1st Street on the north to 4th Street on the south. National Manufacturing Company Works was shown within Segment 6 immediately north of 2nd Street and included a pipe dipping tar furnace, a boiler, forge, shears, a punch, and rolls. A hand printing building was shown on the south side of 2nd Street. An old depot building was located within Segment 6 between the main and side tracks to the south of 2nd Street. A Passenger and Freight Depot was shown as a larger structure north of 4th Street. Wise and Knight’s Roller Mill appeared to be located on a portion of Segment 6 immediately north of 3rd Street. South of the mill was the Wise and Knight’s Lumber Yard, followed by a Fashion Livery facility. The Fashion Livery facility included a tin shop, hardware and stove area, drawing area, and offices. Further east was ‘D’ Street, followed by commercial/retail facilities.
- **1896** – The 1896 Sanborn map depicted that portion of Segment 6 from 1st Street on the north to 4th Street on the south. National Manufacturing Company Works (as shown on the 1892 Sanborn map) was no longer present in 1896. A vacant hay warehouse was shown at this location north of 2nd Street within Segment 6. A carpentry facility was shown as occupying the hand printing facility in 1896. The Wise and Knight’s Roller Mill and Lumber Yard were no longer shown. The Passenger and Freight Depot was shown immediately north of 4th Street within Segment 6. Fashion Livery and additional commercial/retail development were depicted immediately east of Segment 6.
- **1907** – The 1907 Sanborn map depicted that portion of Segment 6 from 4th Street north to 1st Street. The Passenger and Freight Depot was shown north of 4th Street within Segment 6. A vacant depot was shown to the south of 2nd Street within the Corridor. The vacant hay warehouse depicted north of 2nd Street in 1896 was no longer shown on the map. Vacant land was shown immediately east of the Corridor. Colton Grain & Milling Company had a grain warehouse adjoining the Corridor between 3rd and 4th Streets. A hay storage shed was shown between ‘D’ Street and the Corridor. Development along the east side of ‘D’ Street included a house, hay storage, vacant suites, a dance hall, and a billiard facility.
- **1914** – The 1914 Sanborn maps depicted that portion of Segment 6 from 2nd Street on the north to 4th Street on the south. The Passenger and Freight Depot was shown to the north of 4th Street within the Corridor. Vacant land was shown immediately east of the Corridor followed by a garage north of 3rd Street, and Colton Grain & Milling Co’s

Grain Warehouse No. 3 between 3rd and 4th Streets. Oil storage was shown at the north end of the warehouse building. 'D' Street was shown east of the Warehouse and development along the east side included drug and grocery stores, a restaurant, offices, a bank, and two pool facilities. The vicinity to the west of Segment 6 was not shown.

- **1926** – The 1926 Sanborn map depicted that portion of Segment 6 from San Jacinto Avenue on the north to 4th Street on the south. Union Oil Company of California was shown straddling the property within the Corridor immediately south of San Jacinto Avenue and the property immediately east of the Corridor. Four 10,000-gallon ASTs were shown at the Union Oil Company of California facility. An ice house was shown adjoining the side track to the east to the north of 2nd Street. The Passenger and Freight Depot was shown within Segment 6 immediately north of 4th Street. A gasoline station was shown adjoining Segment 6 immediately north of 4th Street followed by Globe Grain & Milling Company Warehouse No. 3 to the north. A machinery cleaning area, steam boiler and fuel tank were shown immediately north of this warehouse building. Vacant land was shown east of the Corridor from San Jacinto Avenue to 1st Street in the remaining areas followed by 'D' Street. The east side of 'D' Street was shown as developed with a repair garage between 2nd and 3rd Street. A gasoline station was shown at the southeast corner of 3rd Street and 'D' Street. Commercial facilities were shown east of 'D' Street from 3rd to 4th Street. The vicinity west of the Corridor was shown immediately north of 4th Street. A railroad pump house and two water ASTs occupied Segment 6 immediately north of 4th Street. Vacant land followed by 'C' Street, vacant land and residences was located west of the Corridor.
- **1929** – The 1929 Sanborn map depicted that portion of Segment 6 from San Jacinto Avenue on the north to 4th Street on the south. Union Oil Company of California was still shown as on the 1926 Sanborn map. An ice house was shown along the side track within Segment 6 to the north of 2nd Street. The Passenger and Freight House was shown within Segment 6 north of 4th Street. An automobile repair facility and gasoline station were depicted east of the Corridor at the northwest corner of 1st Street and 'D' Street. A garage repair facility was shown east of the Corridor north of 3rd Street. A gasoline station with repair facilities and Globe Grain & Milling Company Grain Warehouse No. 3 were shown east of Segment 6 immediately north of 4th Street. Commercial/retail facilities were shown along the east side of 'D' Street. A gasoline

station was shown at the southwest corner of 3rd Street and 'D' Street. The vicinity west of Segment 6 was not shown on the 1929 Sanborn map.

Based on a review of historical Sanborn maps, the former grain warehouse facilities including a machinery cleaning area, oil storage and fuel area immediately east of the proposed Downtown Perris Station, the former gasoline station and repair facilities immediately north of 4th Street and east of the alignment, the Union Oil of California facility north of the proposed Downtown Perris Station, and the former lumber yard along the east side of the alignment represent environmental concerns due to their proximity to Segment 6. No other environmental concerns were shown along the Corridor or on the surrounding properties that suggest evidence of an environmental concern.

3.3.2 Segment 7 – 4th Street (Highway 74) to Interstate 215

- **1890** – The 1890 Sanborn map depicted that portion of Segment 7 from 4th Street (Highway 74) south to 6th Street. A main track and side track were shown within the Corridor. No structures were shown within this portion of Segment 7. 'D' Street was shown east of the Corridor. Development along the east side of 'D' Street included restaurants, drug and grocery stores, a hotel, and vacant suites. Vacant land was shown to the east between 5th and 6th Streets. The vicinity to the west of Segment 7 was not shown.
- **1892 and 1896** – The 1892 and 1896 Sanborn maps depicted that portion of Segment 7 from 4th Street on the north to 7th Street on the south. No structures were depicted within the Corridor. No railroad tracks were shown south of 6th Street on the 1892 Sanborn map. Vacant land was shown east of Segment 7, followed by 'D' Street and commercial/retail facilities primarily located between 4th and 5th Streets. The vicinity west of the Corridor was not shown on these maps.
- **1907** – The 1907 Sanborn map depicted that portion of Segment 7 from 4th Street south to 7th Street. An oil storage area was shown immediately south of 6th Street along the Corridor. Railroad tracks were not shown continuing south of 6th Street on this map. Vacant land was shown in the remaining areas of Segment 7. A general merchandising warehouse building was shown at the southwest corner of 4th Street and 'D' Street. Two offices and a store were shown between the Corridor and 'D' Street. Development east of 'D' Street included stores, restaurants a hotel, vacant

suites, and a general warehouse building. The vicinity west of Segment 7 was not shown.

- **1914** – The 1914 Sanborn maps depicted that portion of Segment 7 from 4th Street on the north to 7th Street on the south. Two ASTs were shown immediately south of 6th Street within the Corridor. The railroad tracks were shown to split near 7th Street and the Corridor branches to the southeast. The Perris Valley Supply Company's Roller & Fee Mill occupied the land between the tracks that had branched off. Vacant land and commercial/retail facilities adjoined the Corridor to the east, followed by 'D' Street and commercial/retail facilities. A lumber company was shown east of the Corridor south of 7th Street. The Perris Valley Lumber Company was shown adjoining to the west of the main railroad tracks within the Corridor, immediately south of 4th Street and west to 'C' Street. The remaining vicinity west of the Corridor was not shown.
- **1926** – The 1926 Sanborn maps depicted that portion of Segment 7 between 4th Street on the north to 8th Street on the south. No structures were shown within the Corridor. The main and side tracks branched away from each other at 7th Street. The San Jacinto Branch was shown to continue within Segment 7 to the southeast. Vacant land followed by commercial/retail facilities bounded Segment 7 to the east, followed by 'D' Street and additional commercial/retail facilities. A vacant lumber company was shown adjoining the Corridor to the east between 7th and 8th Streets. Perris Valley Lumber Company was shown within the Corridor immediately south of 4th Street and west to 'C' Street. Vacant land was depicted west of 'C' Street. Holloway & Spittler Roller & Fee Mill was shown adjoining the west of the Corridor south of 7th Street.
- **1929** – The 1929 Sanborn map depicted that portion of Segment 7 from 4th Street on the north to 8th Street on the south. Perris Valley Lumber Company occupied the portion of Segment 7 immediately south of 4th Street and west to 'C' Street. No other structures or facilities were shown within Segment 7. Vacant land, followed by commercial/retail facilities, was shown east of the Corridor from 4th Street south to 6th Street. Vacant lumber sheds, a water tank, a sign printing facility, and garages were shown adjoining Segment 7 between 7th and 8th Streets. Vacant land was shown adjoining Segment 7 south of 5th Street. Perris Valley Cotton Grower's Association was shown west of the Corridor south of 7th Street. An oil storage building was shown between the side track and San Jacinto Branch north of 8th

Street (west of Segment 7), and was part of the Holloway & Spittler Roller & Feed Mill facility west of this portion of Segment 7.

Based on a review of historical topographic maps, the Perris Valley Lumber Company west of the alignment and south of 4th Street, the two ASTs formerly located south of 6th Street, and the lumber facilities to the east and west of the alignment near 7th Street represent environmental concerns to Segment 7. No other environmental concerns were shown along the Corridor or on the surrounding properties that suggest evidence of an environmental concern.

4.0 SITE RECONNAISSANCE

Kleinfelder's assessment activities included a site reconnaissance. This section summarizes the findings from the Site reconnaissance.

4.1 METHODOLOGY AND LIMITING CONDITIONS

Ms. Margaret Carroll of Kleinfelder performed a Site reconnaissance of the Study Area between April 14, 2008 and April 18, 2008. The reconnaissance included a visual inspection of the Study Area to assist in identifying the presence or likely presence of hazardous substances or petroleum hydrocarbons under conditions that suggest an existing release, a past release, or threat of release into structures, soil, groundwater, or surface water at the Site. Observations of readily apparent environmental conditions are summarized in [Table 6](#), and color photographs of the alignment are presented in [Appendix B](#). The Perris Valley Line – Segments 1 through 7 are shown on [Plates 2](#) through [4](#). Kleinfelder walked and drove the Study Area, including the perimeter and interior thereof. However, the Fair Isle Station area was only observed from outside the parcel. In addition, Kleinfelder observed the interior of structures, if access was available during our reconnaissance. Access was available to the 990 Palmyrita Avenue building. At the time of the reconnaissance, the weather was sunny and clear.

4.2 SITE OBSERVATIONS

Site observations are described in [Table 6](#). Noted items of environmental concern or hazardous materials are also shown on [Plates 2](#) through [5](#).

Table 6
Site Observations

Segment, Appendix B Photo, and Plate Reference	Observations
Segment 1 – Spring Street to Columbia Avenue (Photos 1 – 8)	
Corridor Photos 1, 3, and 4 Plate 2	<p>Refuse was observed at various locations along the railroad alignment between the proposed Citrus Connection and the proposed Palmyrita Station. The majority of the refuse was observed east of the proposed Citrus Connection and west of the proposed Palmyrita Station. The refuse included household trash east of the proposed Citrus Connection, and ceramic tiles and old tires west of the proposed Palmyrita Station. No evidence of hazardous materials was observed. A stockpile of gravel and rail ties was observed along the Corridor to the north of Palmyrita Avenue. A pole-mounted transformer was observed on the Corridor near the northwestern portion of the proposed Palmyrita Station. No evidence of leaking or staining was observed in the vicinity of the transformer. A polyvinyl chloride (PVC) pipe was observed within Segment 1 and appeared to originate from the adjoining proposed Palmyrita Station parcel to the east. No evidence of staining was observed beneath the outfall of this pipe. A storm drain was observed at the southwest corner of Segment 1.</p>
Proposed Citrus Connection Photo 2 Plate 2	<p>The proposed Citrus Connection is located on one parcel consisting of vacant land covered with vegetation. A creek was observed at the southern portion and is situated at a lower elevation than the remaining areas. Unimproved roads were observed at the northern and southern portions of the proposed Citrus Connection. Refuse piles were observed throughout the creek area, with a concentration of trash located within the creek areas near the railroad tracks to the east and west. No evidence of hazardous substances or hazardous wastes was observed in the refuse piles.</p> <p>Evidence of discolored soil or water, stressed vegetation, ASTs, underground storage tanks (USTs), pits, ponds, or lagoons were not observed at the proposed Citrus Connection parcel.</p>
Proposed Palmyrita Station Photos 5 – 8 Plates 2 and 5	<p>The proposed Palmyrita Station consists of vacant land covered with vegetation. Evidence that the proposed Palmyrita Station was formerly used for agricultural purposes (i.e., rows and stockpiles of organic material) was observed. A row of orange trees was observed around the perimeter of the proposed Palmyrita Station parcel with two rows branching into the interior at the northern end. A concrete stand pipe associated with the irrigation of the former orange groves was observed on the northern portion of the parcel between the orange trees.</p> <p>A building is located on the parcel and is divided into a northern portion, with an adjoining office to the north, and a southern portion. The northern portion of the building consisted of an open warehouse area. A “TCL Powder Coating” room was observed at the northwestern corner of this portion of the building. Two openings leading to a basement were observed within the concrete floor of this room. A small room located in the northeastern corner of this portion of the building contained a sign labeled “waste ink”.</p> <p>The southern portion of the building consisted of a warehouse area. Two pieces of equipment, (one of which was a press, the other unknown), was observed in the northern end of this portion of the building. Standing liquid, less than an inch deep was observed in the vicinity of the press. A placard labeled</p>

**Table 6 (Continued)
Site Observations**

Segment, Appendix B Photo, and Plate Reference	Observations
	<p>"acids" was observed in the general vicinity of this equipment. The building appeared to have been vandalized, as evidenced by open doors and windows and electrical conduit and torn construction material observed at various locations throughout the building.</p> <p>A basement is located beneath the northern portion of the building. Two rooms were located in the basement area and were used to house a steam boiler, two natural gas boilers, equipment, and compressors. The equipment remains in the basement. Five-gallon buckets labeled as grease and oil as well as Glutarhyde (Formula 310) were observed in the westernmost room of the basement. Staining on the floor within the basement was observed. A closet used to store chemicals, including containers labeled as dimethylene, dimethyl-propanoline, and potassium sulfite, was observed beneath stairs leading to the basement. Staining was observed on the floor of the basement. At least three drains were observed in the basement area; one was located outside the two basement rooms and two were located within the easternmost basement room. No staining was observed in the vicinity of the drains. A large sump was observed within the westernmost room of the basement. Standing liquid was observed in the sump.</p> <p>A cooling tower was observed outside the northwestern corner of the site building. A pad-mounted transformer was observed south of the cooling tower. Significant staining was observed south of the pad-mounted transformer. The transformer was labeled as non-polychlorinated biphenyl (PCB) containing oil. A pole-mounted transformer was observed in the southeastern portion of the site. No staining or leaking was observed.</p> <p>A loading area was observed at the southeastern corner of the building near the parking lot. The parking lot contained piles of trash and debris. Sacks of corn powder were observed in the parking area. No hazardous chemicals or hazardous wastes were observed in this area. Near the southeastern corner of the parking lot was a fenced area that appears to have been used to store chemicals (as evidenced by a hazardous materials placard). A 55-gallon drum was observed, but the contents are unknown. Some household trash was observed in this area. A concrete berm was located along the southern end of the fenced area. Moderate staining was observed within the fenced area and is considered an environmental condition of concern.</p> <p>Construction material, including conduit piping, stockpiled asphalt and stockpiled concrete aggregate, and various signs (including those used for traffic control) was observed within an area of the parking lot enclosed by a slotted fence. This area was being used as a staging area for Arizona Pipeline. At the time of the site reconnaissance, materials were being loaded onto trucks and taken off-site. This area is not considered to be an environmental concern.</p> <p>With the exception of staining, noted above, evidence of discolored soil or water, stressed vegetation, ASTs, USTs, pits, ponds, or lagoons were not observed at the proposed Palmyrita Station during the Site reconnaissance.</p>

**Table 6 (Continued)
Site Observations**

Segment, Appendix B Photo, and Plate Reference	Observations
Segment 2 – Columbia Avenue to Mount Vernon Avenue (Photos 9 – 12)	
Corridor Photos 9 and 10 Plate 2	<p>Segment 2 begins at Columbia Avenue (immediately south of the proposed Palmyrita Station) and includes the Corridor south to, and including, the proposed UCR Station, terminating at Mount Vernon Avenue. Several stockpiles were observed along the railroad between Columbia Avenue and Marlborough Avenue. The stockpiles consisted of gravel, ballasts, wood, and railroad ties. Ballasts and railroad ties are typically impacted by petroleum products or other hazardous materials. Numerous drainage structures (such as culverts) were observed crossing the Corridor between Columbia Avenue and Marlborough Avenue. Kinder Morgan petroleum pipeline markers were observed along the railroad alignment to the north of Spruce Street, which indicated the petroleum pipeline was located within the Corridor, parallel to the east side of the railroad tracks.</p> <p>Evidence of discolored soil or water, stressed vegetation, ASTs, USTs, pits, ponds, or lagoons were not observed along the Segment 2 alignment. A description of the remaining Segment 2 observations is included in the proposed UCR Station description below.</p>
Proposed UCR Station Photos 11 and 12 Plate 2	<p>The proposed UCR station consists of a narrow strip of vacant land from West Blaine Street at the western end to Mount Vernon at the eastern end. Kinder Morgan petroleum pipeline markers were observed along the northern portion of the proposed UCR Station to Valencia Hill Drive, where the pipeline appears to be redirected south of the alignment. The neighboring residences were encroaching onto the northern portion of the proposed UCR Station and included garden areas, a basketball court, and storage of abandoned vehicles. At least five, pole-mounted transformers were observed along the northern portion of the proposed UCR Station. Evidence of staining or leaking was not observed on or beneath the transformers. A Santa Ana Valley Water Test Station and a 9-inch high-pressure water pipeline are located near the intersection of the alignment and Valencia Hill Drive. A flood control channel is located along the southern portion of the proposed UCR Station from Valencia Hill Drive to Mount Vernon Avenue.</p> <p>Evidence of discolored soil or water, stressed vegetation, ASTs, USTs, pits, ponds, or lagoons were not observed on the proposed UCR Station site at the time of the Site reconnaissance.</p>

**Table 6 (Continued)
Site Observations**

Segment, Appendix B Photo, and Plate Reference	Observations
Segment 3 – Mount Vernon Avenue to Box Springs Road (Fair Isle Drive) (Photos 13 – 15)	
Corridor Photos 13 and 14 Plate 2	<p>Segment 3 begins at Mount Vernon Avenue (east end of the proposed UCR Station) and continues east then south to Box Springs Road (Fair Isle Drive). Segment 3 includes the proposed Fair Isle Station. Segment 3 runs eastward until it changes direction toward the south near Linden Street. Segment 3 then continues south up to, and including, the proposed Fair Isle Station. Segment 3 traverses through vacant land and land used for residential purposes. Three 55-gallon drums were observed at the base of a ravine location along the Corridor at Manfield Street. Due to the steep terrain, Kleinfelder was not able to assess the contents of the drums or the surface area surrounding the drums. Household trash was observed near the Hyatt School located on the Corridor south of Manfield Street. In addition, an old rusted pipe was observed. It is unknown what this pipe was used for. A Kinder Morgan pipeline marker was observed along the east side of the Corridor near Poarch Road.</p> <p>Evidence of discolored soil or water, stressed vegetation, ASTs, USTs, pits, ponds, or lagoons were not observed along Segment 3 at the time of the Site reconnaissance. A description of the observations of the proposed Fair Isle Station is summarized below.</p>
Proposed Fair Isle Station Photo 15 Plate 2	<p>The proposed Fair Isle Station is situated in an undeveloped area at the base of hills near the existing railroad tracks. Outcrops of rocks and areas of alluvial deposits were observed. A stream was observed immediately west of the alignment at the proposed Fair Isle Station.</p> <p>Evidence of discolored soil or water, stressed vegetation, ASTs, USTs, pits, ponds, or lagoons were not observed at the proposed Fair Isle Station at the time of the Site reconnaissance.</p>

**Table 6 (Continued)
Site Observations**

Segment, Appendix B Photo, and Plate Reference	Observations
Segment 4 – Box Springs Road (Fair Isle Drive) to Cactus Avenue (Photos 16 – 19)	
Corridor Photos 16 – 18 Plate 3	<p>Segment 4 begins at Fair Isle Drive and continues south, crossing the freeway, and continuing south up to, and including, the proposed March Field Station and terminating at Cactus Avenue. The northern portion of Segment 4 crosses Highway 60 and I-215 to the south and continues south along the west side of I-215. Drainage structures (such as culverts) were observed at various locations crossing Segment 4 from east to west. Kinder Morgan petroleum pipeline markers were observed along the east side of the railroad tracks and on the west side of the railroad tracks immediately north of River Crest Drive. A pad-mounted transformer was observed along the railroad, immediately adjacent to the west the alignment's intersection with I-215 and River Crest Drive, south of a drainage basin. The transformer was labeled as containing non-PCB oil. Adjacent to the transformer was a City of Riverside sewage pump station. General household trash was observed at various locations along the Corridor. Stockpiled soil was observed along the railroad alignment, west of the railroad tracks, and immediately south of River Crest Drive.</p> <p>Evidence of discolored soil or water, stressed vegetation, ASTs, USTs, pits, ponds or lagoons were not observed along Segment 4 at the time of the Site reconnaissance. A summary of the observations of the proposed March Field Station is below.</p>
Proposed Moreno Valley/March Field Station Photo 19 Plate 3	<p>The proposed Moreno Valley/March Field Station parcels consist of vacant, graded land, with some shrubs. A debris pile was observed at the northwestern portion of the station and included ceramic tiles, broken concrete pieces, ballasts, paper, and asphalt. Ballasts may be impacted with petroleum hydrocarbons or other hazardous materials. Three drainage areas were observed along the eastern portion of the parcels. A road was observed leading eastward. A flood control channel was observed immediately east of the proposed March Field Station, followed by the Corridor within Segment 4. A Questar pipeline marker was observed near the railroad tracks indicating that a high-pressure gas pipeline was located in the vicinity of the Corridor.</p> <p>Evidence of discolored soil or water, stressed vegetation, ASTs, USTs, pits, ponds or lagoons were not observed at the proposed March Field Station at the time of the Site reconnaissance.</p>

**Table 6 (Continued)
Site Observations**

Segment, Appendix B Photo, and Plate Reference	Observations
Segment 5 – Cactus Avenue to Cajalco Road (Photo 20 – 22)	
Corridor Photos 20 – 22 Plate 3	<p>Segment 5 begins at Cactus Avenue and continues south encompassing the proposed Ramona Station to Cajalco Road. General household trash was observed at various locations along the Corridor. Drainage channels were also observed at various locations along Segment 5. An approximate 10-foot square area of dark staining was observed north of the Cajalco Expressway on the west side of the railroad tracks and immediately south of a siding. An irrigation standpipe was observed south of the Cajalco Expressway and south of the proposed Ramona Station. Rail cars were observed on a railroad spur that was branching from the main railroad tracks within the Corridor to the south of an existing construction facility. Stockpiled soil was observed along the Corridor south of Oleander Avenue.</p> <p>A high-pressure gas line (evidenced by pipeline markers) was shown in Segment 5 at the approximate location of the adjacent sewage plant north of Oleander Avenue. Another high-pressure gas line was shown crossing the Corridor immediately north of Van Buren Boulevard. In this same area the March Air Field Museum was observed east of I-215.</p> <p>With the exception of the dark stained soil described above, evidence of discolored soil or water, stressed vegetation, ASTs, USTs, pits, ponds or lagoons were not observed along Segment 5 at the time of the Site reconnaissance.</p>
Proposed Ramona Station Plate 3	<p>The proposed Ramona Station consists of vacant land with low shrubs. Evidence of discolored soil or water, stressed vegetation, ASTs, USTs, pits, ponds, or lagoons were not observed at the proposed Ramona Station during the Site reconnaissance.</p>

**Table 6 (Continued)
Site Observations**

Segment, Appendix B Photo, and Plate Reference	Observations
Segment 6 – Cajalco Road to 4th Street (Highway 74) (Photo 23 –30)	
Corridor Photos 23 – 30 Plate 4	<p>Segment 6 begins at Cajalco Road, continues south to 4th Street (Highway 74), and includes the proposed Downtown Perris Station. General household trash was observed at various locations along the segment. Drainage channels were also observed at various locations along Segment 6. A railroad car was observed on the railroad tracks to the north of Orange Avenue. Three pole-mounted transformers were observed along the west side of the segment immediately north of Orange Avenue. No leaking or staining was observed on or beneath the transformers. Stockpiled soil, which appeared to be associated with adjacent construction activities, was observed along the west side of the segment north of Nuevo Road.</p> <p>Evidence of discolored soil or water, stressed vegetation, ASTs, USTs, pits, ponds, or lagoons were not observed along the Segment 6 alignment during the Site reconnaissance. Observations of the proposed Downtown Perris Station are summarized below.</p>
Proposed Downtown Perris Station Photo 31 Plate 4	<p>The proposed Downtown Perris Station is situated on four parcels of land that are owned by the Riverside County Transportation Commission (RCTC). Two vacant structures were observed on the southwestern parcel. Only a portion of the southernmost structure appears to be located on this southwestern parcel of the proposed Downtown Perris Station, and the building was labeled as a hardware store. The interior of this building was not accessible at the time of the Site reconnaissance. A second building was observed north of the hardware store. A rail spur traversed the southwestern parcel along the east side of this building.</p> <p>An area of lower elevation (appears as drainage) was observed on the northwestern parcel of the proposed Downtown Perris Station. The northeastern parcel was vacant. The southeastern parcel was vacant. A railroad spur and three stockpiles of soil were observed on the southeastern parcel of the proposed Downtown Perris Station. No evidence of staining was observed and no odors noted in the stockpiled soil. The origin of the soil is unknown to Kleinfelder.</p> <p>Evidence of discolored soil or water, stressed vegetation, ASTs, USTs, pits, ponds, or lagoons were not observed at the proposed Downtown Perris Station during the Site reconnaissance.</p>

**Table 6 (Continued)
Site Observations**

Segment, Appendix B Photo, and Plate Reference	Observations
Segment 7 – 4th Street (Highway 74) to Interstate 215 (Photos 31 –38)	
Corridor Photos 32 – 35 and 38 Plate 4	<p>Segment 7 begins at Highway 74 and continues south to 8th Street, where it continues southeast to I-215. General household trash was observed at various locations along the Corridor. Drainage channels were also observed at various locations along the Segment 7 alignment. Dark staining was observed on a wall to an adjoining facility immediately east of Ellis Avenue. The staining also appeared on the ground, consisting of an area of approximately 3 by 5 feet, within the segment near the base of the wall. A little further east of this staining was a stockpile of soil and a trench. The trench appeared to be a deliberately made trench that originated from the adjoining property to the north (Global Plastics), and extended onto the railroad alignment toward the east. The soil within the trench appeared to be grayish in color and different from the surrounding soil. Broken plastic was observed in this area of the Corridor. An AST was observed as containing dyed-diesel fuel; no staining was observed on the ground around the AST. Open land to the south of this area is part of the airfield associated with Perris Valley Airport.</p> <p>With the exception of the staining in the soil and one AST described above, evidence of discolored water, stressed vegetation, USTs, other ASTs, pits, ponds, or lagoons were not observed along the Segment 7 alignment during the site reconnaissance. Observations of the proposed South Perris Station are summarized below.</p>
Proposed South Perris Station Photos 36 – 37 Plate 4	<p>The proposed South Perris Station consists of vacant land covered with vegetation. Evidence of discolored soil or water, stressed vegetation, hazardous materials, ASTs, USTs, pits, ponds, or lagoons were not observed at the segment during the Site reconnaissance.</p>

5.0 RECORDS REVIEW

The purpose of the records review is to obtain and review records that would help to evaluate whether properties within the Study Area have been identified as having experienced significant unauthorized releases of hazardous substances or other events with potentially adverse environmental effects. The EDR database search results are presented in [Appendix C](#), and regulatory file copies are presented in [Appendix D](#). Properties of potential environmental concern based on a review of available records and a review of previous assessments are summarized in [Table 8](#).

5.1 STANDARD ENVIRONMENTAL RECORD SOURCES

Federal, state and local regulatory agencies publish databases or "lists" of businesses and properties that handle hazardous materials or hazardous waste, or are the known location of a release of hazardous substances to soil and/or groundwater. These databases are available for review and/or purchase at the regulatory agencies, or the information may be obtained through a commercial database service. Kleinfelder contracted a commercial database service, EDR, of Milford, Connecticut to perform the government database search for listings within the prescribed search distances. EDR compiles the information into a report which includes permits, historical records, and location information noted as Focus Map IDs. A description of database listings, associated acronyms, types of information contained in each of the databases reviewed, and the agency responsible for compiling the data is also included in the EDR Corridor Study Report, presented in full, in [Appendix C](#). The number of listings presented by EDR for each database searched is summarized in [Table 7](#) below:

**Table 7
Records Reviewed and Number of Listings**

Federal	Total Listings	State and Local	Total Listings
NPL	1	HIST Cal-Sites	0
Proposed NPL	0	CA BOND EXP. PLAN	0
Delisted NPL	0	SCH	1
NPL LIENS	0	Toxic Pits	0
CERCLIS	1	SWF/LF	1
CERC-NFRAP	0	CA WDS	4
LIENS 2	0	WMUDS/SWAT	1
CORRACTS	0	Cortese	5
RCRA-TSDF	0	SWRCY	0
RCRA-LQG	1	LUST	17
RCRA-SQG	17	CA FID UST	11
RCRA-CESQG	0	SLIC	0
RCRA-NonGen	1	UST	12
US ENG CONTROLS	1	HIST UST	13
US INST CONTROL	1	AST	2
ERNS	11	LIENS	0
HMIRS	0	SWEEPS UST	11
DOT OPS	0	CHMIRS	17
US CDL	1	Notify 65	0
US BROWNFIELDS	0	DEED	0
DOD	1	VCP	0
FUDS	0	DRYCLEANERS	1
LUCIS	0	WIP	0
CONSENT	0	CDL	7
ROD	1	RESPONSE	0
UMTRA	0	HAZNET	70
ODI	0	AIRS	16
DEBRIS REGION 9	0	HAULERS	1
MINES	1	ENVIROSTOR	1
TRIS	0	Tribal	Total Listings
TSCA	0	INDIAN RESERV	0
FTTS	1	INDIAN ODI	0
HIST FITTS	1	INDIAN LUST	0
SSTS	0	INDIAN VCP	0
ICIS	0	INDIAN UST	0
PADS	0	EDR Proprietary Records	Total Listings
MLTS	0	Manufactured Gas Plants	0
RADINFO	0		
FINDS	26		
RAATS	0		

EDR utilizes a geographical information system to plot the locations of facilities that are listed in regulatory databases that had reported spills, leaks, or other incidents. Kleinfelder reviewed this information to help establish if the Corridor, proposed connector segment, proposed stations, or nearby properties within the Study Area have been included in the noted databases and lists. The EDR listings, as available, include the type of hazardous material, the quantity, and regulatory agency involved. Kleinfelder reviewed each of the listings to assess whether these properties would likely pose an environmental concern to the Corridor, proposed connector segment, and proposed stations (Site). Numerous listings on the EDR database were found not to pose an environmental concern based on the following, or a combination thereof:

- The listed property was located at a distance where, in Kleinfelder's opinion, the facility would unlikely have environmentally impacted the Site.
- The listed property was located in a downgradient or crossgradient direction from the Site at a distance that would have unlikely posed an environmental impact.
- The listed property was identified in low-hazardous risk databases (i.e., UST, HAZNET, SQG databases) not on or immediately adjoining the Site and were not listed in other databases and/or was not listed as having any associated violations. The listing of a facility on these databases is not indicative of an unauthorized release.
- The listing of the facility suggested a short-term release had occurred (i.e., from incidental traffic accidents, or chemicals from illegal drug labs found at residences) with an associated hazardous materials cleanup.
- The quantity of the substances released was not considered to cause a significant environmental concern to the Site.
- The listing indicates that the reported release affected soil only that were not or immediately adjoining the Site.

Based on these criteria, Kleinfelder did not further evaluate these properties, and therefore, these properties are not discussed. The remaining properties, listed in [Table 8](#), were reviewed by Kleinfelder to assess whether properties within close proximity to the Site may have had significant environmental releases or incidents which may have impacted the Site. These listings, which indicate a significant release had occurred and/or which remain as an open case with the appropriate regulatory agency, were further assessed by Kleinfelder by requesting a file review with the appropriate

regulatory agency. Further evaluation was made as to whether the indicated release may be an environmental concern to the Site. A summary of the reviewed regulatory agency files and properties of concern are included in [Section 5.2](#).

5.2 ADDITIONAL AGENCY ENVIRONMENTAL RECORDS

The following additional sources of environmental records were reviewed during this HMCS. Local regulatory agencies were contacted for reasonably ascertainable and practically reviewable documentation regarding potential environment impacts present at the Site and adjoining facilities. Information/responses from the agencies contacted are included in [Appendix D](#) and a summary of the information reviewed is presented below.

5.2.1 South Coast Air Quality Management District

Kleinfelder visited the South Coast Air Quality Management District (SCAQMD) web page (www.aqmd.gov) for information regarding permits, equipment type, and notice of violation (NOV) files for properties within the Study Area. A search of available facilities within the Study Area was conducted by address and street name within the Study Area. Numerous listings for facilities within the Study Area were reviewed, but only those facilities with NOVs (not related to administrative violations) are discussed below. The following is a summary of the information reviewed. Copies of the available records are included in [Appendix D](#).

5.2.1.1 Segment 1 – Spring Street to Columbia Avenue

- **990 Palmyrita Avenue, Riverside, California (T&L Powder Coating)** – Permits to Operate were issued to T&L Powder Coating on June 8, 2001 for operation of a natural gas powder-coating oven (Permit No. F40580), and an approximately 10-foot wide by 10-foot long by 10-foot high powder coating spray booth enclosure (Permit No. F40579). The permits are listed as inactive, but the facility is listed as active. Based on a site reconnaissance by Kleinfelder on April 23, 2008, the building at this address was vacant. No violations or notices to comply were reported for this facility.
- **990 Palmyrita Avenue, Riverside, California (Uarco, Inc.)** – Permits to Operate were granted to Uarco, Inc. on July 23, 1992 for operation of two natural gas boilers (Permit Nos. D59177 and D59178), two flexographic heat set printing presses

(Permit Nos. D59081 and D59082), and four air-dry letter printing presses (Permit Nos. D59173, D59174, D59175, and D59176). In addition, three Permits to Operate were granted for the operation of three miscellaneous air-dry printing presses (Permits D73935 and D73944, issued June 4, 1993; and D84809 dated August 19, 1994). Each of the reported permits was listed as inactive. No violations or notices to comply were reported for this facility.

5.2.1.2 Segment 5 – Cactus Avenue to Cajalco Road

- **1569 Nandina Avenue, Perris, California (Freeway Building Materials)** – Currently, no permitted equipment is listed for this facility. One NO-V was issued on August 27, 1998 related to failure to notify SCAQMD of UST excavation activities. The NOV was corrected and the case closed.

5.2.1.3 Segment 7 – 4th Street (Highway 74) to Interstate 215

- **1301 Case Road, Perris, California (EMWD; Perris Valley Water Reclamation Facility)** – Active permits related to waste water treatment equipment, emergency generators, boilers, and gasoline dispensing equipment were listed for this facility. Two NOVs were listed. The first was related to fugitive dust from disturbed surface area in the atmosphere beyond the property line in August 1999. The second was related to a modification of a boiler associated with the waste treatment equipment in September 1999. Both violations were corrected and the case closed.
- **336 E. Ellis Avenue, Perris, California (Dick Evans Transportation, Inc.)** – Currently, no permitted equipment is listed for this facility. However, on January 10, 2003, a NOV was issued to this facility related to use of improper parts cleaning solvent. The violation was corrected as of February 18, 2003.

5.2.2 City of Riverside Building Department

Kleinfelder visited the City of Riverside Building Department website to obtain available permit information for known site addresses only. Permits were available for review for the proposed Palmyrita Station parcel address of 990 Palmyrita Avenue, Riverside, California. The following is a summary of the documents reviewed. Copies are included in [Appendix D](#).

- Application for Building Permit issued to Uarco for the construction of a new commercial building, granted on February 19, 1963. The permit indicates the building has a basement.
- Permit to Connect to Public Sewer was issued for the Site, dated March 8, 1963.
- Building permit for an addition of a foundation only, dated July 8, 1977.
- An inspection record dated September 6, 1977 indicates an addition of an approximately 48,000 square foot industrial building.
- A mechanical permit was issued to Uarco Inc for the use of a boiler.

5.2.3 Riverside County Department of Environmental Health

Records were reviewed at the Riverside County Department of Environmental Health (RCDEH) for properties identified in our records search, which potentially represent an environmental concern to the Corridor, proposed connector, and proposed stations. Although records were requested and files exist at the RCDEH, the following files were not able to be located by RCDEH staff: 610 Meyer Drive, MARB; 1301 Case Road (Proposition 65 disclosure only in file per records description); 13260 Highway 395, Moreno Valley; 1495 Columbia Avenue (Proposition 65 disclosure only in file per records description), and 2 South D Street. The following is a summary of the documents that were available and were reviewed.

5.2.3.1 *Segment 1 – Spring Street to Columbia Avenue*

- **990 Palmyrita Avenue, Riverside, California (Uarco, Inc.)** - An “Application for Permit to Operate Underground Storage Tank” was reviewed. According to this application, Uarco Inc. installed a 12,000-gallon capacity gasoline UST in 1963. An Underground Storage Tank Closure/Abandonment Application, dated May 18, 1987, indicated that Uarco Inc. would remove a single-wall UST containing oil that was no longer in use. According to a sketch, the UST was located near the northwestern corner of the building, approximately 10 feet south of the transformer and 25 feet west of the building. A remote fill port is shown east of the UST, along the western wall of the building. Two ASTs are shown directly north of the fill port, against the west side of the building. Contents of ASTs are not noted. A RCDEH Daily Field Report dated June 11, 1987 indicated that upon removal of the UST, the backfill material had a strong odor. The inspector’s notes indicated that aeration on Site would be permitted. Analytical results for a soil sample collected on June 11, 1987

indicated no detectable concentrations of Total Recoverable Petroleum Hydrocarbons (TRPH) using US EPA Method 418.1.

Laboratory reports from Edward S. Babcock & Sons, Inc., dated February 27, 1989, showed soil samples collected on February 14, 1989 at Uarco Inc. Samples designated as “990 SW Corner Sample soil at 3 ½ feet”, “Northern tank northern sample at 4 feet”, “Northern tank southern sample at 4 feet”, and “Right tank (southern) soil @ 4 feet” were analyzed by EPA 418.1, and were reported to contain between 30 milligrams per kilogram (mg/kg) and 80 mg/kg TRPH. Since there is no further information in the file regarding this sampling event, it is unclear specifically the purpose or locations of the samples. However, based on the description of the samples and a review of the 1987 UST permit drawing, it appears that these samples may have been collected near the two ASTs depicted in that drawing. Additionally, a Weck Laboratories, Inc., Laboratory Report dated March 31, 1989 was present in the files for soil samples collected on March 24, 1989 at Uarco. Two soil samples analyzed by EPA Method 418.1 did not contain concentrations of TRPH above laboratory detection limits of 4 mg/kg. No other information was present in the files regarding purpose or location of the samples.

A RCDEH Letter dated May 21, 1989 was also in the file indicating Uarco, Inc. has met RCDEH requirements “to be considered non-contaminated” based on soil results. No other information is present in this letter regarding specific locations or particulars regarding reference to USTs, ASTs, other areas, or the property as a whole.

5.2.3.2 *Segment 4 –Box Springs Road (Fair Isle Drive) to Cactus Avenue*

- **20775 Box Springs Road, Riverside, California (Shell Service Station)** – During a Caltrans property acquisition evaluation, a subsurface investigation was conducted at this facility in June 2002 and it was discovered that a release had occurred from on-site USTs. In the most recent Quarterly Status and Ground and Surface Water Monitoring Report (First Quarter 2008) dated April 14, 2008, submitted by Wayne Perry, Inc., it was indicated that this property is currently a graded and curbed Caltrans highway right-of-way that was formerly occupied by a Shell Service Station. Three 12,000-gallon fiberglass USTs, three dispenser islands, a station building, and a car wash were demolished and removed from the property in December 2003. Site assessment activities, soil remediation and groundwater remediation have

occurred at this location. Samples were collected from off-site groundwater monitoring wells and a stream on February 29, 2008. Depth to groundwater ranged between 8.62 and 24.85 feet bgs and groundwater flow was to the northwest. No Total Petroleum Hydrocarbons (TPH) as gasoline, Benzene, Toluene, Ethylbenzene, and Xylenes (BTEX), fuel oxygenates, or other Volatile Organic Compounds (VOCs) were detected in the four off-site wells and creek samples to the east and northeast of the property (towards the Corridor).

5.2.3.3 Segment 5 – Cactus Avenue to Cajalco Road

- **1569 Nandina Avenue, Perris, California (Freeway Building Materials)** – This facility is located east of the Corridor along Segment 5, beyond Interstate 215. A service station operated at this facility from an unknown period of time to approximately 1998. Five USTs were removed from the property in 1998 and contamination was discovered at that time. Site assessment and groundwater monitoring activities have been ongoing at this facility. A recent groundwater monitoring report indicates that at the time of the last groundwater sampling event (December 6, 2007), the water level ranged from 19.17 to 23.64 feet bgs and groundwater flow was to the southeast (away from the Corridor). TPH as gasoline was detected up to 3,200 parts per billion (ppb), TPH as diesel up to 65,000 ppb, benzene up to 28,000 ppb, Methyl *tert*-butyl ether (MtBE) up to 2,700 ppb, Diisopropyl ether (DIPE) at 8.2 ppb, *tert*-Amyl Methyl Ether (*t*AME) up to 360 ppb, and naphthalene up to 370 ppb. Full-scale remediation is expected using a soil vapor extraction system once the City of Perris approves it. According to the Pilot Test and Interim Remedial Action Plan (Geo-Cal, Inc., August 31, 2004) the bedrock beneath this facility slopes steeply to the north and east, and the groundwater flow follows the bedrock surface to the east. Contamination is migrating to the southeast parallel to the inferred groundwater flow direction.

5.2.3.4 Segment 6 – Cajalco Road to 4th Street (Highway 74)

- **24 'D' Street, Perris, California (Perris Auto Repair Center)** – Hazardous Materials Management Permits were issued to Perris Auto Repair Center from 1993 through 2005. According to a Hazardous Waste Generator Inspection Report dated May 21, 1997, the inspector indicated that the facility needed to secure compressed gas cylinders and needed to label the waste oil storage tank. The waste oil tank was reported as in the early stages of developing a leak. An UST Permit for Closure

dated December 9, 2002 was issued for the removal of two USTs. The facility was listed as having two gasoline USTs and an oil UST. Heavy staining was observed beneath the northern ends of USTs 2 and 4 greater than 6 feet bgs. The RCDEH file indicated that the case was referred to the Santa Ana Regional Water Quality Control Board (SARWQCB).

- **101 South 'D' Street, Perris, California (B & D Service)** – Information reviewed indicated that three USTs were removed from the property in April 2000. Groundwater was reported at approximately 60 feet bgs and discolored soil was observed. According to a June 20, 2000 letter from the RCDEH to Mr. Baljit Sambi, RCDEH indicated that removal of three USTs at the property is complete. The final soil sample test results beneath the USTs indicated petroleum hydrocarbon concentrations below action levels. RCDEH indicated that no further action was required.
- **102 South 'D' Street, Perris, CA (B & D Service [see 101 South 'D' Street also])** – According to a March 23, 2000 letter from RCDEH, an inspection was conducted on March 16, 2000. Although the owner was not present, several drums containing waste oil were observed without lids. Oil filters were scattered throughout the facility. Waste oil was observed to be spilled in various areas of the property with large amounts of waste oil spilled on the northern and western fence lines. It was indicated that because of the amount of oil spilled, the fence had a coating of oil blocking its openings.
- **210 West San Jacinto Avenue, Perris, California (County of Riverside, dba Perris Fire Station)** – Hazardous Materials Management Permits were issued for the fire station at this location from 1995 through 2007. According to information reviewed, this facility formerly maintained a 500-gallon gasoline UST and a 1,000-gallon waste oil UST that were removed in September 1987. An application was also reviewed which indicated the facility maintained a 1,000-gallon gasoline UST, a 500-gallon waste oil UST, and a 2,000-gallon gasoline UST. In addition, this facility maintained 5,000-gallon gasoline and diesel USTs. An October 28, 2006 Underground Storage Tank Closure Report indicated that the USTs were located between a mechanics shop and an aboveground storage tank at the facility. Discolored soil was discovered at a depth of 13 feet bgs beneath the USTs and at 3 feet below associated dispensers. The EDR report indicated an impact to the drinking water aquifer due to the release from the facility. Records were not

available at the SARWQCB for review; however, according to Ms. Rose Scott of the SARWQCB, an attempt to close the case was made and the case is undergoing a peer review. Ms. Scott recalled that additional assessment at this location did not reach groundwater, based on her knowledge as the regulatory agency case worker for this Site.

5.2.3.5 Segment 7 – 4th Street (Highway 74) to Interstate 215

- **403 North 'D' Street, Perris, California (ARCO Products Company)** – This property is located at the southeast corner of 4th Street and 'D' Street in downtown Perris. According to information reviewed, SECOR submitted a January 15, 1990 letter to Atlantic Richfield Company (ARCO) Products Company regarding the removal of one 550-gallon waste oil UST and four USTs ranging in size from 4,000 gallons to 6,000 gallons. Contamination was detected and remediation activities commenced. Groundwater during remediation activities was encountered between 50 and 61 feet bgs, and groundwater flow was reported to the northeast (away from the Corridor). ARCO submitted a Final Quarterly Report for groundwater monitoring activities (Fourth Quarter 1997 dated January 15, 1998). The current phase of project at that time was listed as closed. A No Further Action Letter was issued to the facility by RCDEH in October 1997.

ARCO filed an application dated April 1, 2003 to remove four 10,000-gallon gasoline USTs. An UST removal report was submitted by Delta Environmental Consultants dated June 20, 2003 and indicated that groundwater was encountered between 50 and 55 feet bgs and groundwater flowed to the northeast. An Underground Storage Tank Unauthorized Release Report was submitted on June 10, 2003.

- **1301 Case Road, Perris, California (EMWD Perris Valley RWRf)** – Kleinfelder requested records for this facility based on its proximity to the Corridor, as noted during our Site reconnaissance. As of June 1, 2004, the facility was listed as not maintaining USTs. The facility was listed as having petroleum ASTs and hazardous materials greater than 55 gallons. The facility was also listed as a generator of hazardous waste. Chemicals used at this facility include: aluminum sulfate solution (Alum); argon; calcium hypchlorite mixture (Oxidizer); chlorine; solvents (distillates and alkylbenzenes); diesel fuel No. 2; Floc-cite (non-hazardous); unleaded regular gasoline; lubricating grease; helium; Hotsy Soap; hydrated lime; hydrochloric acid solution; hydrogen peroxide solution; lubricating oil; Clarifloc polymer; sludge

thickener; liquefied petroleum gas; Simple Green cleaner/degreaser; sodium bisulfite solution; sodium hydroxide solution; bleach; SoilKlean enzymes; used oil; and Zymetech cleaner/deodorant.

The facility reportedly had USTs that were installed in 1982. An Underground Storage Tank Closure Inspection Report for the EMWD Perris Pumping Plant dated November 17, 1994 indicates that a fiberglass diesel oil UST was removed. No significant releases or violations were reported at this facility.

5.2.4 Santa Ana Regional Water Quality Control Board

Records were reviewed at the SARWQCB for properties, which potentially represent an environmental concern to the Corridor, proposed connector, and proposed stations. The following is a summary of the documents reviewed.

5.2.4.1 Segment 4 – Box Springs Road (Fair Isle Drive) to Cactus Avenue

- **20775 Box Springs Road, Riverside, California (Shell Service Station)** – This property is located west of the Corridor and is oriented in a northwest to southeast direction. Three 12,000-gallon USTs, associated dispenser islands, a station building, and a car wash were removed from this property in December 2003. Impacted soil was removed from beneath the former USTs and associated piping on March 31, 2004. An additional UST and associated piping was discovered during demolition activities beneath the station building. Excavated soil was disposed off the property. Groundwater monitoring wells were subsequently installed at the former service station. Analytical results of soil samples collected during installation of vadose zone wells suggested the majority of soil impacts are in the saturated zone and are likely a result of the dissolved-phase plume. Groundwater direction was found to flow in a northwest direction, crossgradient to the Corridor. Recent results from groundwater sampling performed in May 2006 indicated the presence of dissolved phase TPH as gasoline (up to 7,100 micrograms per liter [$\mu\text{g/L}$]), M tBE ; (up to 6,100 $\mu\text{g/L}$), *tert*-Butyl alcohol (*tBA*) (up to 31,000 $\mu\text{g/L}$), and ethanol (250 $\mu\text{g/L}$). Additional wells were installed in June 2007. A soil vapor extraction system operated continuously between July 2004 and May 2005 at this property. Contamination remains in the area downgradient of the property and crossgradient of the Corridor.

- **13260 Highway 215 (Old 215 Frontage Road/Valley Springs Parkway) Shell Service Station** - Five USTs, including two 2,000-gallon, one 3,000-gallon, and one 8,000-gallon gasoline USTs, and one 500-gallon waste oil UST, were removed in February 1989. Soil assessments were conducted between April 1989 and March 1995, and groundwater sampling began in March 1995. Western Environmental Engineers Co. (WEECO) conducted a soil assessment in April 2007 and installed two monitoring wells at that time. TPH as gasoline, BTEX, and fuel oxygenates were not detected in samples. Routine quarterly groundwater sampling was conducted by WEECO (First Quarter 2008 Groundwater Monitoring and Progress Report, March 27, 2008). Maximum contaminant concentrations were detected in groundwater samples from well MW-3 located at the northwestern corner of the property (closest to the Corridor) for TPH as gasoline at 21,700 ug/L, benzene at 3,789 ug/L, toluene at 41 ug/L, ethylbenzene at 95 ug/L, xylenes at 54 ug/L, and DIPE at 664 ug/L. MfBE, EtBE, tAME, and tBA were not detected. Groundwater was estimated flowing to the northwest. Liquid-phase hydrocarbon was not found in the wells during this event. Historically hydrocarbons have increased since 1995. Groundwater flow is toward the Corridor and impacts have not been delineated.

5.2.4.2 Segment 5 – Cactus Avenue to Cajalco Road

- **610 Meyer Drive, March Air Reserve Base (MARB), California** – Current plume maps show boundaries for contaminated areas of the MARB, formerly MARB, to the west and south of the Corridor. Remediation and monitoring is ongoing at various locations associated with the MARB to address source areas. Based on Operable Unit Site locations, MARB Sites 19, 22, 24, and 43 were identified as being within 500 feet of the Study Area and are part of the Operable Unit 2, ROD site. The following four sites are part of the closure side of the OU2 ROD, which was completed in April 2004:
 - *Site 19: West March Sludge Drying Beds* - No remedial action required. Contamination from sludge remains above unrestricted levels.
 - *Site 22: Landfill No. 2, Main Base* - Site could not be found. No evidence of waste was identified.
 - *Site 24: Landfill No. 1, West March, Incinerator Area* - Waste and soil was excavated in 1995 and placed at Site 6. No contamination remains above unrestricted levels at the site.

- *Site 43: Former Automotive Maintenance Area/ Cal Trans UST Site* -Removal and disposal of fuel-contaminated soil is complete. Removed from the CERCLA process and site has been closed by RWQCB.

5.2.4.3 Segment 6 – Cajalco Road to 4th Street (Highway 74)

- **102 South 'D' Street (B&D Automotive)** - Four USTs were removed in February 1994. Concentrations of VOCs from UST soil samples ranged from non-detect to 7,600 mg/kg. An initial study was filed with City of Perris. Based on reports and interviews, neither Riverside County Hazardous Materials Division nor the SARWQCB has accepted the validity of the preliminary site assessment work plan submitted. Further, the agency lead has not recommended the site for closure. The City of Perris Planning Commission finds that since the project shall be conditioned to conduct the requisite studies and perform any recommended remediation of measures prescribed by the State Agency, that the hazard can be reduced to a less than significant level.
- **24 South 'D' Street (Perris Auto Repair)** - Five USTs with unknown contents were removed in December 1992 (three 1,000-gallon, one 4,000-gallon, and one 6,000-gallon). A formal UST Tank Closure Report was not prepared and the content of the USTs were not documented. Twelve soil samples were collected during the removal of the USTs. Maximum concentrations included TPH as gasoline (5,700 parts per million [ppm]), TRPH (30 ppm), toluene (0.890 ppm), ethylbenzene (12 ppm), and total xylenes (61 ppm). A work plan to complete four soil borings (JB Services, Work Plan, 1993) as prepared; however, the work does not appear to have been completed. From April 1993 through August 2005, the RCDEH sent several letters to Mr. Nemr Eid (responsible party) requesting full characterization of impacted soil and possibly groundwater. Mr. Eid did not meet the requests. The RCDEH transferred the case to the SARWQCB in August 2005. SARWQCB staff met with Mr. Eid and sent several letters; however, no site assessment was completed.

The City of Perris recently purchased the parcel for redevelopment. During a visit to the property by the City of Perris on March 23, 2008, 24 unlabeled 55-gallon drums were observed (these drums were observed by Kleinfelder personnel during the April 2008 Site Reconnaissance; see [Appendix B](#), Photo 29). In a letter from SARWQCB to Mr. Michael McDermott of the City of Perris Office of Real Estate Services, dated April

11, 2008, a work plan for site assessment at the property was due by May 9, 2008. At the time of our records review, this work plan was not yet submitted.

5.2.4.4 Segment 7 – 4th Street (Highway 74) to Interstate 215

- **403 North 'D' Street, Perris, California (AM/PM™ Mini-mart)** – Property is located on southeast corner of intersection of 4th Street and 'D' Street. Based on the reviewed information, from July 1990 to June 1996, the facility was upgraded, site assessment and remedial activities took place and the RCDEH issued a no further action letter dated October 29, 1997. During site demolition in May 2003, four 10,000-gallon gasoline USTs, two dispenser islands, and associated piping were removed. Assessment and remediation were conducted from November 2004 and continues through the present. SECOR International Inc. submitted a Well Installation and Dual-Phase Extraction Event work plan on February 25, 2008 for this property. However, since groundwater is expected to flow in a northeasterly direction, away from the Corridor, this facility is not considered an environmental concern to Segment 6.

5.2.5 State Fire Marshall, Pipeline Safety Office

A request was submitted to the California State Fire Marshal (CSFM) for information regarding potential pipelines in the vicinity of the Site. According to the CSFM, a 6-inch (refined product) pipeline owned by Kinder Morgan is located in the vicinity of the Corridor, proposed connector, and proposed stations.

5.2.6 Kinder Morgan Energy Partners, L.P.

At the time of Kleinfelder's Site reconnaissance, Kinder Morgan pipeline markers were observed at various locations to the northeast of the intersection of Villa Street and the railroad tracks, and at numerous locations along the Corridor. Kleinfelder submitted a written request to Mr. Don Quinn of Kinder Morgan requesting specific information pertaining to the Site and whether releases have occurred along the pipeline in the vicinity of the Site. In a June 5, 2008 letter from Mr. Don Quinn, Manager of Pipeline Relations, Mr. Quinn provided pipeline alignment maps for Kinder Morgan's high-pressure petroleum products pipelines in the vicinity of the Corridor. According to the letter, the pipeline is a 6-inch pipeline. Mr. Quinn indicated that there are no known environmental issues concerning the pipeline.

5.2.7 Questar Corporation

Kleinfelder spoke with Mr. Jim Dotts of Questar Corporation on August 11, 2008 to obtain additional information regarding the pipeline that is located in the vicinity of the Corridor, south of Alessandro Boulevard. According to Mr. Dotts, the pipeline traverses generally in an east-west direction, but runs along the railroad tracks for approximately 600 feet before crossing the railroad toward I-215. Mr. Dotts indicated the pipeline formerly contained crude oil approximately 10 years ago. The pipeline was planned for use as a natural gas pipeline, but Questar may be selling the pipeline. In the interim, the pipeline currently contains nitrogen. Mr. Dotts is not aware of any incidences reported along the pipeline. He also indicated that a pipeline integrity test was performed of the pipeline and to his knowledge the integrity of the pipeline was intact.

5.2.8 Perris Building Department

Kleinfelder visited the Riverside County Land Information System (RCLIS) website for address information pertaining to the parcels at and in the vicinity of the proposed Downtown Perris Station containing observed structures. According to the RCLIS, no street addresses are available for the parcels with the observed structures. Kleinfelder then contacted the City of Perris Building & Safety Department and spoke to Ms. Kim Williford (951-443-1029) for building permit information related to these structures based on the APNs provided. According to Ms. Williford, permits cannot be searched by APN, but rather need to be researched by street address. During a visit to the City of Perris Building & Safety Department, representatives indicated that the structures located at the proposed Downtown Perris Station were exempt from obtaining building permits. No other information was provided.

An online search for Ace Hardware store in Perris to obtain a street address was conducted. An Ace Hardware store is listed at 180 West 4th Street. A further request for information pertaining to this address was requested via telephone to Ms. Williford. However, a response has not yet been received.

5.3 PREVIOUS ENVIRONMENTAL REPORTS

Previous environmental reports were provided to Kleinfelder regarding properties in the vicinity of the Site. A summary of the previous reports follows.

5.3.1 Segments 1, 2, 3, 4, 5, and 6 (partial)

- **Converse Consultants Inland Empire (CCIE), *Phase I Preliminary Site Assessment, San Jacinto Subdivision, 16 Mile Railroad Alignment, Highgrove to Perris, California, March 1, 1993.*** A previous Phase I site assessment was provided for 16 miles of the AT&SF railroad alignment from Pico Street in Grand Terrace to Orange Avenue, north of Perris. Alignment properties with the presence of hazardous materials in either soil or groundwater were identified within an area of 1,000 feet on either side of the alignment. As addresses were not provided for the alignment, several agency records were not available for review. At the time of CCIE's report, the subject property was used as a railway alignment with railroad tracks on crushed rock aggregate base (ballast). The rails were supported by creosote-treated railroad ties, embedded into the ballast.

Twelve properties were identified by CCIE as having the potential to impact the alignment based on environmental concerns. Four of the twelve properties, which were located on MAFB, now MARB were considered as potential for containing significant concentrations of hazardous materials; however, they were designated on the NPL list and characterization was underway. Additionally, five of the 12 properties were outside of the search area corresponding with the Site area for the subject report.

One property is already listed in Segment 1 of this report under the address of 800 Iowa Avenue, Riverside, California. The remaining two properties were described as a closed gasoline station at 381 Blaine Avenue, and Bell Grain and Milling at 1791 Highway 215. Both were classified as low and moderate potential for environmental impact, respectively, with potential sources in soil and groundwater. These two properties were not listed in the current EDR report for the Site.

5.3.2 Segment 4 – Box Springs Road (Fair Isle Drive) to Cactus Avenue

- **Ninyo & Moore, *Phase I Environmental Site Assessment, Proposed Alessandro Station, Riverside County, California, December 22, 2005.*** A previous Phase I site assessment was provided for the proposed Alessandro Station, which was considered for purchase by RCTC. The property is located west of I-215, near the southeast corner of East Alessandro Boulevard and Brown Street (previously

referenced as Meridian Parkway). At the time of Ninyo & Moore's report, the property was vacant land.

Ninyo & Moore noted the property had been vacant land since 1953 and three elongated buildings in the vicinity that are believed to have been used for warehousing purposes by the nearby MARB facility. Due to possible uses and lack of listing in the regulatory databases, these off-site buildings would not be considered a potential environmental condition to the property. Although the MARB facility is located approximately 1 mile southeast of the property, due to the distance and direction of groundwater flow, this facility was not considered a potential environmental condition. Ninyo & Moore did not identify any potential environmental conditions and did not recommend further investigations.

- **Bureau Veritas North America, Inc. (Bureau Veritas), *Phase II Site Investigation Report, Proposed Alessandro Station, Meridian Parkway, near East Alessandro Boulevard, Riverside County, California, January 18, 2008.*** A previous Phase II Site Investigation Report was provided to Kleinfelder for the proposed Alessandro Station (see location description in the Phase I summary above). At the time of Bureau Veritas's report, the property was vacant land.

Four soil borings were advanced to approximately 20 feet bgs for evaluating potential subsurface impacts associated with landfill materials that were reportedly buried beneath the northeastern portion of the proposed Alessandro Station property. Soil samples from approximately 5 feet bgs were for laboratory analysis. Samples did not contain detectable concentrations of TPH as diesel fuel and gasoline, VOCs, and SVOCs. Some Title 22 metals were detected in soil samples; however, concentrations were all below EPA Region 9 Preliminary Remediation Goals (PRGs). A geophysical survey with ground penetrating radar did not reveal evidence of landfill material or buried metallic debris. Based on these results, Bureau Veritas concluded that landfill materials did not appear to be present beneath the northeastern portion of the property.

5.3.3 Segments 4 and 5

- **Ninyo & Moore, *Phase I Environmental Site Assessment, Caltrans Parcel Numbers 7731-01-01 through 7731-3, Riverside County, California, February 23, 2006.*** A previous Phase I site assessment was provided for several Caltrans

parcels in an unincorporated area of Riverside County, which were considered for purchase by RCTC. The Caltrans parcel numbers were referred as to APNs 7730-01-01, 7731-1-A, 7731-2, and 7731-3. At the time of Ninyo & Moore's report, most of the property was vacant land. The southern portion of the property was occupied by a portion of I-215.

The property contained a railroad track from at least 1953 through at least 1980. Sometime between 1980 and 1992, the railroad tracks were removed from the site and were realigned west of the newly constructed I-215. In 1992, the southern portion of the property was developed as part of I-215; the remaining portions of the property were vacant. Ninyo & Moore did not identify any recognized environmental conditions (RECs) and did not recommend further investigations unless the property was to be redeveloped and/or the soils disturbed, in which case soil samples were recommended for herbicide and select metals analyses to assess whether the constituents are present due to historical land uses.

5.3.4 Segment 5 – Cactus Avenue to Cajalco Road

- **Associated Consulting Civil & Environmental Services, Inc., Remediation Action Report, Hydrocarbon Fuel Contamination at a Riverside County Transportation Commission Property Adjacent to Tosco Cajalco (Circle K) Service Station, January 2008.** A release was documented at this location from a diesel fuel pump left opened in January 31, 2007, which ran down the driveway at the service station to Cajalco Road and into a clogged storm channel, which then backed up onto the property. Excavation and off-site disposal was the chosen remediation approach for this property. Based on the description and lab results, it appears that the affected soil was assessed, excavated to a depth below impact, and confirmation samples were collected. Impacted soil (48 tons) was removed on January 22, 2008 and transported to an off-site disposal facility. Confirmation samples were below laboratory reporting limits and no further action was recommended.

5.3.5 Segment 7 – 4th Street (Highway 74) to Interstate 215

- **Ninyo & Moore, Phase I Environmental Site Assessment, Riverside County Transportation Commission, Perris Wye Property, Riverside County, California, March 31, 2005.** A previous Phase I site assessment was provided for

the “Perris Wye Property”, which was considered for purchase by RCTC. The property is located south of the intersection of ‘D’ street and Commercial Street in the city of Perris, and consists of an arc-shaped section. The property has consisted of a rail right-of-way (dirt path and tracks removed) without structures from approximately 1953 through the present.

Ninyo & Moore concluded that there were no indications of RECs in connection with the site at the time of the Phase I, except for the possible historical herbicide use at the property. Application of herbicides, including possible arsenic-containing compounds, was a common historical practice for weed control on rail lines. Based on this, Ninyo & Moore recommended soil samples be collected along the property prior to future construction activities.

- **Ninyo & Moore, Phase I Environmental Site Assessment, Vacant Land, APN 327-210-006, Perris, California, dated November 27, 2006.** The property is located on the southeast corner of the intersection between Mapes Road and Case Road in the city of Perris. It is bound to the south by the BNSF and to the north by Mapes Road and Bonnie Drive. At the time of Ninyo & Moore’s report, the property to the north of the property (the current proposed South Perris Station) was noted as vacant land.

According to the report, the adjoining property to the south of the property was historically vacant land or used for agricultural purposes from at least 1901 through 2006. No off-site sources of environmental concern were found for this property.

5.4 FACILITIES OF POTENTIAL ENVIRONMENTAL CONCERN

[Table 8](#) provides a summary and description of on-site and off-site properties identified in each segment of the study area, listed by address, location, and EDR Focus Map ID (if assigned), and provides an opinion regarding whether these properties are a concern to the Site. These properties are also shown on [Plates 2](#) through [4](#), with a corresponding Focus Map ID number, if provided.

**Table 8
Environmental Sites of Interest**

Segment 1 – Spring Street to Columbia Avenue								
Site of Interest Number	Address	Focus Map 1 ID	On-Site or Off-Site (Distance from Site)	Direction from Site	Groundwater Gradient	Comments	Environmental Concern (Y or N)	Justification
1	Proposed Citrus Connection	Not applicable	On-Site	Not applicable	Not applicable	Historically used for agricultural purposes.	Y	Possible residual pesticides/herbicides as a result of former agricultural use.
2	Kent Landsberg Paperland 1180 Springs Street Riverside, California 92507	1	120 feet beyond adjoining railroad tracks	West	Downgradient	Listed in the CA FID UST, SWEEPS UST, and HAZNET databases. Had diesel USTs. Listed as a generator of hazardous waste, including waste oil and mixed oil.	N	No releases were listed in the EDR report. Facility is located in a downgradient location from the Site. Based on distance and direction, it is Kleinfelder's opinion that this facility is not an environmental concern to the Site.
3	Brine Fac, Lily-Tulip Div 800 Iowa Riverside, California	3	400 feet south of Proposed Citrus Connection ; 800 feet west of Corridor	South of Proposed Citrus Connection ; West of Corridor	Crossgradient/ Downgradient	Listed in the WMUDS/SWAT database. Process waste generator.	N	Based on distance and direction of facility, it is Kleinfelder's opinion that this facility is not an environmental concern.
4	Standard Register 990 Palmyrita Avenue Riverside, California 92507	4	On-Site (Proposed Palmyrita Station)	Not Applicable	Not Applicable	Listed in the HAZNET database as a generator of photochemicals and photoprocessing waste. Also listed as disposing of asbestos-containing waste. Based on historical documentation, the Proposed Palmyrita Station was historically used for agricultural purposes.	Y	See "UARCO Incorporated" entry below.
5	UARCO Incorporated 990 Palmyrita Avenue Riverside, California 92507	4	On-Site (Proposed Palmyrita Station)	Not Applicable	Not Applicable	Small Quantity Generator (SQG), no violations found. Historical 12,000-gallon UST (installed 1963). Based on historical documentation, the Proposed Palmyrita Station was historically used for agricultural purposes.	Y	Possible residual pesticides/herbicides as a result of former agricultural use. The property was developed with the existing building in the mid-1960s. Possible impacts associated with a former UST, remote fill port, ASTs, observed staining, a 55-gallon drum with unknown contents, a cooling tower, and sump. In addition, ACMs and LBP may be present in the on-site building.
6	Astro Seal Inc. Celco Industries 827 Palmyrita Avenue Unit B Riverside, California 92507	7	350 feet	East	Upgradient	SQG, no violations found. Listed in the FINDS and HAZNET databases. Generator of unspecified oil-containing waste, waste oil, mixed oil, unspecified solvent mixture waste, and other inorganic solid waste.	N	No releases from this facility were listed in the EDR report. Based on this information and the distance from the Site, it is Kleinfelder's opinion this facility is not an environmental concern.

Property of Environmental Concern

**Table 8 (Continued)
Environmental Sites of Interest**

					Segment 2 – Columbia Avenue to Mount Vernon Avenue			
Site of Interest Number	Address	Focus Map 2 ID	Distance from Site	Direction from Site	Groundwater Gradient	Comments	Environmental Concern (Y or N)	Justification
7	Proposed UCR Station	Not applicable	On-Site	Not applicable	Southwest	Based on historical documents, the Proposed UCR Station was formerly used for agricultural purposes.	Y	Possible residual pesticides/herbicides as a result of former agricultural use.
8	U C Riverside Fleet Services/Steam Plant 3401 Watkins Drive Riverside, California 92521	16	~100 feet	Southwest	Crossgradient Downgradient	The database report indicates that an unauthorized release from a UST occurred at the facility in May 1995. The release has not been issued "case closed" status. 18 USTs present at facility. Historical gasoline and used-oil USTs. Air emissions reported (1987-2004).	Y	The facility is located to the southwest of the Corridor and is cross-to downgradient with respect to groundwater flow. In addition, groundwater is expected greater than 50 feet bgs. Although the facility has not received case closure with the regulatory agency, because the release affected soil only and the facility is located cross- to downgradient from the site, Kleinfelder did not request a review of additional regulatory agency records. However, due to the proximity of this facility to the proposed UCR Station, this facility represents a potential environmental concern.
9	West of Mt. Vernon Avenue	Not applicable	On-Site	Not applicable	Not applicable	Observed stockpiled ballasts and railroad ties near the northeastern portion of Segment 1, south of Columbia Avenue.	Y	Ballasts and railroad ties are often treated with petroleum hydrocarbon products and pose a potential environmental concern. Although no staining was observed on or in the vicinity of the ballasts and railroad ties, it is possible that staining exists beneath the piles. The ground beneath the piles was not visible at the time of our Site reconnaissance.
Segment 3 – Mount Vernon Avenue to Box Springs Road (Fair Isle Drive)								
Site of Interest Number	Address	Focus Map ID	Distance from Site	Direction from Site	Groundwater Gradient	Comments	Environmental Concern (Y or N)	Justification
10	Proposed Fair Isle Station	Not applicable	On-Site	Not applicable	Not applicable	Based on historical documentation, the Proposed Fair Isle Station was formerly used for agricultural purposes.	Y	Possible residual pesticides/herbicides as a result of former agricultural use.
11	Eastern end of Manfield Street	Not applicable	Adjoining Segment 3	West	Downgradient	Observed three 55-gallon drums at the time of the site reconnaissance.	Y	Three 55-gallon drums were observed at the base of a ravine adjacent to the Segment 3 alignment at the Manfield Street eastern terminus. Due to the steep terrain leading to the drums, the contents of the drums were not determined and are presently unknown.

Property of Environmental Concern

**Table 8 (Continued)
Environmental Sites of Interest**

Segment 4 - Box Springs Road (Fair Isle Drive) to Cactus Avenue								
Site of Interest Number	Address	Focus Map 3 ID	Distance from Site	Direction from Site	Groundwater Gradient	Comments	Environmental Concern (Y or N)	Justification
12	Shell Service Station 20775 Box Springs Road Riverside, California 92507	22	200 feet	Southwest	Crossgradient	Gasoline USTs present. The database report indicates that an unauthorized release of gasoline occurred at the facility in August 2002 and drinking water was affected. The release has not been issued "case closed" status. SQG, no violations found. Files were reviewed at regulatory agency.	N	Groundwater flow was shown to flow to the northwest during site assessment and remediation activities. No TPH as gasoline, BTEX, fuel oxygenates, or other VOCs were detected in four off-site wells and creek samples to the east and northeast of the property (towards the Corridor). Based on this information, at this time, this facility is not considered a significant environmental concern.
13	Reliable Floats Fac. 20760 Box Springs Road Riverside, California 92507	22	200 feet	Southwest	Crossgradient	The database report indicates that an unauthorized release of hydrocarbons was discovered at the facility in February 1997. The release was issued "case closed" status. Preliminary site investigation performed due to Caltrans freeway improvement project.	N	Based on the distance, direction, and case closure status, this facility is not considered an environmental concern to the Corridor.
14	Communications-Box Springs 10535 Box Springs Road Moreno Valley, California 92388	22	300 feet	West	Crossgradient to Upgradient	Gasoline UST present.	N	No releases were reported to have occurred from this location according to the EDR report. Based on this information and, the distance and direction of this facility from the Corridor, it is Kleinfelder's opinion that this facility is not an environmental concern. In addition, because no releases from this facility were listed in the EDR report, additional regulatory agency file reviews were not conducted for this facility.
15	Raceway Ford 5900 Sycamore Canyon Boulevard Riverside, California 92507	23	Adjoining to 100 feet	West	Crossgradient	SQG, no violations found. AST present. Air emissions reported (2002-2004).	N	Based on the direction and types of databases listed, this facility is not considered an environmental concern to the Corridor
16	Northbound I-215, South of Fair Isle Drive	Not applicable	Adjoining	East	Crossgradient	Vehicular accident, reported to have occurred on railroad tracks.	Y	According to the EDR environmental database report, an accident was reported on the railroad tracks to the south of Fair Isle Drive. Approximately 75 gallons of diesel were released in April 2001. It is possible that residual diesel is present in the vicinity of the railroad tracks at this location.
17	Sycamore Park Fueling 6171 Quail Valley Court Riverside, California 92507	25	350 feet	Southwest	Crossgradient	USTs present.	N	Based on the distance, direction, and type of databases listed, this facility is not considered an environmental concern to the Corridor.
18	Dr. Thomas T. Haider, MD 6276 River Crest Drive Riverside, California 92507	27	Adjoining	East	Downgradient	"Caller stated that a white Toyota truck is releasing unknown material from a container on the back of the truck onto the ground."	N	Although substance is unknown, the quantity based on the description provided, does not appear to be significant. In addition, this facility is located in a downgradient location. Therefore, this facility is not considered an environmental concern to the Corridor.
19	Congoleum Corp, Kinder Div 6300 Box Springs Road Riverside, California 92507	27	Adjoining	West	Crossgradient to Upgradient	Air emissions reported (1987).	N	Based on the type of database listed, this facility is not considered an environmental concern to the Corridor.

Property of Environmental Concern

**Table 8 (Continued)
Environmental Sites of Interest**

Segment 4 - Box Springs Road (Fair Isle Drive) to Cactus Avenue (Continued)								
Site of Interest Number	Address	Focus Map 3 and 4 ID	Distance from Site	Direction from Site	Groundwater Gradient	Comments	Environmental Concern (Y or N)	Justification
20	Rain for Rent #36 6400 Fischer Road Riverside, California 92502	29	Adjoining	Northeast	Crossgradient	ERNS: calls made in December 1990 and January 1991 reporting ongoing release from a diesel AST.	Y	This facility is located approximately 100 feet northeast of and crossgradient from the Corridor. Based on the EDR database report, this facility was listed in the ERNS database. Calls were reportedly made in December 1990 and January 1991 stating that there was an ongoing release from a diesel AST at this facility. Based on its adjoining location to the Corridor, this facility is considered an environmental concern to the Corridor.
21	Fischer Road	Not applicable	Adjoining	Northeast	Crossgradient	Appears to be associated with the Rain for Rent facility listed above.	Y	According to the EDR environmental database report, this facility was listed in the ERNS database as releasing diesel from an AST at the facility, according to phone calls reporting the incident. The callers indicated the diesel was released from the AST in December 1990 and January 1991 on an ongoing basis. Based on its adjoining location to the Corridor, this facility is considered an environmental concern to the Corridor.
22	City of Riverside Department of Public Utility Electric 2221 Eastridge Avenue Riverside, California 92507	30	Adjoining	West	Crossgradient to Upgradient	Air emissions reported (2002-2005).	N	Based on the type of database listed, this facility is not considered an environmental concern to the Corridor.
23	Moreno Shell Service Station 13260 Highway 215 Moreno Valley, California 92553	31	500 feet	East	Crossgradient	The database report indicates that an unauthorized release of gasoline occurred at the facility in February 1989. The release has not been issued "case closed" status.	Y	Maximum contaminant concentrations were detected in groundwater samples from well MW-3 located at the northwestern corner of the property (closest to the Corridor) for TPH as gasoline at 21,700 ug/L, benzene at 3,789 ug/L, toluene at 41 ug/L, ethylbenzene at 95 ug/L, xylenes at 54 ug/L, and DIPE at 664 ug/L. MtBE, EtBE, tAME, and tBA were not detected. Groundwater was found to flow to the northwest toward the Corridor and impacts have not been delineated. Based on the distance from the Corridor and groundwater flow direction, this former facility represents an environmental concern to Segment 4.
24	Howard Lee Property 13390 Highway 215 Moreno Valley, California	Orphan	~500 feet	East	Crossgradient	The database report indicates that an unauthorized release of gasoline occurred at the facility in June 1993. The release was issued "case closed" status.	N	Based on the distance and direction, and case closed status, this facility is not considered an environmental concern.

Property of Environmental Concern

**Table 8 (Continued)
Environmental Sites of Interest**

Segment 5- Cactus Avenue to Cajalco Road								
Site of Interest Number	Address	Focus Map 5 ID	Distance from Site	Direction from Site	Groundwater Gradient	Comments	Environmental Concern (Y or N)	Justification
25	March Air Reserve Base (MARB) 610 Meyer Drive, Building 2403 March Air Reserve Base, California 92518	"NPL Region"	Various (large area)	Corridor crosses facility	Various	Facility on National Priorities List. One investigation area appears to be within Corridor. MARB is listed in the CERCLIS, FINDS, RCRA LQG, ROD, US ENG CONTROLS, US INST CONTROL, and MANIFEST databases. Available files reviewed at the SARWQCB. According to RCDEH, files available for MARB were not located. Site documents were also located on the EPA's Superfund website.	N	Building 2403 is located east of I-215, greater than 1,000 feet from the Corridor. Additionally, current main plume maps reviewed show boundaries for contaminated areas of the MARB to the west and south of the Corridor. These plumes are comprised predominately of solvent or fuel contaminants. Remediation and monitoring is ongoing at various locations associated with the MARB to address source areas. Based on Operable Unit site locations, sites 19, 22, 24, and 43 were identified as being within 500 feet of the Study Area and are part of the Operable Unit 2, Record of Decision (ROD) site. The following four sites are part of the closure side of the OU2 ROD, which was completed in April 2004. Based on the locations of contaminated plumes identified for MARB to the west and south of the Corridor, and the "closed" or "no further remediation required" status of the four sites within 500 feet of the Corridor, MARB does not currently represent an environmental concern to the Corridor.
26	Pulliam Family Trust Nandina Liquor/Texaco 1569 Nandina Avenue Perris, California 92571	33	450 feet	East	Downgradient	The database report indicates that an unauthorized release of diesel occurred at the facility in January 1993 and drinking water was affected. The release has not been issued "case closed" status. Files reviewed at regulatory agencies.	N	This facility is located east of the Corridor along Segment 4, beyond I-215. A service station operated at this facility from an unknown period of time to approximately 1998. Five USTs were removed from the property in 1998 and contamination was discovered at that time. Site assessment and groundwater monitoring activities have been ongoing at this facility. A recent groundwater monitoring report indicates that at the time of the last groundwater sampling event (December 6, 2007), the water level ranged from 19.17 to 23.64 feet bgs and groundwater flow was to the southeast (away from the Corridor). TPH as gasoline was detected up to 3,200 ppb, TPH as diesel up to 65,000 ppb, benzene up to 28,000 ppb, MtBE up to 2,700 ppb, DIPE at 8.2 ppb, tAME up to 360 ppb, and naphthalene up to 370 ppb. Full scale remediation is expected using a soil vapor extraction system once the City of Perris approves it. According to the Pilot Test and Interim Remedial Action Plan (Geo-Cal, Inc., August 31, 2004) the bedrock beneath this facility slopes steeply to the north and east, and the groundwater flow follows the bedrock surface to the east. Contamination is migrating to the southeast parallel to the inferred groundwater flow direction. Because the groundwater flow is away from the Corridor and the facility is 450 feet from the Corridor, this facility is not considered an environmental concern to the Corridor. SCAQMD records indicate a NOV was issued for failure to notify the agency of UST excavation activities. The NOV was corrected and the case closed.
27	North of Cajalco Expressway, along the rail Corridor	Not applicable	On-Site	Not applicable	Not applicable	Moderate oil staining was observed during the site reconnaissance.	Y	The staining was observed on the railroad ballasts in an area along the railroad tracks to the north of the Cajalco Expressway. Because the staining was observed along the railroad tracks, the observed staining is considered an environmental concern.

Property of Environmental Concern

**Table 8 (Continued)
Environmental Sites of Interest**

Segment 6 - Cajalco Road to 4th Street (Highway 74)								
Site of Interest Number	Address	Focus Map 6 ID	Distance from Site	Direction from Site	Groundwater Gradient	Comments	Environmental Concern (Y or N)	Justification
28	Val Verde Continuation High School Nevada Avenue/Morgan Street Perris, California 92571	37	400 feet	East-Northeast	Downgradient	The property was formerly used for agricultural purposes. Listed in Envirostor database (no further action).	N	Based on the distance and direction, and no further action status, this facility is not considered an environmental concern to the Corridor.
29	California Truss Company 23665 Cajalco Road Perris, California 92570	38	Adjoining	West	Upgradient	AST on site (contents not listed).	N	No releases from this facility were listed in the EDR report. Based on this information and the type of database listed, it is Kleinfelder's opinion that this facility is not an environmental concern to the Corridor.
30	McAnnally Enterprises 23840 Rider Street Perris, California 92370	39	Adjoining	West	Upgradient	Facility under waste discharge requirements.	N	No releases from this facility were listed in the EDR report. Based on this information and the type of database listed, it is Kleinfelder's opinion that this facility is not an environmental concern to the Corridor.
31	Star Milling Company 24067 Water Avenue Perris, California 92570	40	Adjoining	West	Upgradient	Air emissions reported (2002-2005).	N	No releases from this facility were listed in the EDR report. Based on this information and the type of database listed, it is Kleinfelder's opinion that this facility is not an environmental concern to the Corridor.
32	New Davidson Brick Co Inc. Davidson Brick Company 24100 Orange Avenue Perris, California 92570	41	Adjoining	West	Upgradient	Diesel UST on site. Air emissions reported (1987 & 1990). Historical diesel UST.	N	No releases from this facility were listed in the EDR report. Based on this information and the type of database listed, it is Kleinfelder's opinion that this facility is not an environmental concern to the Corridor.
33	The Salvation Army 24201 Orange Avenue Perris, California 92572	41	Adjoining	West	Upgradient	Air emissions reported (1997-2001).	N	No releases from this facility were listed in the EDR report. Based on this information and the type of database listed, it is Kleinfelder's opinion that this facility is not an environmental concern to the Corridor.
34	Harvill Machine, Inc. 24201 Orange Avenue Perris, California 92370	41	Adjoining	West	Upgradient	Historical gasoline USTs.	N	No releases from this facility were listed in the EDR report. Based on this information and the type of database listed, it is Kleinfelder's opinion that this facility is not an environmental concern to the Corridor.
35	Mineral Resource Technology Inc. 24200 Orange Street Perris, California 92570	41	Adjoining	West	Upgradient	HAZNET facility.	N	No releases from this facility were listed in the EDR report. Based on this information and the type of database listed, it is Kleinfelder's opinion that this facility is not an environmental concern to the Corridor.
36	Atkinson Brick Company Los Angeles (County), California	43	Adjoining	West	Upgradient	Facility is a mine and a plant.	N	No releases from this facility were listed in the EDR report. Based on this information and the type of database listed, it is Kleinfelder's opinion that this facility is not an environmental concern to the Corridor.

Property of Environmental Concern

**Table 8 (Continued)
Environmental Sites of Interest**

Segment 6 - Cajalco Road to 4th Street (Highway 74) (Continued)								
Site of Interest Number	Address	Focus Map 9 ID	Distance from Site	Direction from Site	Groundwater Gradient	Comments	Environmental Concern (Y or N)	Justification
37	Al's Union/Unocal Al's/Unocal 2 South 'D' Street Perris, California 92570	46	Adjoining	East	Downgradient	The database report indicates that an unauthorized release of gasoline occurred at the facility in September 1995 and drinking water was affected. The release has not been issued "case closed" status. Historical gasoline and used-oil USTs. Records were requested for review with the SARWQCB and the RCDEH. According to SARWQCB, records for this facility are located with RCDEH. Although RCDEH indicated they showed a file existed, the file was not located for our review.	Y	Al's Union/Unocal Al's/Unocal occupied this off-site location. A gasoline release was reported in September 1995, which affected drinking water. Case closure has not been issued. The property was also shown to be occupied by Unocal Bulk Storage on Sanborn Maps. Because this facility had a release that has not been issued case closure by the regulatory agency and because this facility is located adjoining the site, this facility is considered an environmental concern.
38	City of Perris, Bob Glass Gym 101 North 'D' Street Perris, California 92570	46	150 feet	East	Crossgradient	Facility under waste discharge requirements.	N	Based on distance and direction of this facility from the Corridor, this facility is not considered an environmental concern to the Corridor.
39	Perris Auto Repair Center 24 'D' Street Perris, California 92570	46	Adjoining	East	Upgradient	The database report indicates that an unauthorized release of gasoline occurred at the facility in January 1993 and drinking water was affected. The release has not been issued "case closed" status. Files reviewed at the regulatory agencies.	Y	Five USTs with unknown contents were removed in December 1992 (three 1,000-gallon, one 4,000-gallon, and one 6,000-gallon). A formal UST Tank Closure Report was not prepared and the content of the USTs were not documented. Twelve soil samples were collected during the removal of the USTs. Maximum concentrations included TPH as gasoline (5,700 ppm), TRPH (30 ppm), toluene (0.890 ppm), ethylbenzene (12 ppm), and total xylenes (61 ppm). A work plan to complete four soil borings (JB Services, Work Plan, 1993) as prepared; however, the work does not appear to have been completed. From April 1993 through August 2005, the RCDEH sent several letters to Mr. Nemr Eid (responsible party) requesting full characterization of impacted soil and possibly groundwater. Mr. Eid did not respond to the requests. The RCDEH transferred the case to the SARWQCB in August 2005. SARWQCB staff met with Mr. Eid and sent several letters; however, no site assessment was completed. The City of Perris recently purchased the parcel for redevelopment. During a visit of the property by the City of Perris on March 23, 2008, 24 unlabeled 55-gallon drums were observed. In a letter from SARWQCB to Mr. Michael McDermott of the City of Perris Office of Real Estate Services, dated April 11, 2008, it was indicated that a work plan for site assessment at the property is due by May 9, 2008. Based on the proximity of this facility to the Corridor, this facility represents an environmental concern.
40	J.J.'s Carwash 101 South 'D' Street Perris, California 92370	46	150 feet	East	Upgradient	Gasoline and diesel USTs. Historical gasoline, diesel, and used-oil USTs.	Y	Specific information related to J.J.'s Carwash was not available. However, based on information reviewed for this location (see the following listing), this facility is considered an environmental concern.

Property of Environmental Concern

**Table 8 (Continued)
Environmental Sites of Interest**

Segment 6 - Cajalco Road to 4th Street (Highway 74) (Continued)								
Site of Interest Number	Address	Focus Map 9 ID	Distance from Site	Direction from Site	Groundwater Gradient	Comments	Environmental Concern (Y or N)	Justification
41	B & D Service 101 South 'D' Street Perris, California 92570	46	150 feet	East	Upgradient	UST and LUST.	Y	Information reviewed at RCDEH indicated that three USTs were removed from the property in April 2000. Groundwater was reported at approximately 60 feet bgs and discolored soil was observed. According to a June 20, 2000 letter from the RCDEH to Mr. Baljit Sambhi, RCDEH indicated that removal of three USTs at the property is complete. The final soil sample test results beneath the USTs indicated petroleum hydrocarbon concentrations below action levels. RCDEH indicated that no further action was required. Four USTs were removed in February 1994. Concentrations of VOCs from UST soil samples ranged from non-detect to 7,600 mg/kg. An initial study was filed with City of Perris. Based on reports and interviews, neither Riverside County Hazardous Materials Division nor the SARWQCB has accepted the validity of the preliminary site assessment work plan submitted. Further, the agency lead has not recommended the site for closure. The City of Perris Planning Commission finds that since the project shall be conditioned to conduct the requisite studies and perform any recommended remediation of measures prescribed by the State Agency, that the hazard can be reduced to a less than significant level.
42	Mobil B & D 102 South 'D' Street Perris, California 92370	46	Adjoining to the Proposed Downtown Perris Station	East	Downgradient	Four USTs with unknown contents.	Y	According to a March 23, 2000 letter from RCDEH, an inspection was conducted on March 16, 2000. Although the owner was not present, several drums containing waste oil were observed without lids. Oil filters were scattered throughout the facility. Waste oil was observed to be spilled in various area of the property with large amounts of waste oil spilled on the northern and western fence lines. It was indicated that because of the amount of oil spilled, the fence had a coating of oil blocking its openings.
43	Perris GTD Facility 120 East 3rd Street Perris, California	46	300 feet	East	Downgradient	50 gallons of diesel released from a UST due to equipment failure in March 1987.	N	Based on the quantity of the release and its downgradient location, not an environmental concern.
44	GTE California Incorporated/Perris Central Office; Gen Tel of Cal, Perris Co.; GTE Perris Svc Tfc 120 East 3rd Street Perris, California 92570	46	300 feet	East	Downgradient	UST. The database report indicates that an unauthorized release of diesel occurred at the facility in July 1987 and drinking water was affected. The release was issued "case closed" status. Air emissions reported (1987-1995).	N	Based on the distance and direction, and case closed station, not an environmental concern.

Property of Environmental Concern

**Table 8 (Continued)
Environmental Sites of Interest**

Segment 6 - Cajalco Road to 4th Street (Highway 74) (Continued)								
Site of Interest Number	Address	Focus Map 9 ID	Distance from Site	Direction from Site	Groundwater Gradient	Comments	Environmental Concern (Y or N)	Justification
45	CDF Station #1; California Dept of Forestry 210 W San Jacinto Avenue Perris, California 92570	46	150 feet	West	Crossgradient to Upgradient	LUST - A gasoline release was reported at this facility, discovered June 7, 2004, and reportedly affected a drinking water aquifer. Maximum MtBE soil concentration was reported at 0.310 parts per billion. Maximum MtBE groundwater concentrations were not reported. The status is listed as "leak being confirmed".	Y	Because case closure has not been issued, and based on the distance and direction of this facility to the Corridor, this facility represents a potential environmental concern to the Corridor.
46	Riverside County Fire Department 210 W San Jacinto Avenue Perris, California 92370	46	150 feet	West	Crossgradient to Upgradient	Historical gasoline UST. Files reviewed at regulatory agencies.	Y	CDF Station #1; Calif Dept of Forestry was listed at this facility address (in another EDR listing) as having had a gasoline release in June 2004, which affected drinking water. Case closure has not been issued. According to Rose Scott of the SARWQCB, an attempt to close the case was made and is under peer review. Ms. Scott indicated that additional assessment at this location never reached groundwater. However, based on the distance and direction of this facility to the Corridor, this facility is considered an environmental concern.
47	CDF/Perris Ranger Headquarters/Unit 210 West San Jacinto Avenue Perris, California 92370	46	150 feet	West	Crossgradient to Upgradient	Gasoline and diesel USTs.	Y	CDF Station #1; Calif Dept of Forestry was listed at this facility address (in another EDR listing) as having had a gasoline release in June 2004, which affected drinking water. Case closure has not been issued. According to Rose Scott of the SARWQCB, an attempt to close the case was made and is under peer review. Ms. Scott indicated that additional assessment at this location never reached groundwater. However, based on the distance and direction of this facility to the Corridor, this facility is considered an environmental concern.
48	Riverside County Fire Station 210 West San Jacinto Avenue Perris, California 92370	46	150 feet	West	Crossgradient to Upgradient	Historical diesel UST.	N	CDF Station #1; Calif Dept of Forestry was listed at this facility address (in another EDR listing) as having had a gasoline release in June 2004, which affected drinking water. Case closure has not been issued. According to Rose Scott of the SARWQCB, an attempt to close the case was made and is under peer review. Ms. Scott indicated that additional assessment at this location never reached groundwater. However, based on the distance and direction of this facility to the Corridor, this facility is considered an environmental concern.
49	East of C Street, North of 4th Street	Not applicable	On-Site	Not applicable	Not applicable	Two structures located on the southwestern parcel of the proposed Downtown Perris Station.	Y	Based on the construction date of these structures, ACMs and LBP are suspected to be present.

Property of Environmental Concern

**Table 8 (Continued)
Environmental Sites of Interest**

Segment 7 - 4th Street (Highway 74) to Interstate 215								
Site of Interest Number	Address	Focus Map 9 ID	Distance from Site	Direction from Site	Groundwater Gradient	Comments	Environmental Concern (Y or N)	Justification
50	AAA Radiator Service 603 South 'D' street Perris, California 92570	50	400 feet	East	Upgradient	UST.	N	No releases for this facility were listed in the EDR report. Based on this information and the distance of this facility from the Corridor, this facility is not considered an environmental concern to the Corridor.
51	Imperial Tube and Steel 1221 G Street Perris, California 92570	52	300 feet	Northeast	Crossgradient	Air emissions reported (2005).	N	Based on the distance, direction, and type of database listed, this facility is not considered an environmental concern to the Corridor.
52	C R & R, Inc. 1706 Goetz Road Perris, California 92570	53	100 feet	Southwest	Crossgradient	2 USTs	N	No releases for this facility were listed in the EDR report. Based on this information and the direction of this facility from the Corridor, this facility is not considered an environmental concern to the Corridor.
53	Perris Transfer Station and MRF 1706 Goetz Road Perris, California	53	100 feet	Southwest	Crossgradient	Large volume transfer and processing facility for mixed municipal waste.	N	No releases for this facility were listed in the EDR report. Based on this information and the direction of this facility from the Corridor, this facility is not considered an environmental concern to the Corridor.
54	SD Services 1706 Goetz Road Perris, California 92570	53	100 feet	Southwest	Crossgradient	Facility under waste discharge requirements.	N	No releases for this facility were listed in the EDR report. Based on this information and the direction of this facility from the Corridor, this facility is not considered an environmental concern to the Corridor.
55	Dick G Evans Transportation 336 Ellis Avenue Perris, California 92570	54	Adjoining	Northeast	Crossgradient	Facility under waste discharge requirements.	N	No releases for this facility were listed in the EDR report. Based on this information and the direction of this facility from the Corridor, this facility is not considered an environmental concern to the Corridor.
56	Home Depot USA HD6875 3150 Case Road Perris, California	Orphan	Unknown	Unknown	Unknown	SQG, no violations found. This facility is at the approximate location of the Perris Valley Water Reclamation Facility and appears to be erroneously plotted by EDR.	N	Unknown location. However, based on type of database listed with no violations report, not an environmental concern.
57	BP West Coast Products LLC 1250 403 N 'D' Street Perris, California	Orphan	~300 feet east	East	Downgradient	2 LUST cases, one closed. Files reviewed at regulatory agencies.	N	See following entry.

Property of Environmental Concern

**Table 8 (Continued)
Environmental Sites of Interest**

Segment 7 - 4th Street (Highway 74) to Interstate 215 (Continued)								
Site of Interest Number	Address	Focus Map 9 ID	Distance from Site	Direction from Site	Groundwater Gradient	Comments	Environmental Concern (Y or N)	Justification
58	ARCO #1250 403 N 'D' Street Perris, California	Orphan	~300 feet east	East	Downgradient	The database report indicates that an unauthorized release of gasoline occurred at the facility in June 2003 and drinking water was affected. The release has not been issued "case closed" status.	N	<p>This property is located at the southeast corner of 4th Street and 'D' Street in downtown Perris. According to information reviewed, SECOR submitted a January 15, 1990 letter to ARCO regarding the removal of one 550-gallon waste oil UST and four USTs ranging in size from 4,000 gallons to 6,000 gallons. Contamination was detected and remediation activities commenced. Groundwater during remediation activities was encountered between 50 and 61 feet bgs, and groundwater flow was reported to the northeast (away from the Corridor). ARCO submitted a Final Quarterly Report for groundwater monitoring activities (Fourth Quarter 1997 dated January 15, 1998). The current phase of project at that time was listed as closed. A No Further Action Letter was issued to the facility by RCDEH in October 1997.</p> <p>ARCO filed an application dated April 1, 2003 to remove four 10,000-gallon gasoline USTs. An UST removal report was submitted by Delta Environmental Consultants dated June 20, 2003 and indicated that groundwater was encountered between 50 and 55 feet bgs and groundwater flowed to the northeast. An Underground Storage Tank Unauthorized Release Report was submitted on June 10, 2003.</p> <p>Based on the reviewed information, from July 1990 to June 1996, the facility was upgraded, site assessment and remedial activities took place and the RCDEH issued a no further action letter dated October 29, 1997. During site demolition in May 2003, four 10,000-gallon gasoline USTs, two dispenser islands, and associated piping were removed. Assessment and remediation were conducted from November 2004 and continues through the present. SECOR International Inc. submitted a Well Installation and Dual-Phase Extraction Event work plan on February 25, 2008 for this property. However, since groundwater is expected to flow in a northeasterly direction, away from the Corridor, this facility is not considered an environmental concern to Segment 6.</p>

Property of Environmental Concern

**Table 8 (Continued)
Environmental Sites of Interest**

59	B&D Automotive 102 'D' Street Perris, California	Orphan	Adjoining to the Proposed Downtown Perris Station	East	Downgradient	The database report indicates that an unauthorized release of gasoline occurred at the facility in February 1994. The release has not been issued "case closed" status. Regulatory records reviewed.	Y	The database report indicates that an unauthorized release of gasoline occurred at the facility in February 1994. The release has not been issued "case closed" status. An initial study was filed with City of Perris. Based on reports and interviews, neither Riverside County Hazardous Materials Division nor the SARWQCB has accepted the validity of the preliminary site assessment work plan submitted. Further, the agency lead has not recommended the site for closure. The City of Perris Planning Commission finds that since the project shall be conditioned to conduct the requisite studies and perform any recommended remediation of measures prescribed by the State Agency, that the hazard can be reduced to a less than significant level. Based on the proximity of this facility to the Corridor and the lack of regulatory resolution of this release case, this facility represents an environmental concern to the Corridor.
Segment 7 - 4th Street (Highway 74) to Interstate 215 (Continued)								
Site of Interest Number	Address	Focus Map 9 ID	Distance from Site	Direction from Site	Groundwater Gradient	Comments	Environmental Concern (Y or N)	Justification
60	West of Ellis Avenue	Not applicable	Adjoining	North	Dowgradient	A trench was observed originating from an adjoining facility to the north of the Segment 7 alignment, and leading onto Segment 7 toward the railroad tracks.	Y	Run off would flow from the adjoining facility toward the Corridor; therefore, this observed trench poses an environmental concern to the Corridor.
61	West of Ellis Avenue	Not applicable	Adjoining	North	Downgradient	Staining was observed on the wall of an adjoining facility to the north of the Segment 7 alignment. The staining appeared on the ground beneath the wall and toward Segment 7.	Y	Because the staining was observed adjoining the Corridor in Segment 7, this staining poses an environmental concern to the Corridor.
62	336 East Ellis Avenue Perris, California	Not applicable	Adjoining	North	Downgradient	Listed as having a NOV issued by SCAQMD on January 10, 2003 related to use of improper parts cleaning solvent. The NOV was corrected by February 18, 2003.	N	Because the facility corrected the SCAQMD NOV, and no additional NOVs were listed for this facility, this facility is not considered an environmental concern to the Corridor.

Property of Environmental Concern

**Table 8 (Continued)
Environmental Sites of Interest**

63	1301 Case Road Perris, California	Not applicable	Adjoining	South	Upgradient	Due to adjoining location to the Corridor, additional records were requested for review with the regulatory agencies. Records were available and reviewed at the RCDEH.	N	<p>As of June 1, 2004, the facility was listed as not maintaining USTs. The facility was listed as having petroleum ASTs and hazardous materials greater than 55 gallons. The facility was also listed as a generator of hazardous waste. Chemicals used at this facility include: aluminum sulfate solution (Alum); argon; calcium hypchlorite mixture (Oxidizer); chlorine; solvents (distillates and alkylbenzenes); diesel fuel No. 2; Floc-cite (non-hazardous); unleaded regular gasoline; lubricating grease; helium; Hotsy Soap; hydrated lime; hydrochloric acid solution; hydrogen peroxide solution; lubricating oil; Clarifloc polymer; sludge thickener; liquefied petroleum gas; Simple Green cleaner/degreaser; sodium bisulfite solution; sodium hydroxide solution; bleach; SoilKlean enzymes; used oil; and Zymetech cleaner/deodorant.</p> <p>The facility reportedly had USTs that were installed in 1982. An Underground Storage Tank Closure Inspection Report for the EMWD Perris Pumping Plant dated November 17, 1994 indicates that a fiberglass diesel oil UST was removed. No significant releases or violations were reported at this facility. Because no releases were reported at this facility, it is Kleinfelder's opinion that this facility does not represent a significant environmental concern to the Corridor.</p>
Orphan Summary (i.e. locations not specifically plotted or located by EDR report)								
Site of Interest Number	Address	Map ID	Distance from Site	Direction from Site	Groundwater Gradient	Comments	Environmental Concern (Y or N)	Justification
64	March AFB (1.25 miles south of) Alessandro, California	Orphan	Potentially within 0.25 mile of Proposed Ramona Station	Unknown	Unknown	Envirostor: Inactive evaluation site.	N	See previous MARB discussions under Segment 5.
65	I-215 and Box Canyon Road Moreno Valley, California	Orphan	Potentially within 0.25 mile of Corridor, unable to locate Box Canyon Road	Unknown	Unknown	The database report indicates that an unauthorized release of 50 gallons of miscellaneous drug waste ("red phosphorus") occurred in February 2001.	N	Location unknown. However, based on quantity and type of substance released, not an environmental concern.
66	Morton Street & Box Springs Road Moreno Valley, California	Orphan	~500 feet	Northeast	Crossgradient	Abandoned drug lab waste.	N	Based on distance, direction and type of substance reported, not an environmental concern.
67	I-215, 30 mi South of Riverside, Near Junction SR 74 Near Riverside, California	Orphan	Unknown	Unknown	Unknown	The database report indicates that an unauthorized release of 100 gallons of diesel occurred in April 1996. A waterway was involved.	N	Unknown location. Appears to be a traffic accident. Based on type of released and quantity, not an environmental concern.
68	Ramona Expressway on Ramp to Northbound 215 Perris, California	Orphan	Potentially within 500 feet of Corridor	East	Downgradient	The database report indicates that four 55-gallon drums of asphalt were dumped onto land as a result of a truck accident in May 1988.	N	Based on type of release, not an environmental concern.
69	Interstate 215 Cross of Nandina Perris, California	Orphan	Potentially within 200 feet of Corridor	East	Downgradient	The database report indicates that 200 gallons of diesel were spilled while transferring diesel from one tank to another in April 1992.	N	Unknown location. However, based on quantity of release and direction of the accident from the Corridor, not an environmental concern.

Property of Environmental Concern

**Table 8 (Continued)
Environmental Sites of Interest**

70	Building 3000 - Off-Base Location (MARB) Perris, California	Orphan	Unknown	Unknown	Unknown	The database report indicates that approximately 145 gallons of insulating oil were released as a result of vandalism in July 1994. A waterway was involved.	N	Based on the quantity released, not an environmental concern.
71	Cajalco Road at I-215 Perris, California	Orphan	Potentially within 200 feet of Corridor	Unknown	Unknown	The database report indicates that 20 gallons of diesel were released as a result of a traffic accident in February 2004.	N	The release appears to have occurred on a roadway as a result of a vehicular accident.. Because the diesel would have spilled onto paved areas and based on the quantity spilled, this release is not considered an environmental concern.
72	East Ellis & Case Road Perris, California	Orphan	Potentially within 100 feet of Corridor	Unknown	Unknown	The database report indicates that 20 gallons of antifreeze were released in June 1992. A waterway was involved.	N	Based on the quantity release, not an environmental concern.
73	'D' Street & San Jacinto Road Perris, California	Orphan	250 feet	East	Downgradient	The database report indicates that 35 gallons of diesel were released from a tank truck in March 2003.	N	Based on the distance and direction from the release occurrence, this release is not considered an environmental concern to the Corridor.
74	SB 215 North of Central Avenue Exit Riverside, California	Orphan	Likely within 100 feet of Corridor	East	Upgradient	The database report indicates that 100 gallons of diesel were released in May 1993.	N	Although the release likely occurred within approximately 100 feet of the Corridor, since it occurred on the SB I-215, it is not considered an environmental concern to the Corridor.
75	SB 215 on the Eucalyptus Off Ramp Riverside, California	Orphan	Likely within 100 feet of Corridor	East	Downgradient	The database report indicates that 200 gallons of diesel were released in September 2000.	N	Release occurred on the Eucalyptus off-ramp and downgradient of the Corridor. Therefore, this release is not considered an environmental concern to the Corridor.
Orphan Summary								
Site of Interest Number	Address	Map ID	Distance from Site	Direction from Site	Groundwater Gradient	Comments	Environmental Concern (Y or N)	Justification
76	Northbound I215 North of Van Buren on Ramp Riverside, California	Orphan	Likely within 100 feet of Corridor	East	Downgradient	The database report indicates that 100 gallons of diesel were released in November 1996. A waterway was involved.	N	Appears to have occurred on the roadway. Based on direction and quantity released, not an environmental concern.
77	4400 Northbound 215 Freeway Riverside, California	Orphan	Potentially within 100 feet of Corridor	Unknown	Unknown	The database report indicates that 60 gallons of diesel were released in February 1999.	N	Appears to have occurred on the roadway. Based on quantity released, not an environmental concern.
78	March Air Reserve Base West of Heacock St. Riverside, California	Orphan	Potentially within 500 feet of Corridor	Unknown	Unknown	The database report indicates that 800 gallons of sewage were released in February 2003 and 250 gallons were recovered.	N	Based on the type of release, time of the release, and unknown location, not an environmental concern. Also see previous MARB entry under Segment 5.
79	March AFB Riverside, California	Orphan	Potentially within 500 feet of Corridor	Unknown	Unknown	The database report indicates that 100 gallons of jet fuel were released in March 1991.	N	Based on the type of fuel released, this release is not an environmental concern. Also see previous MARB entry under Segment 5.
80	N/B I-215 at Central Avenue Riverside, California	Orphan	Potentially within 500 feet of Corridor	East	Upgradient	The database report indicates that 250 to 2,000 gallons of diesel were released in May 1995.	N	Appears to have occurred on a roadway. Not an environmental concern.
81	SB 215 at Central Avenue Riverside, California	Orphan	Potentially within 500 feet of Corridor	East	Upgradient	The database report indicates that 135 gallons of diesel were released in September 1990.	N	Appears to have occurred on a roadway. Not an environmental concern.
82	Cactus & I-215 on March AFB Property Riverside, California	Orphan	Potentially within 500 feet of Corridor	Unknown	Unknown	The database report indicates that 20 gallons of drug lab waste were released in May 1991.	N	Based on the type of release and quantity report, not an environmental concern.

Property of Environmental Concern

**Table 8 (Continued)
Environmental Sites of Interest**

83	March AFB 22nd CSG-CEF Riverside County, California	Orphan	Potentially within 500 feet of Corridor	Unknown	Unknown	The database report indicates 10,500 gallons of jet fuel were released in May 1991.	N	Based on the type of fuel released and the quantity report, this release is not an environmental concern. Also see previous MARB entry under Segment 5.
84	NB I-215 Just South of Fair Isle Drive Unincorporated County Area, California	Orphan	Likely within 100 feet of Corridor	Unknown	Unknown	The database report indicates 75 gallons of diesel were released in April 2001. "The accident occurred on the railroad tracks..."	Y	Because the release occurred "...on the railroad tracks...", this release is considered an environmental concern to the Corridor at the southern end of Segment 3.
85	Kinder Morgan Pipeline	Not applicable	Adjoining	Varies	Varies	A Kinder Morgan Pipeline is located adjoining the Corridor.	Y	Although no releases or environmental concerns have been reported from the Kinder Morgan pipeline, it is possible that soil and/or groundwater contamination may exist at various points in the vicinity of this pipeline.
86	Questar Pipeline	Not applicable	Adjoining	Varies	Varies	A Questar Pipeline is located adjoining the Corridor.	Y	Although no releases or environmental concerns have been reported from the Questar pipeline, it is possible that soil and/or groundwater contamination may exist at various points in the vicinity of this pipeline.

Property of Environmental Concern

6.0 EVALUATION

6.1 SIGNIFICANCE OF IMPACTS

In determining the significance of properties of potential environmental concern in a particular study area, the criteria to consider, as they relate to hazardous materials and public safety, are presented in a document titled “Appendix G: Environmental Checklist Form” of the CEQA Guidelines. The following is a list of projects/situations that would require consideration of potential hazardous materials/public safety impacts.

1. Projects that would create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.
2. Projects that would create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment.
3. Projects that would emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school.
4. Projects that would be located on a site, which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would create a significant hazard to the public or the environment.
5. Projects located within an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, would result in a safety hazard for people residing or working in the project area.
6. For projects within the vicinity of a private airstrip, projects resulting in a safety hazard for people residing or working in the project area.
7. Projects that would impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.
8. Projects that would expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands.

These criteria were compared with each of the findings of this study to determine their impact significance to the proposed project. The results of this comparison are

presented in [Section 6.2](#). It is our understanding that the Corridor and proposed stations will not involve activities associated with Items 3 and 7 above. Additionally, Items 5 and 6 are outside the scope of the hazardous materials study. For this reason, these criteria are not addressed in this study. The remaining criteria are addressed in the following section.

6.2 ENVIRONMENTAL IMPACTS

Based on the above criteria and the results of this HMCS, potential environmental impact sites/issues have been identified in the Study Area, and are discussed below in association with the relevant criteria among those criteria discussed in the above section. The pertinent criteria identified in [Section 6](#) above include Criteria 1, 2, 4, and 8.

- 1. Projects that would create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.* A Kinder Morgan high-pressure petroleum pipeline runs through the Study Area primarily in a north-south direction. According to Mr. Don Quinn with Kinder Morgan, no known environmental concerns have been associated with this pipeline. While no releases from the pipeline have been reported, it is possible that soil and/or groundwater contamination may exist at various points in the vicinity of the Kinder Morgan pipeline. A Questar pipeline crosses the Study Area and traverses generally in an east-west direction. According to Mr. Dott of Questar, the pipeline runs along the railroad tracks for approximately 600 feet before crossing the railroad toward I-215. Mr. Dott indicated the pipeline formerly contained crude oil approximately 10 years ago, but currently contains nitrogen. Although Mr. Dott indicated that no known releases have occurred along this pipeline in the vicinity of the Study Area, it is possible that soil and/or groundwater contamination may exist in the vicinity of the pipeline. If environmental conditions are encountered, they may need to be addressed prior to or during construction of the PVL Project.
- 2. Projects that would create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment.* Of the sites, or areas, discussed in [Section 5](#) of this study, most have had reported releases of hazardous substances to soil and/or groundwater. A summary of the status of each address or area discussed in [Section 6](#) is presented in [Table 8](#) in [Section 5.4](#), as well as a

justification for whether the property is considered a potential environmental concern.

4. *Projects that would be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would create a significant hazard to the public or the environment.* At least one UST, located in the Study Area (proposed Palmyrita Station, Segment 1) is located on the Site and is under the jurisdiction of RCDEH. The UST has been reportedly removed from the Site. In addition, off-site facilities within the Study Area currently have, or had, USTs. [Appendix C](#) contains a listing of sites containing registered USTs, LUST facilities, and other facilities, which fall under Section 65962.5. The potential exists for soil and groundwater contamination to be present at any UST site, regardless of whether a release has been reported.
8. *Projects that would expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands.* Urban area near Segment 3 and 4 have the potential for a wildfire. [Plate 1](#) has shaded areas with high potential as provided by RCTC and Land Management Agency.

Additionally, the following potential impacts were noted that may affect the Site.

- a. Based on the construction date of the buildings located within the Corridor (i.e., the proposed Palmyrita Station building at 990 Palmyrita Avenue and the structures located at the proposed Downtown Perris Station), the potential exists for ACMs and LBP to be present in the buildings.
- b. Possible impacts associated with former agricultural use at the proposed Citrus Connection , proposed UCR, proposed Fair Isle, and proposed Palmyrita Stations exist.
- c. Possible impacts from observed areas of staining at the proposed Palmyrita Station, historical usage of the existing cooling tower, 55-gallon drum with unknown contents, and sump located in the basement.
- d. Possible impacts from ballasts and railroad ties that may be impacted with petroleum hydrocarbons or other hazardous materials.

7.0 POTENTIAL MITIGATION MEASURES

In accordance with the significance determination criteria and sites of potential environmental impacts presented in [Section 6](#), the following mitigation measures are recommended:

- In general, documented soil and groundwater contamination located at sites within the Study Area should be addressed by the individual responsible parties. Remediation goals are based on cleanup levels designed to protect water quality. However, residual contamination may present non-water quality risks to the environment, such as human health, or create a condition of pollution or nuisance not addressed by the regulatory agency cleanup requirements. Residual contamination may be of particular concern during subsurface construction activities, when the contaminant pathway is often the most direct and shortest. Therefore, it is recommended that a risk assessment be performed at all sites within the Study Area where contamination has been identified or is discovered during construction activities, and at which soil is to be disturbed, to address non-water quality risks posed by any residual contamination, and to establish appropriate mitigation measures (e.g., natural attenuation, active remediation, engineering controls) that would be protective of human health and the environment. All assessment and remediation activities should be conducted in accordance with a work plan, which is approved by the regulatory agency having oversight of the activities.
- During construction activities, it may be necessary to excavate existing soil within the Study Area, or to bring fill soils into the study area from off-site locations. In areas that have been identified as being contaminated or where soil contamination is suspected, appropriate sampling is required prior to disposal of excavated soil. Characterization of the soil is necessary prior to any excavation or removal activity. Contaminated soil should be properly disposed at an off-site facility. Fill soils also should be characterized to check that imported soil is free of contamination.
- Based on the findings of the HMCS pertaining to the proposed Palmyrita Station, it is Kleinfelder's opinion that liquids be removed from the sump in the basement; chemicals, petroleum products, and the 55-gallon drum be removed from the property; and further assessment be conducted in the vicinity of the identified environmental concerns.

- A hazardous building materials survey should be performed at buildings in the Study Area prior to demolition or renovation activities. This type of survey typically addresses LBP, ACMs, and PCBs in electrical equipment, mercury switches, and heating/cooling systems. Such a survey should be conducted under the direct supervision of a State of California certified asbestos consultant and US EPA lead assessor. Prior to demolition or renovation work which would disturb identified ACMs, LBP, or other hazardous materials, a licensed abatement removal contractor should remove and properly dispose of the hazardous material(s) in accordance with applicable local, state and federal regulations. A California certified consultant should prepare a bid specification document, perform abatement project planning, site and air monitoring, oversight and reporting activities.
- The drums located in the ravine in Segment 3 (eastern terminus of Manfield Street) should be assessed for content and disposed off-site in accordance with applicable guidelines.
- In the event that USTs, not identified in this study, or undocumented areas of contamination are encountered during redevelopment activities, work should be discontinued until appropriate health and safety procedures are implemented. A contingency plan should be prepared to address contractor procedures for such an event, to minimize the potential for costly construction delays. In addition, either the RCDEH or the SARWQCB, depending on the nature of the contamination, should be notified regarding the contamination. Each agency and program within the respective agency has its own mechanism for initiating an investigation. The appropriate program should be selected based on the nature of the contamination identified. The contamination remediation and removal activities should be conducted in accordance with pertinent local, state, and federal regulatory guidelines, under the oversight of the appropriate regulatory agency.
- Collection of soil and/or groundwater samples should be performed to further evaluate the significance of potential environmental concerns resulting from off-site adjoining or nearby properties, show on [Table 8](#) as having an Environmental Concern (yes noted on [Table 8](#)).
- Ballasts and/or railroad ties that are identified as contaminated with hydrocarbons or some other hazardous materials should be removed of and disposed of properly at an off-site facility.

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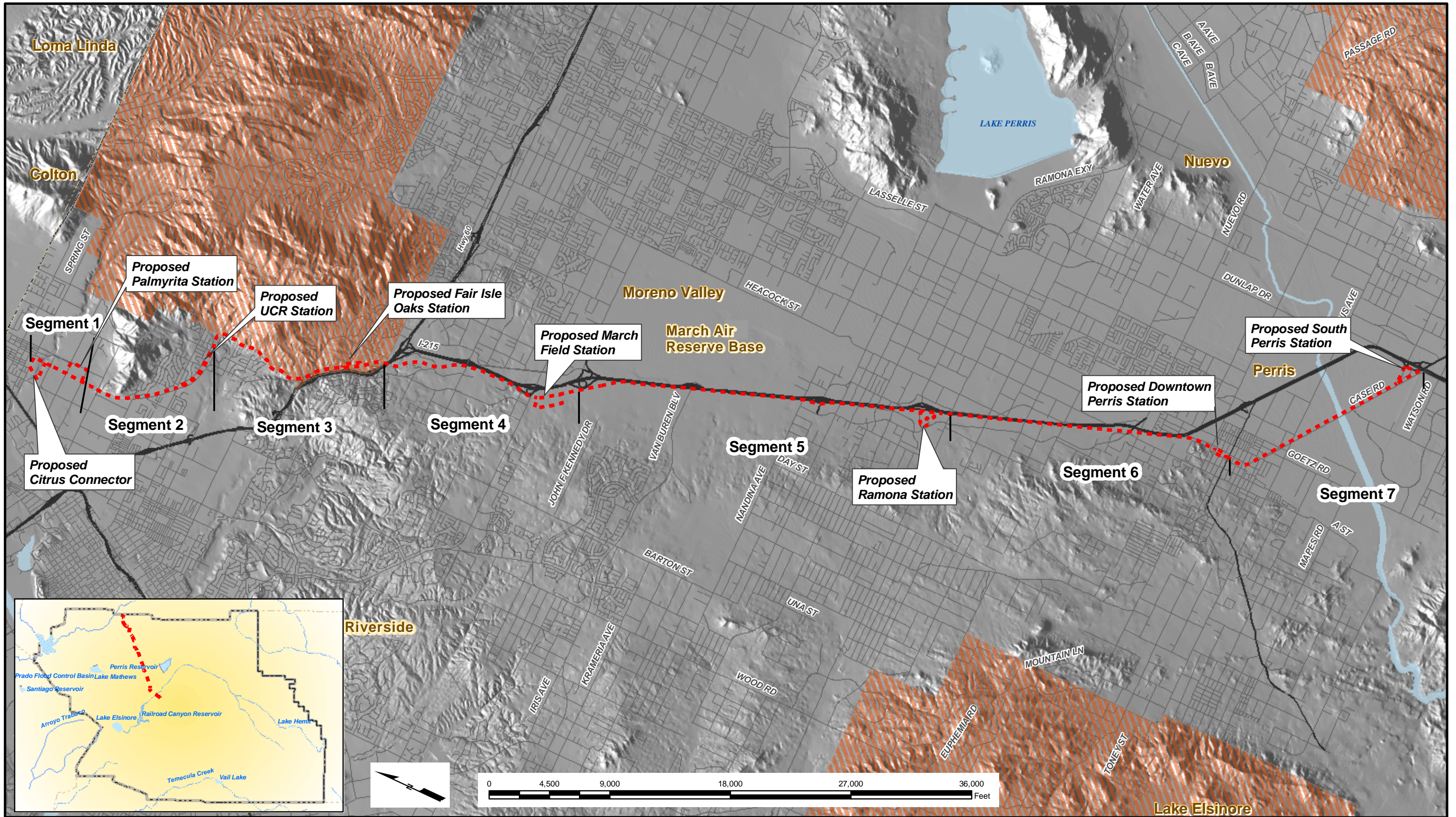
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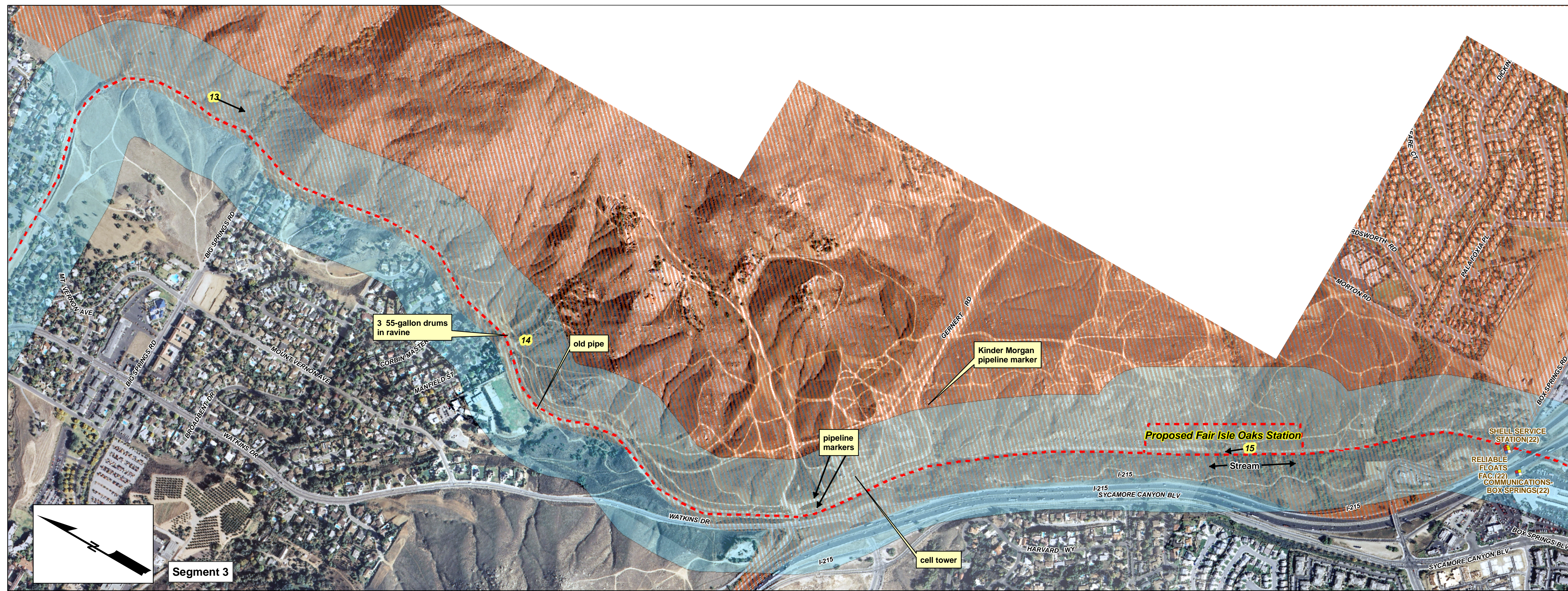
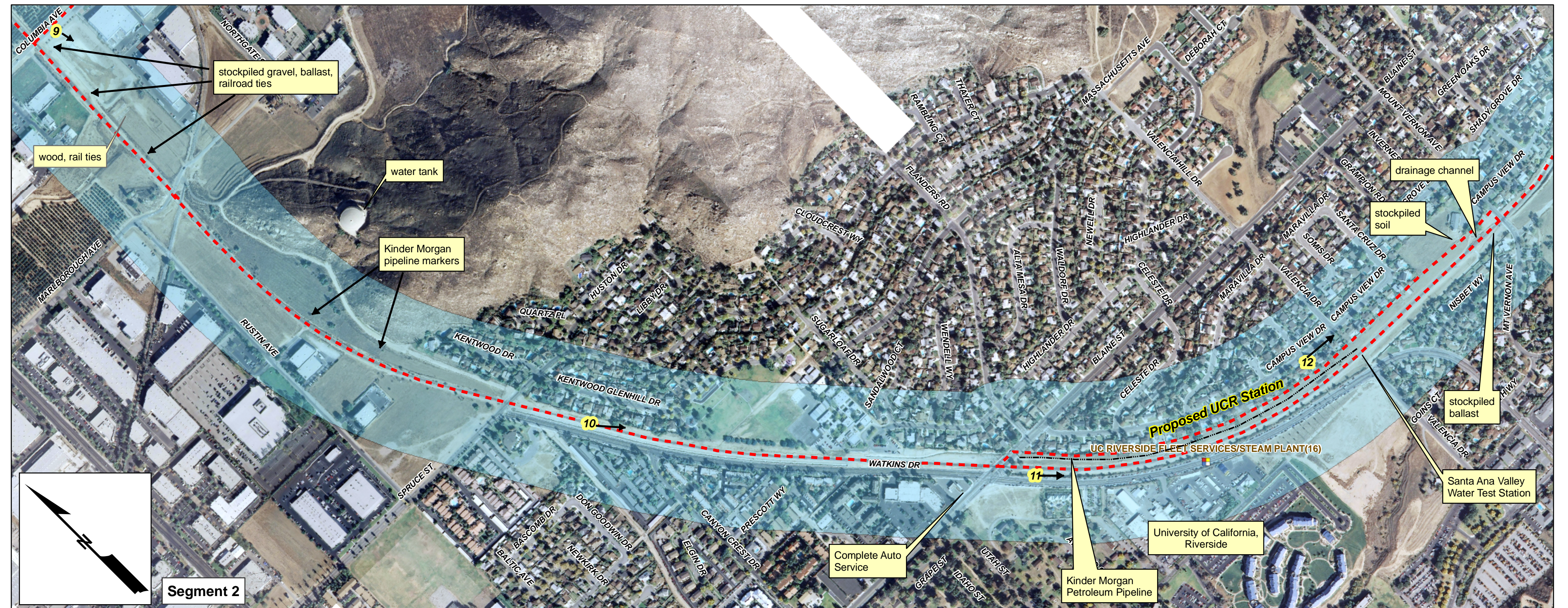
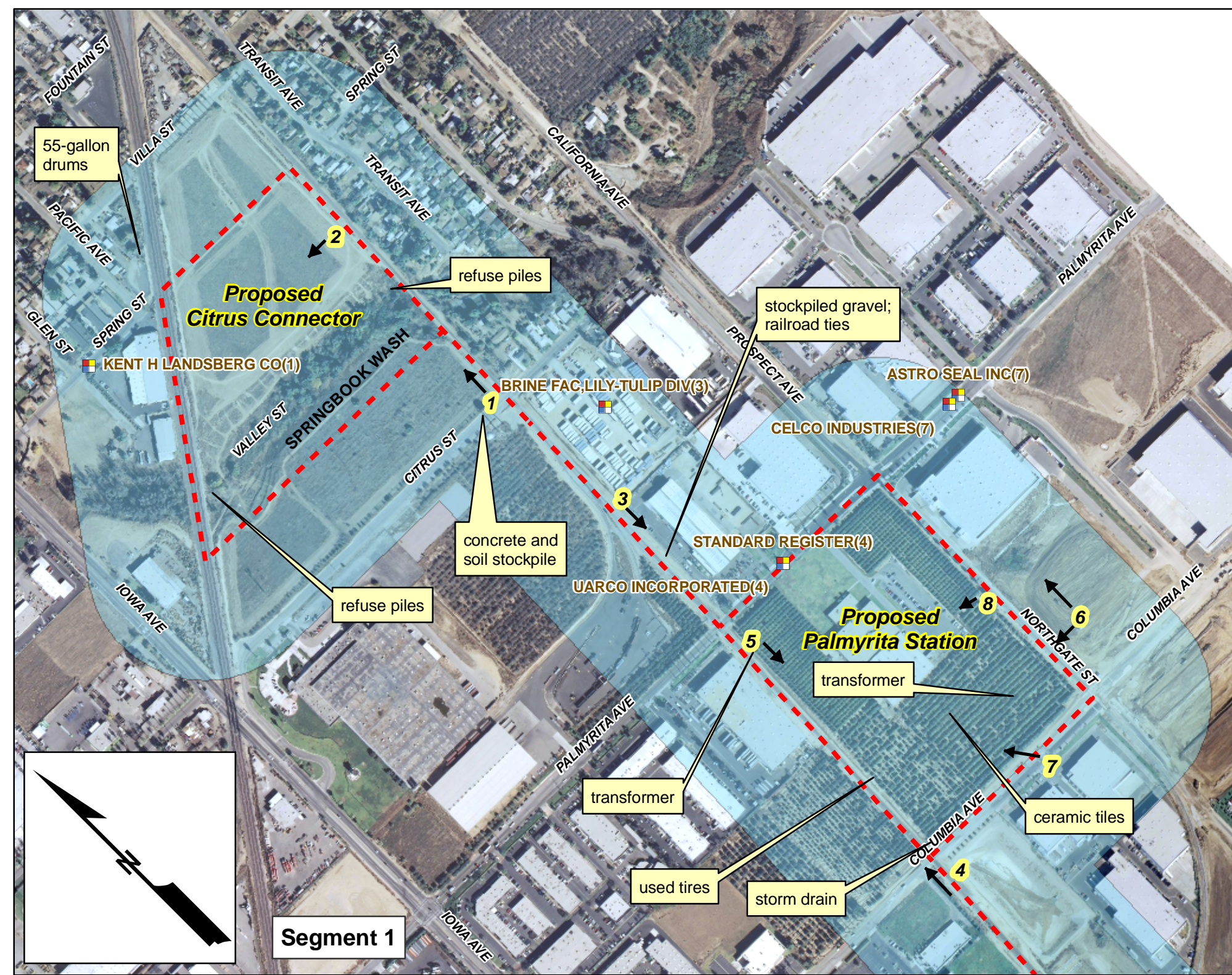
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Additional sources may be referenced separately in the report text.

PLATES



	<p>Legend</p> <p>Riverside County</p> <p>Water</p> <p>High Probability Fire Area (HPFA)</p>		<p>Roads</p> <p>Highways</p> <p>Station Name</p> <p>Segment Number</p>	<p>The information included on this graphic representation has been compiled from a variety of sources and is subject to change without notice. Kleinfelder makes no representations or warranties, express or implied, as to accuracy, completeness, timeliness, or rights to the use of such information. This document is not intended for use as a land survey product nor is it designed or intended as a construction design document. The use or misuse of the information contained on this graphic representation is at the sole risk of the party using or misusing the information.</p>	<p>KLEINFELDER Bright People. Right Solutions.</p> <p>www.kleinfelder.com</p>	<p>Site Vicinity Map Perris Valley Line</p> <p>Hazardous Materials Study Perris Valley Corridor Riverside County, Ca</p>	<p>Plate 1</p>
Cartography By: R. Alvarez		Date: 08/01/08		Project Number: 92666		File Name: PVL_sitemap	



Legend

- EDR Hazardous Waste Site ID Mortell Co (10)
- Perris Valley Corridor Alignment
- 500' Buffer
- HPFA
- Field Observations
- Photo Number, arrow indicates direction of view
- Approximate Location of Observation

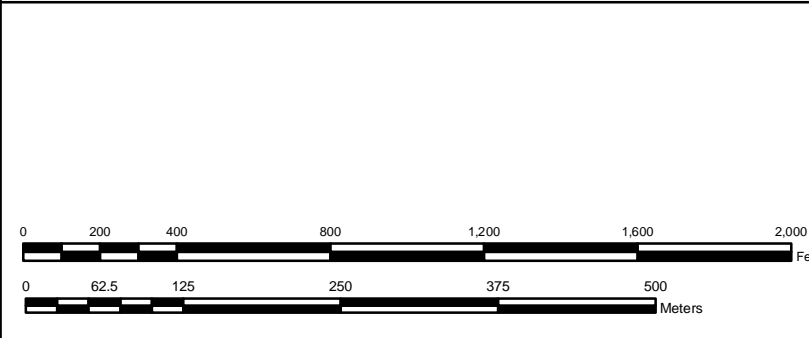
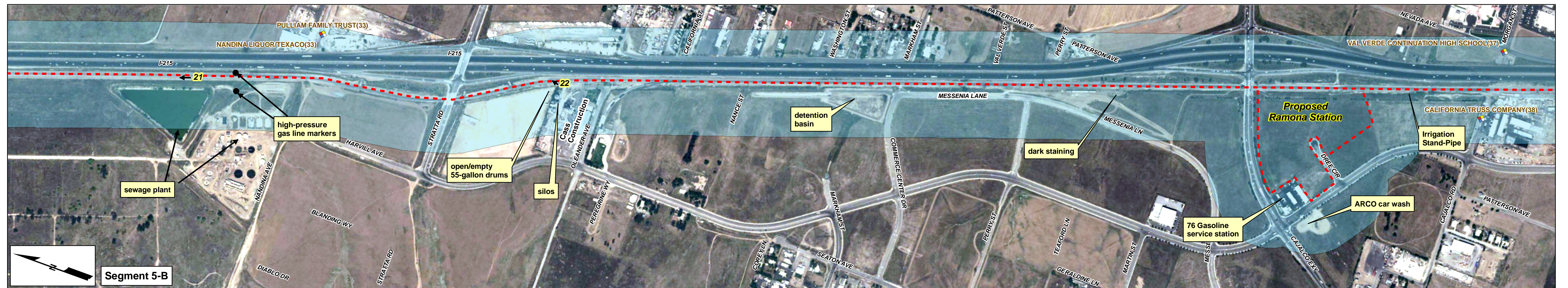
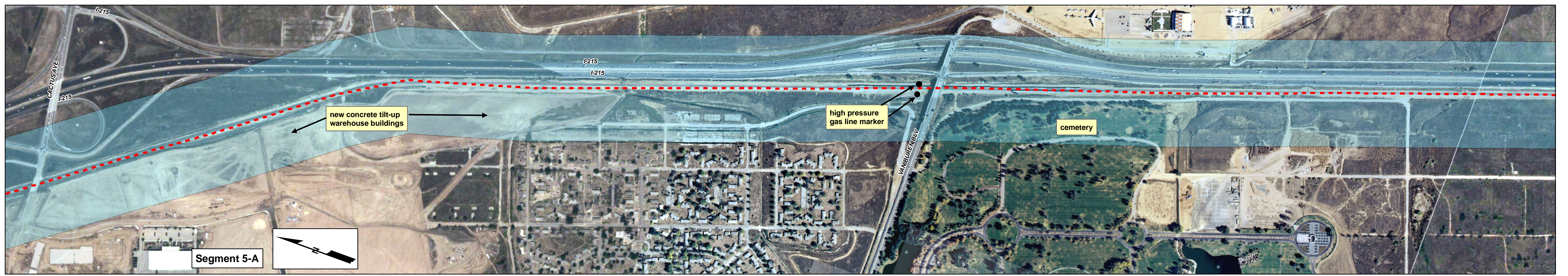
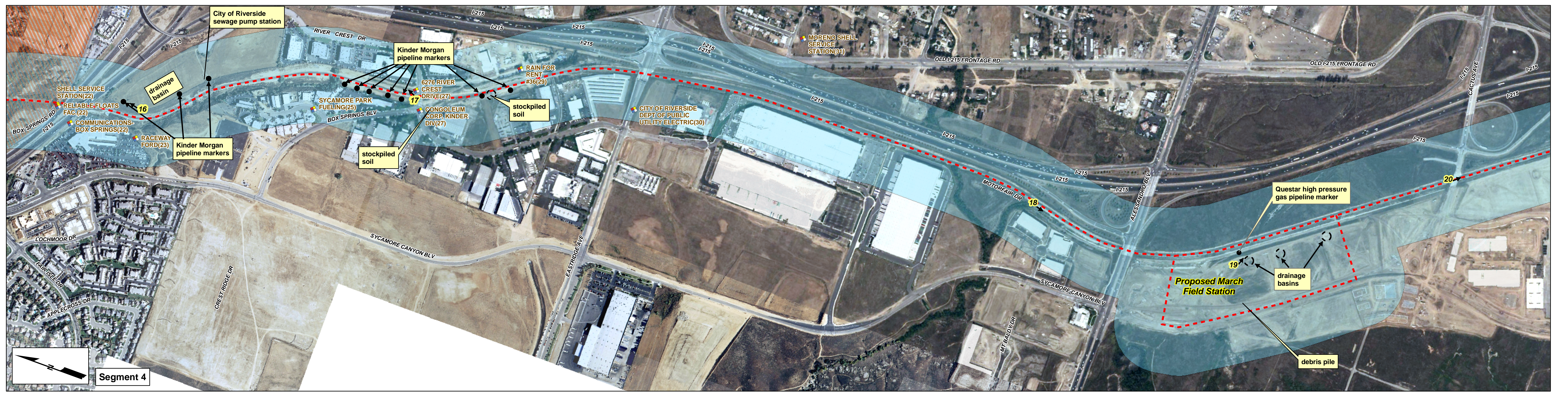
Hazardous Materials Corridor Study

Perris Valley Line - Segments 1, 2, 3

Riverside County, California

Perris Valley Line Corridor Study Riverside County, Ca <small>The information included on this graphic representation has been compiled from a variety of sources and is subject to change without notice. Kleinfield makes no representation or warranties, express or implied, as to accuracy, completeness, timeliness, or rights to the use of such information. This document is not intended for use as a land survey product nor is it designed or intended as a construction design document. The use or misuse of the information contained on this graphic representation is at the sole risk of the party using or misusing the information.</small>	Project No.	92666
	Drawn By:	R. Alvarez
	Checked by:	
	Date:	08/01/2008
File Name:	PVL_plate2_080108	

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Legend	
	EDR Hazardous Waste Site ID Mortell Co (10)
	Perris Valley Corridor Alignment
	500' Buffer
	HPFA
	Field Observations
	Photo Number, arrow indicates direction of view
	Approximate Location of Observation

Hazardous Materials Corridor Study

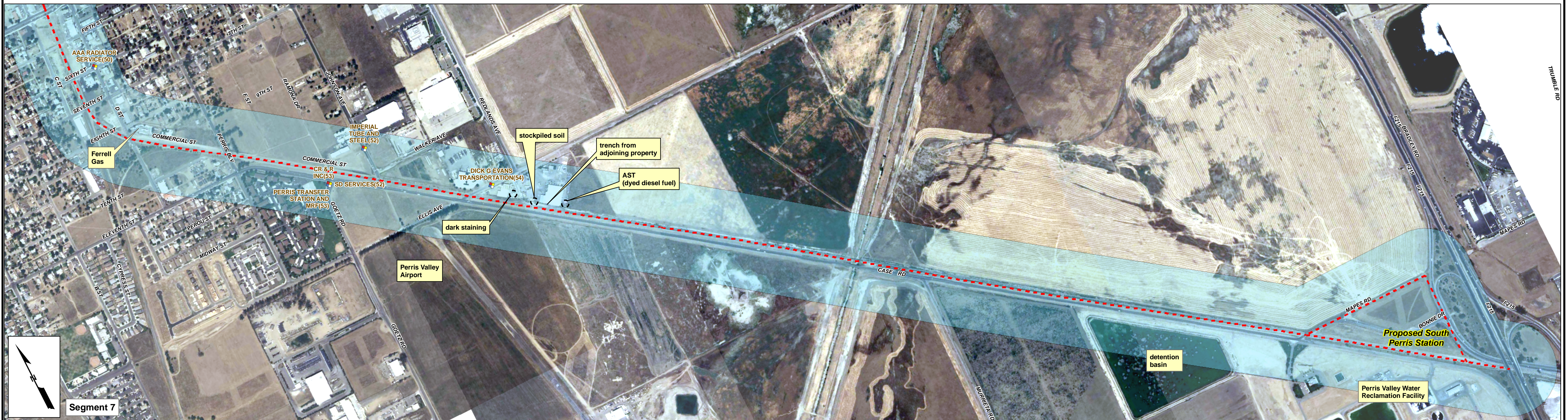
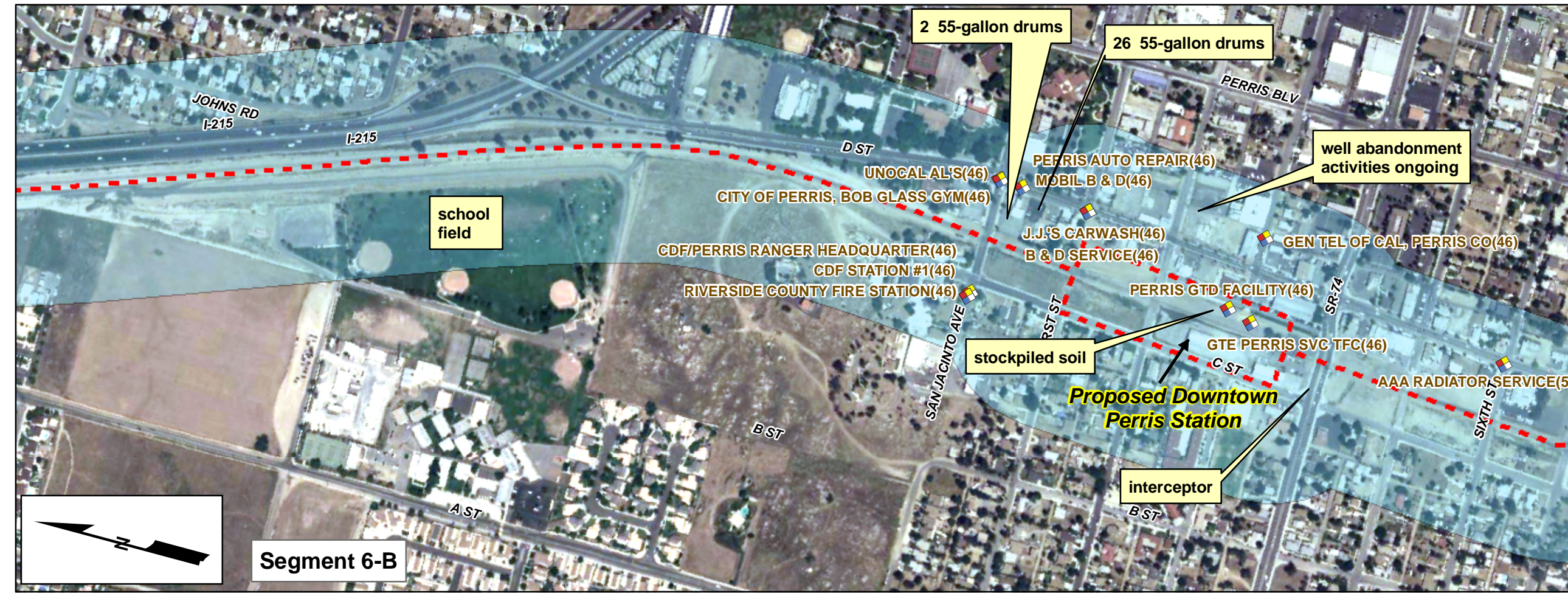
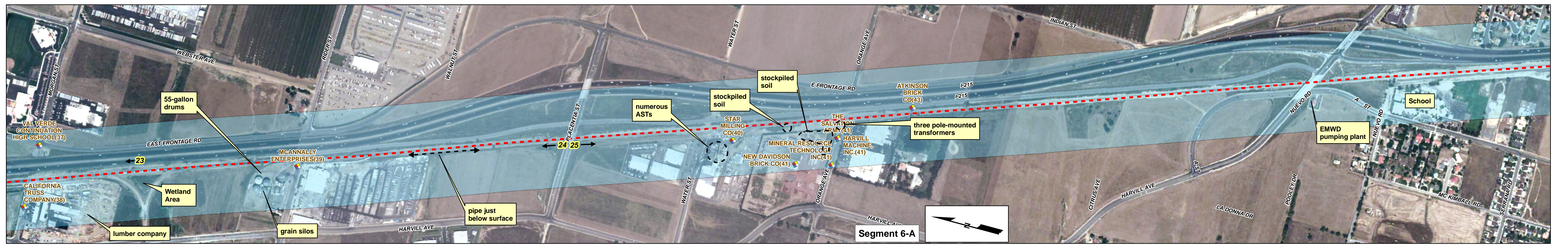
Perris Valley Line - Segments 4, 5

Riverside County, Ca

Perris Valley Line Corridor Study
Riverside County, Ca

Project No.	92666
Drawn By:	R. Alvarez
Checked by:	
Date:	08/01/2008
File Name:	PVL_plate3_080108





Legend	
	EDR Hazardous Waste Site ID Mortell Co (10)
	Perris Valley Corridor Alignment
	500' Buffer
	Field Observations
	Photo Number, arrow indicates direction of view

Hazardous Materials Corridor Study

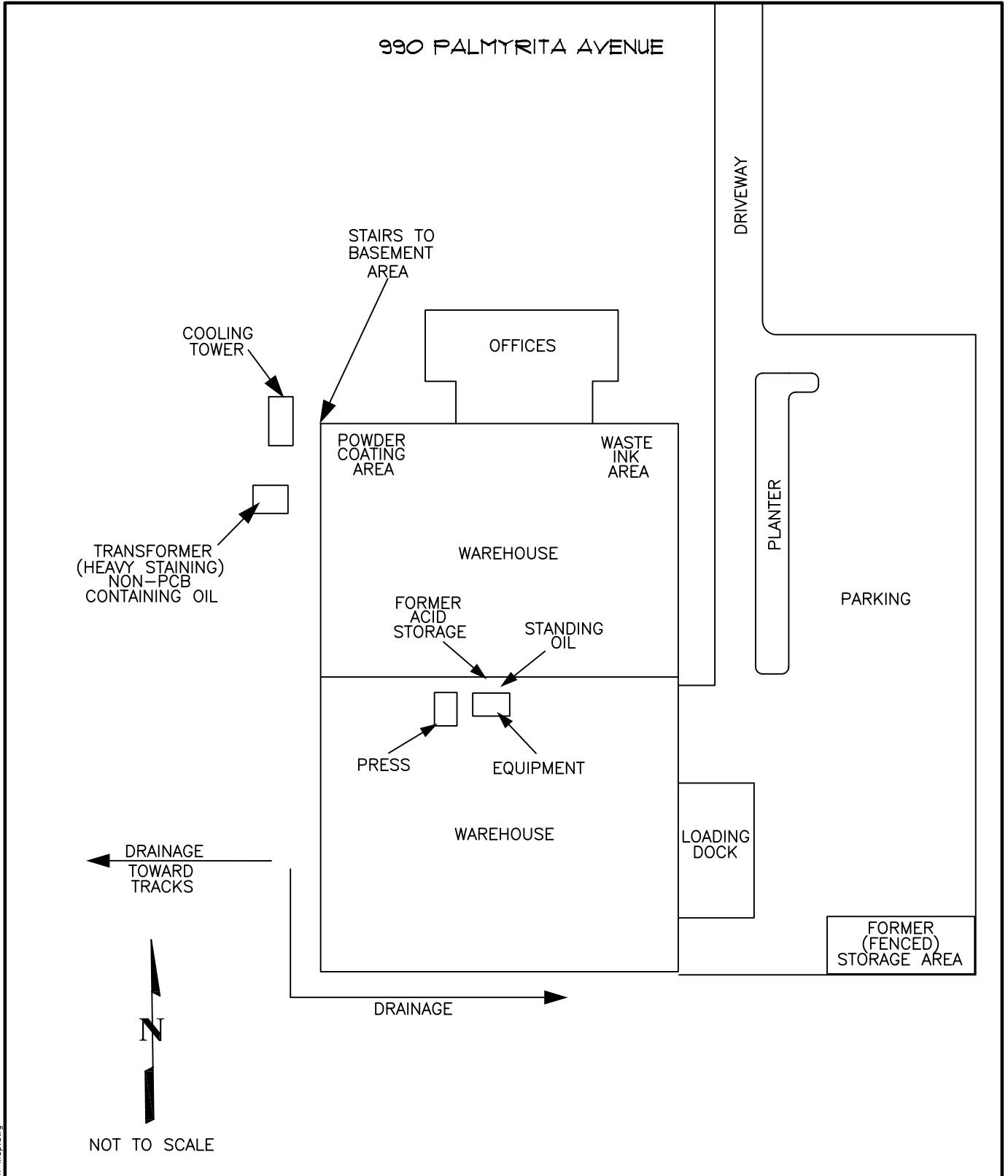
Perris Valley Line - Segments 6, 7

Riverside County, Ca

Perris Valley Line
Corridor Study
Riverside County, Ca

Project No.	92666
Drawn By:	R. Alvarez
Checked by:	
Date:	08/01/2008
File Name:	PVL_plate4_080108





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**DETAILED SITE PLAN
PROPOSED PALMYRITA
STATION SITE**

HAZARDOUS MATERIALS CORRIDOR STUDY
PERRIS VALLEY LINE
RIVERSIDE COUNTY, CALIFORNIA

DRAWN BY: DRD
REVISED BY:
CHECKED BY:
PLATE
5

DATE: 7-2008	APPROVED BY:	PROJECT: 92666	FILE NAME:
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