

1.3 Reliance

This ESA has been prepared for the sole use of Accretive Investments, Inc. (Client). This assessment should not be relied upon by other parties without the express written consent of EEI and Client. Any use or reliance upon this assessment by a party other than the Client, therefore, shall be solely at the risk of such third party and without legal recourse against EEI, its employees, officers, or directors, regardless of whether the action in which recovery of damages is brought or based upon contract, tort, statute or otherwise.

This assessment should not be interpreted as a statistical evaluation of the subject property, but rather is intended to provide a preliminary indication of on-site impacts from previous property usage and/or the release of hazardous materials. If no significant indicators of the presence of hazardous materials and/or petroleum contamination are encountered during this search, this does not preclude their presence. The findings in this report are based upon published geologic and hydrogeologic information, information (both documentary and oral) provided by the County of San Diego, FirstSearch® (i.e., agency database search), various state and federal agencies, and EEI's field observations. Some of these data are subject to change over time. Some of these data are based on information not currently observable or measurable, but recorded by documents or orally reported by individuals.

2.0 PHYSIOGRAPHIC SETTING

2.1 Subject Property Description

Regionally, the subject project is situated along the Interstate 15 (I-15) corridor in northern San Diego County, north of the City of Escondido and west of the community of Valley Center. The subject property consists of proposed roadway improvements including the southbound I-15 off ramp to Old Highway 395 and the northbound I-15 off ramp to Old highway 395. Existing roadway pavement consists entirely of asphaltic concrete.

The subject property is comprised of two separate easement areas: one consisting of a single 300-foot by 40-foot area at the southbound I-15 onramp into Old Highway 395, and the other a pair of 300-foot areas on either side of the off ramp from I-15 southbound to Old Highway 395 (one at 40-foot width, and one at 20-foot width); plus a 100-foot easement directly north of the I-15 northbound off ramp.

Based on historical records such as aerial photographs, and topographic maps, Old Highway 395 was present in the site vicinity from at least 1946. In 1980, I-15 was present in its current configuration. The subject property has mainly been bordered by a mix of undeveloped land, agricultural land, and rural residential development throughout history.

2.2 Topography

The subject property is located on the United States Geological Survey (USGS), Bonsall, 7.5-Minute Quadrangle (USGS, 2012). Overall, the subject properties are located on moderately to steeply sloping terrain consisting of varying topographic relief. An un-named creek traverses (under) Old Highway 395 near the intersection with the I-15 northbound off ramp, flowing in a southerly direction. Based upon the aforementioned USGS map, the approximate elevation of the intersection of Old highway 395 with the southbound off ramp is 700 feet above mean sea level (amsl). The approximate elevation of the intersection of Old highway 395 with the northbound off ramp is 5800 feet amsl. Based on topographic relief, surface water drainage in this vicinity appears to be predominately to the south.

2.3 Regional and Local Geology

The subject property and vicinity lies within the Peninsular Ranges Geomorphic Province of California (CGS, 2002). The Peninsular Ranges Geomorphic Province extends from the Transverse Ranges Geomorphic Province and the Los Angeles Basin, south to Baja California. This province varies in width from about 30- to 100-miles. It is bounded on the west by the Pacific Ocean, on the south by the Gulf of California and on the east by the Colorado Desert Province. The Peninsular Ranges are essentially a series of northwest-southeast oriented fault blocks. The Transverse Ranges Geomorphic Province bounds the Peninsular Ranges on the north.

Major fault zones and subordinate fault zones found in the Peninsular Ranges Province typically trend in a northwest-southeast direction. The closest major faults to the subject property are the Julian segment of the Elsinore Fault zone; the Rose Canyon Fault zone; and the Coronado Bank Fault zone (including the San Diego Trough Fault). Other major faults in the region include the San Jacinto Fault zone and the San Andreas Fault zone. The San Andreas Fault zone is considered the most active fault zone and borders the northeasterly margin of the province.

Geologic maps indicate the general vicinity of the subject property is underlain by Mesozoic aged (Cretaceous) granitic rocks (Tan, 2000). Specifically, the property is underlain by Tonalite of Couser Canyon, described as a Hornblende-biotite tonalite; coarse grained and massive. This Tonalite contain some granodiorite and is characterized by an abundance of pegmatite dikes.

Soils beneath the project site and vicinity have been identified by the United States Department of Agriculture – Natural Resources Conservation Service, Web Soil Survey as sandy loams of the Cieneba soil series (USDA, 2012). The Cieneba series consists of very shallow and shallow, somewhat excessively drained soils that formed in material weathered from granitic rock. Cieneba soils are on uplands and have slopes of 9 to 85 percent. These soils are somewhat excessively drained, have low to medium runoff, moderately rapid permeability in the soil, but much slower in the weathered granite.

2.4 Regional and Local Hydrogeology

According to the San Diego Regional Water Quality Control Board (SDRWQCB, 1994), the subject property is located within the groundwater designation of the Bonsall Subarea (HSA – 903.12), which is a part of the lower San Luis Hydrologic Area (HA – 903.10) and located within the San Luis Rey Hydrologic Unit (HU – 903.00). Groundwater beneath the San Luis HA has been identified as having existing beneficial uses for municipal, agricultural, and industrial supply processes.

EEI reviewed the California Department of Water Resources, Water Data Library website (WDL, 2012) for additional information pertaining to groundwater and water supply wells on or close to the subject property. According to the website, there no water supply wells located in the immediate site vicinity.

2.5 Hydrologic Flood Plain Information

EEI reviewed the Federal Emergency Management Agency (FEMA, 2012) Flood Insurance Rate Map (FIRM) online database to determine if the subject property was in a flood zone. According to the information reviewed on FIRM 06073C0495G Panel 495 of 2375 (revised May 2012), the subject property is situated within Zone X. Zone X is designated as being areas of 500-year flood; areas of 100-year flood with average depths of less than one foot or with drainage areas less than one square mile, and areas protected by levees from 100-year flood. A copy of the FIRM is included in **Appendix B**.

3.0 SUBJECT PROPERTY BACKGROUND

3.1 Subject Property Ownership

Given that the subject property consists of vacant land associated with a proposed existing roadway expansion project, the property owner information was not readily available.

3.2 Subject Property History

EEI reviewed readily available information sources to evaluate historic land use in and around the subject property. These information sources include information from aerial photographs, USGS maps and the County of San Diego. The information sources reviewed is summarized in the following sections.

3.2.1 Aerial Photograph and Historical Map Review

Aerial photographs and historical topographical maps were reviewed to identify historical land development and any surface conditions which may have impacted the subject property. Photographs and historical topographic maps dating 1939, 1946, 1948, 1951, 1953, 1963, 1968, 1974, 1975, 1980, 1990/91, 2002, 2008, and 2012 were obtained and reviewed from Track Info Services/FirstSearch®, an environmental information/database retrieval service. A 2010 aerial photograph was obtained from Google Earth® and reviewed, a copy of which is included herein (**Figure 2**).

Table 1 summarizes the results of the historical use review. Copies of the aerial photographs and historical topographic maps provided by Track Info Services/FirstSearch® are included in **Appendix C**. According to the information reviewed, Old Highway 395 was present in the site vicinity from at least 1946. In 1980, I-15 was present in its current configuration. The subject property has mainly been bordered by a mix of undeveloped land, agricultural land, and rural residential development throughout history. No significant offsite development, such as commercial development, was noted in the immediate site vicinity.

TABLE 1 Summary of Historical Use Review		
Year	Source and Scale	Comments
1939	Aerial Photograph 1:340	Subject property and surrounding property appeared as undeveloped land. An unimproved road appeared to the west in the site vicinity.
1946	Aerial Photograph 1:340	Old Highway 395 was present in the site vicinity. Sparse development appeared along Old Highway 395.
1948/1951	Topographic Map 1:24,000	Old Highway 395 was present as the major roadway in the site vicinity. Sparse rural residential development was noted in the surrounding area.
1953	Aerial Photograph 1:340	No apparent changes were noted on the site vicinity; with the exception of increased agricultural and structural development in the surrounding area.
1963	Aerial Photograph 1:340	No apparent changes were noted on the site vicinity; with the exception of increased agricultural and structural development in the surrounding area.

TABLE 1
Summary of Historical Use Review

Year	Source and Scale	Comments
1968/1975	Topographic Map 1: 24,000	No apparent changes were noted on the subject property or adjacent property. Increased development of roads and structures appeared in the surrounding area.
1974	Aerial Photograph 1:340	No apparent changes were noted on the site vicinity; with the exception of increased agricultural and structural development in the surrounding area.
1980	Aerial Photograph 1:685	I-15 appeared crossing Old Highway 395. Freeway on and off ramps appeared in the immediate site vicinity.
1990/1991	Aerial Photograph 1:340	No apparent changes were noted on the site vicinity; with the exception of increased development in the surrounding area.
2002/2008	Aerial Photograph 1:340	No apparent changes were noted in the site vicinity.
August 2010	Aerial Photograph Google Earth®	The subject property and adjacent and surrounding property appeared in its current configuration. A mix of agricultural land, residential and commercial development appeared in the site vicinity.
2012	Topographic Map 1:24,000	I-15 traversed over Old Highway 395 in its current configuration. West Lilac Road was present to the north. Increased development appeared in the surrounding area.

3.2.2 City/County Directory

Due to the absence of structural development on the subject property, and therefore, the lack of directory information, as well as the agricultural and rural land uses of the surrounding area, this information source was not researched as it was not deemed to be sufficiently useful.

3.2.3 Sanborn Fire Insurance Maps

Sanborn Fire Insurance maps were developed in the late 1800s and early 1900s for use as an assessment tool for fire insurance rates in urbanized areas. An on-line search was made at the Los Angeles County Public Library's collection of Sanborn Fire Insurance maps (LAPL, 2012). Sanborn map coverage was not available for the subject property and/or surrounding area; therefore, indicating little or no development prior to the 1950s.

3.2.4 County of San Diego Department of Planning and Land Use

Due to the absence of structural development on the subject property, and therefore, the lack of any associated address or building permit records, this information source was not researched as it was not deemed to be sufficiently useful.

3.3 Regulatory Database Search

EEI reviewed known electronic database listings for possible hazardous waste generating establishments in the vicinity of the subject property, as well as adjacent sites with known environmental concerns. Facilities were identified by county, state, or federal agencies that generate, store, or dispose of hazardous materials. The majority of information in this section was obtained from FirstSearch®, an environmental information/database retrieval service. A copy of the FirstSearch® report is provided in **Appendix D**, along with a description of the individual databases. The subject property was not listed on any of the databases researched.

3.3.1 Federal Databases

National Priority List (NPL) – No listings were reported within one mile of the subject property.

NPL Delisted – No listings were reported within one-half mile of the subject property.

Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS) – No listings were reported within one-half mile of the subject property.

CERCLIS (NFRAP) Archive – No listings were reported within one-half mile of the subject property.

Resource Conservation and Recovery Information System (RCRA) Corrective Action Sites (COR) – No listings were reported within one mile of the subject property.

RCRA TSD Facility List (RCRA-D) – No listings were reported within one-half mile of the subject property.

RCRA Generators (RCRA-G) – No listings were reported within one-quarter mile of the subject property.

RCRA No Longer Regulated (NLR) – No listings were reported within one-eighth mile of the subject property.

Federal Brownfield – No listings were reported within one-quarter mile of the subject property.

Emergency Response Notification System (ERNS) – No listings were reported within one-eighth mile of the subject property.

The subject property was not identified on any of the above-referenced databases researched.

3.3.2 State and Regional Sources

Tribal Lands – One listing was reported within one mile of the subject property: **Bureau of Indian Affairs Contact I**. One non-geocoded site was listed as **Bureau of Indian Affairs Contact 1** (location unknown). Tribal lands listings are generally not locations or releases, but placeholders used to contact the local Bureau of Indian Affairs representative for information on tribal lands in the area.

State/Tribal Sites – No listings were reported within one mile of the subject property.

State Spills 90 – No listings were reported within one-eighth mile of the subject property.

State/Tribal Solid Waste Landfill (SWL) Sites – One listing was reported within one-half mile of the subject property. **Green Co Farms** (32163 Old Highway 395, 0.27 miles south), was listed as a proposed green waste composting facility. Based on this information, this site is not considered an environmental concern.

State/Tribal California State Leaking Underground Storage Tanks (LUST) – No listings were reported within one-half mile of the subject property.

State/Tribal Permitted Underground Storage Tanks (UST)/Aboveground Storage Tanks (AST) – One listing was reported within one-quarter mile of the subject property. **Raymond L. Grimsinger** (61663 Palos Verdes Drive, 0.44 miles northeast), was listed as the site of a UST, with a status listed as “not reported” and “exempt.” Operating permits are not generally rationale for environmental concern, unless a release has occurred at the site. The listing has not reported a release; therefore, is not considered a concern.

State/Tribal IC/EC – No listings were reported within one-quarter mile of the subject property.

State/Tribal Voluntary Cleanup Program Properties (VCP) – No listings were reported within one-half mile of the subject property.

State/Tribal Brownfields – No listings were reported within one-half mile of the subject property.

State Permits – No listings were reported within one-quarter mile of the subject property.

State Other – No listings were reported within one-quarter mile of the subject property.

Oil and Gas Wells – No listings were reported within one-quarter mile of the subject property.

Federal IC/EC – Six listings were reported within one-quarter mile of the subject property.

Dry Cleaners – No listings were reported within one-quarter mile of the subject property.

Hazardous Waste Manifest – No listings were reported within one-quarter mile of the subject property

The subject property was not identified on any of the above-referenced databases researched.

3.4 Regulatory Agency Review

3.4.1 Deer Springs Fire Protection District

EEI contact the Deer Springs Fire Protection District (DSFPD) for information pertaining to hazardous waste releases, spills, incident, and/or inspection reports for the subject property. According to staff, the DSFPD does not hold records related to hazardous releases, spills, or UST permits and referred EEI to the County of San Diego Department of Environmental Health (see below). A search by personnel for incident or inspection reports related to the subject property revealed no records on file.

3.4.2 County of San Diego Department of Environmental Health

Due to the absence of development on the subject property, and therefore, the lack of an associated address, as well as the agricultural and rural residential land uses of the surrounding area, this information source was not researched as it was not deemed to be sufficiently useful.

3.4.3 State Water Resources Control Board

EEI reviewed the online database GeoTracker (2012), which provides records on LUSTs and Spills, Leaks, Investigation and Cleanup (SLIC) sites, which is maintained by the State Water Resources Control Board (SWRCB). Neither the subject property nor any adjacent or nearby properties were listed on any of the databases researched.

3.4.4 Department of Toxic Substances Control

EEI reviewed the online database EnviroStor (2012), which provides records on LUSTs, SLICs, Priority cleanup sites and states sites, which is maintained by the Department of Toxic Substances Control (DTSC). Neither the subject property nor any adjacent or nearby properties were listed on any of the databases researched.

3.4.5 Review of Division of Oil, Gas and Geothermal Resources Files

Oil and gas wells were not observed on the subject property during our subject property reconnaissance. A review of the California Division of Oil, Gas, and Geothermal Resources Website for oil and gas fields in California and Alaska (CDOGGR, 2012) indicated no petroleum exploration or production has occurred on or immediately adjacent to the subject property (identified as within Township 10S, Range 03W, Sections 24 and 25).

3.4.6 National Pipeline Mapping System

EEI reviewed the National Pipeline Mapping System (NPMS, 2012) public viewer website for gas transmission pipelines and hazardous liquid trunklines on or close to the subject property. According to the information reviewed, an unidentified pipeline parallels Old Highway 395 in the immediate site vicinity. No other information regarding the type of pipeline was provided. No other pipelines were noted in the site vicinity.

3.5 Interview with Current Property Owner

Based on the nature of the subject property consisting of vacant land associated with a proposed existing roadway expansion project, directive from the Client, and the fact that property owner information was not readily available, the property owner was not interviewed. Based on the information gathered from other readily available historical resources, including historic topographic maps, historic aerial photographs, and internet research, EEI does not consider the absence of this interview to effect the validity of this Phase I ESA.

3.6 User Provided Information

Pursuant to ASTM E1527-05, EEI provided a Phase I ESA User Specific Questionnaire to the “user” (the person on whose behalf the Phase I ESA is being conducted), in this case, Mr. Jon Rilling, with Accretive Investments, Inc., completed the questionnaire. The User Specific Information provided by Mr. Rilling is documented below. A copy of the user specific questions (per ASTM E1527-05) with Mr. Rilling’s associated responses is included in **Appendix E**.

3.6.1 Environmental Liens or Activity and Use Limitations

Mr. Rilling stated that he is not aware of any environmental liens, land use limitations, deed restrictions or governmental notifications relating to past or recurrent violations of environmental laws with respect to the property or any facility located on the property.

3.6.2 Specialized Knowledge

Mr. Rilling did not indicate that he had any other specialized knowledge related to the subject property.

3.6.3 Valuation Reduction for Environmental Issues

Mr. Rilling stated that valuation reduction for environmental issues is not applicable in this case.

3.6.4 Presence or Likely Presence of Contamination

Mr. Rilling indicated that he does not know of any specific issues related to past uses, specific chemicals, spills, releases, or cleanups which may have occurred on the property.

3.6.5 Other

Mr. Rilling noted that the Phase I ESA is required due to a County of San Diego Development application requirement. Mr. Rilling noted that the type of transaction is a survey for environmental planning.

3.7 Other Environmental Issues

3.7.1 Asbestos-Containing Materials

Asbestos, a natural fiber used in the manufacturing of a number of different building materials, has been identified as a human carcinogen. Most friable (i.e., easily broken or crushed) Asbestos-Containing Material (ACM) was banned in building materials by 1978. By 1989, most major manufacturers had voluntarily removed non-friable ACM (i.e., flooring, roofing, and mastics/sealants) from the market. These materials, however, were not banned completely.

In October 1995, the Federal Occupational Safety and Health Administration (OSHA) redefined the manner by which building materials are classified in regards to asbestos and the also the way these materials are to be handled. Under this ruling, “thermal system insulation and sprayed-on or troweled on or otherwise applied surfacing materials” applied before 1980 are considered presumed Asbestos-Containing Materials (PACM). Other building materials such as “floor or ceiling tiles, siding, roofing, transite panels” (i.e., non-friable) are also considered PACM unless tested.

An ACM survey was not conducted at the subject property as part of this Phase I ESA. The subject property consists of vacant land associated with a proposed expansion of existing improved roadways. Based on this information, the presence of asbestos-containing materials is not considered likely.

3.7.2 Lead-Based Paint

Lead-Based Paint (LBP) is identified by OSHA, the Environmental Protection Agency (EPA) and the Department Housing and Urban Development Department (HUD) as being a potential health risk to humans, particularly children, based upon its effects to the central nervous system, kidneys, and bloodstream. The risk of Lead-Based Paint has been classified by HUD based upon the age and condition of the painted surface. This classification includes the following:

- maximum risk is from paint applied before 1950;
- a severe risk is present from paint applied before 1960;
- a moderate risk is present from paint applied before 1970;
- a slight risk is present from paint applied before 1977; and
- paint applied after 1977 is not expected to contain lead.

The subject property consists of vacant land associated with a proposed expansion of existing improved roadways. Based on this information, the presence of lead-based paint is not considered likely.

3.7.3 Radon

Radon is a radioactive gas which has been identified as a human carcinogen. Radon gas is typically associated with fine-grained rock and soil, and results from the radioactive decay of radium. The U.S. EPA recommends that homeowners in areas with radon screening levels greater than 4 Picocuries per liter (pCi/L) conduct mitigation of radon gas to reduce exposure.

Sections 307 and 309 of the Indoor Radon Abatement Act of 1988 (IRAA) directed the U.S. EPA to list and identify areas of the U.S. with the potential for elevated indoor radon levels. U.S. EPA’s Map of Radon Zones (EPA-402-R-93-071) assigns each of the 3,141 counties in the US to one of three zones based on radon potential:

- Zone 1 counties have a predicted average indoor radon screening level greater than 4 pCi/L.
- Zone 2 counties have a predicted average indoor radon screening level between 2 and 4 pCi/L.
- Zone 3 counties have a predicted average indoor radon screening level less than 2 pCi/L.

Based on such factors as indoor radon measurements; geology; aerial radioactivity; and soil permeability, the U.S. EPA has identified the County of San Diego as Zone 3 (i.e., a predicted average indoor radon screening level less than 2 pCi/L). EEI does not consider radon as a significant environmental concern at this time.

3.7.4 Polychlorinated Biphenyls

Polychlorinated biphenyls (PCB's) are used in electrical equipment, particularly in capacitors and transformers, because they are electrically nonconductive and stable at high temperatures. PCB's persist in the environment, accumulate in organisms, and concentrate in the food chain.

The disposal of these compounds is regulated under the Toxic Substances Control Act, which banned the manufacture and distribution of PCB's. By Federal definition, PCB equipment contains 500 parts per million (ppm) or more of PCB's, where PCB-contaminated equipment contains PCB concentrations greater than 50 ppm but less than 500 ppm. The US Environmental Protection Agency (EPA), under TSCA guidance, regulates the removal and disposal of all sources of PCB's containing 50 ppm or more.

Any electrical equipment containing dielectric insulating fluids or coolants, manufactured prior to 1976, should be considered as potentially PCB-containing. This includes transformers, capacitors, and fluorescent light fittings. In addition, PCB's may also be found as a stabilizer in older lubricating oils, pesticide extenders, cutting oils, hydraulic fluids, paints, sealants, and flame retardants (UNEP, 1999).

No overhead power lines were observed in the immediate site vicinity. What appeared to be an abandoned (green) electrical box and a pole-mounted transformer was noted adjacent to the southeastern portion of the proposed improvement area. Based on our experience with similar sites surrounding the subject property and San Diego County, PCB containing pole-mounted transformers is unlikely; therefore, this equipment is not considered an environmental concern at this time.

4.0 SUBJECT PROPERTY RECONNAISSANCE

4.1 Purpose

The purpose of our subject property reconnaissance was to visually and physically observe the subject property, structures, and adjoining properties for conditions indicating an existing release, past release, or threatened release of any hazardous materials/substances or petroleum products into structures on the subject property, or into soil and/or groundwater beneath the subject property. This would include any evidence of contamination, distressed vegetation, petroleum-hydrocarbon surface staining, waste drums, ASTs/USTs, illegal dumping, or improper waste storage/handling. Detailed information is provided in the text below.

4.2 Subject Property

On August 2, 2012, EEI personnel conducted a site reconnaissance to visually observe the subject site and adjoining properties for conditions indicating a potential recognized environmental concern. Visual conditions present during the site reconnaissance are documented in the Photographic Log (**Appendix F**), and summarized in **Table 2**.

Overall, the subject project is situated along the I-15 corridor in northern San Diego County, north of the city of Escondido and west of the community of Valley Center. The subject property is comprised of two separate easement areas: one consisting of a single 300-foot by 40-foot area at the southbound I-15 onramp into Old Highway 395, and the other a pair of 300-foot areas on either side of the off ramp from I-15 southbound to Old

Highway 395 (one at 40-foot width, and one at 20-foot width); plus a 100-foot easement directly north of the I-15 northbound off ramp. Existing roadway pavement consists entirely of asphaltic concrete. Curb and gutters along the proposed improvement area, consisting of only the south edge of the northbound off ramp and the west edge of the southbound off ramp, are formed asphalt. Overhead power lines were not observed.

The southbound I-15 off ramp intersects Old Highway 395 on the west side of I-15. One lane allows for a right (west) turn onto an uphill section of Old Highway. The second lane allows for either a left turn onto a downhill section (and concrete overpass) of Old Highway 395 or access to the I-15 on ramp to southbound I-15. Based upon our field observations, surface expressions associated with underground utility improvements included small, street light and Caltrans concrete vaults. Additionally, a storm drain grate inlet was observed along the west edge of the off ramp near the northern boundary of the proposed improvements. This drainage inlet appeared to tie into a concrete lined drainage basin with grate inlet off the westerly shoulder. A concrete-paved drainage swale was also observed descending to the basin from the slope area to the west. The immediate shoulder of the west side of the off ramp consisted of granular soils. Thin, dry weeds/bushes were noted along the ascending slope west of the shoulder.

The northbound I-15 off ramp intersects Old Highway 395 on the east side of the I-15 corridor. One lane allows for access to a right downhill turn onto Old Highway 395. Another lane allows for a left run onto an uphill section (and concrete overpass) of Old Highway 395 or access to the I-15 on ramp to northbound I-15. An un-paved drainage swale (predominantly below roadway elevations) exists along the westerly edge of the off ramp. Topography west of the off ramp ascends toward an onramp to northbound I-15. The south side of the off ramp, within the proposed area of improvements, descends to natural drainage area. Underground utility improvements (i.e., small, street light concrete vaults) were visible along the easterly edge. The immediate shoulders on the off ramp consist predominantly of granular soils; however, dry weeds and bushes were observed along the shoulders of the off ramp.

The eastern side of Old highway 395, directly opposite the northbound off ramp consisted of an asphalt curb and an un-paved shoulder with dry weeds and bushes further east. Noticeable erosional gullies exposed cobbles and granular soils underlying the shoulder. The area east of the shoulder descends to another natural drainage area, where a grated storm drain riser inlet exists. What appeared to be an abandoned (green) electrical box and a pole-mounted transformer was noted adjacent to the southeastern portion of the proposed improvement area.

EEI personnel conducted a reconnaissance of the property by traversing the property from north to south then east to west to physically observe the property and adjoining properties for conditions indicating a potential recognized environmental concern. Concerns would include any evidence of contamination, distressed vegetation, petroleum-hydrocarbon staining, waste drums, illegal dumping, or improper waste storage and/or handling. No evidence of *recognized environmental conditions* was noted on the subject property during our subject property reconnaissance efforts.

TABLE 2 Summary of Subject Property Reconnaissance		
Item	Concerns	Comments
General Housekeeping	No	Minor to locally common wind-blown glass, plastic and trash/debris observed onsite.
Surface Spills	No	None observed.
Stained Surfaces	No	A few, very minor and weathered areas of petroleum staining were observed along the unpaved shoulders.
Fill Materials	No	Roadway fills associated with off ramp construction were observed.
Pits/Ponds/Lagoons	No	None observed.
Surface Impoundments	No	None observed.
ASTs/USTs	No	None observed.
Distressed Vegetation	No	None observed.
Wetlands	No	None observed directly within the proposed improvement areas.
Electrical Substations	No	None observed.
Areas of Dumping	No	None observed.
Transformers	No	None observed.
Waste/Scrap Storage	No	None observed.
Chemical Use/Storage	No	None observed.

4.3 Adjacent Properties

On August 2, 2012, EEI personnel conducted a visual and auto reconnaissance of the adjoining neighborhoods (to the extent practical) to evaluate the potential for offsite impacts that may affect the subject property. These would include evidence of chemical storage or usage, surface staining or leakage, distressed vegetation, or evidence of illegal dumping.

In general, the subject property is surrounded by rural, agricultural, and undeveloped land as well as the I-15 corridor easements. Access was limited to adjacent sites along Old Highway 395; however, immediately adjacent properties were not identified as having environmental related issues on any of the databases researched, and are not considered as an environmental concern at this time. No service stations, dry cleaners, or industrial properties were located in the immediate vicinity.

5.0 LIMITED SOIL INVESTIGATION

The subject linear properties do not appear to have been utilized for agricultural purposes. The subject property consists of major roadways/highways, including I-15 and Old Highway 395. Based on the future planned widening and improvements to the roadways, off ramps and intersections, additional investigation efforts (i.e., soil sampling and analysis) were performed by EEI to further evaluate subject property soils for aerially-deposited lead from historical automotive fuel combustion.

EEI collected soil samples along the Old Highway 395 off ramps to north and southbound I-15 (on both sides of the off ramps). The widths of the proposed easements were 40 feet and 300 feet in length. The exception was the easement along the easterly edge of Old highway 395, directly east of the northbound I-15 off ramp. This area was 100 feet in length. A total of eight (8) discrete surficial soil samples were collected from the roadway shoulders. All soil samples were submitted for laboratory analytical testing. The following sections discuss our investigation activities.

5.1 Field Investigation

On August 2, 2012, EEI personnel mobilized to the subject areas to conduct soil sampling activities with a stainless steel hand auger. Soil sampling locations were selected with the goal of collecting representative soil samples from the subject property. A total of five (5) discrete locations (identified as HA-1 through HA-5, **Figure 3**) were chosen to provide representative coverage at the northbound I-15 off ramp to Old Highway 395. Three (3) soil samples were collected along the easement area on the westerly edge of the southbound off ramp of I-15 to Old Highway 395 (identified as HA-6 through HA-8, **Figure 3**).

Individual samples were collected at a composite depth of approximately zero to six-inches below ground surface (bgs), using a hand auger. Sample material was extracted from the ground and placed in laboratory-supplied, 4-ounce glass jars. The jar was sealed with a Teflon-lined cap, and labeled with a number unique to the sample. The samples were placed in a chilled cooler and transported to EEI's office in Carlsbad and stored in a refrigerator, where they were subsequently picked up by SunStar Labs, a California State-certified laboratory, under proper Chain-of-Custody (COC) documentation.

5.2 Laboratory Analytical Testing

All eight (8) discrete soil samples (HA-1 through HA-8) collected during this investigation were analyzed for Total Lead by United States Environmental Protection Agency (U.S. EPA) Test Method 6010B. The following bulleted items summarize the results of laboratory analytical testing:

- Concentrations of lead were detected at 18 milligrams per kilogram (mg/kg) in sample HA-5. No other samples detected lead above the laboratory reporting limit (i.e., "non-detect").

The attached **Table 3** summarizes laboratory analytical results. Complete laboratory reports and COC documentation are provided in **Appendix G**.

TABLE 3			
Soil Sample Results			
Sample ID	Sample Depth (inches bgs)	Date Sampled	Total Lead-EPA 6010B (mg/Kg)
HA-1	0-6	8-2-2012	ND
HA-2	0-6	8-2-2012	ND
HA-3	0-6	8-2-2012	ND
HA-4	0-6	8-2-2012	ND
HA-5	0-6	8-2-2012	18
HA-6	0-6	8-2-2012	ND
HA-7	0-6	8-2-2012	ND
HA-8	0-6	8-2-2012	ND
Laboratory Reporting Limit			3
Residential CHHSLs			150
bgs = below ground surface; CHHSL = California Human Health Screening Levels; EPA = Environmental Protection Agency; mg/kg = milligrams per kilogram; ND = Non Detect, or less than the laboratory reporting limit			

5.3 Discussion of Testing Results

Lead was detected above the laboratory detection limit in sample HA-5, at 18 milligrams per kilogram (mg/kg). No other samples analyzed detected lead above the laboratory reporting limit (i.e., “non-detect”).

EEI compared the reported lead value to the California Human Health Screening Levels (CHHSL) residential land use scenario values. The CHHSLs are concentrations of select hazardous chemicals that are used to estimate and compare reported values in soil to risk to human health. The following bulleted items summarize the reported values:

- The detected lead concentration of 18 mg/kg, is less than the CHHSL residential screening level of 150 mg/kg in one sample.

6.0 FINDINGS AND OPINIONS

Based on the information obtained in this ESA, EEI has the following findings and opinions:

- Known or suspected RECs – No known or suspected RECs have been identified during the preparation of this ESA: However, based on the future planned widening and improvements to the roadways, off ramps and intersections, additional investigation efforts (i.e., soil sampling and analysis) were performed by EEI to further evaluate the subject property soils for aerially-deposited lead from historical automotive fuel combustion. Therefore, EEI performed a limited soil investigation at the subject property.

The results of our limited soil investigation (see Section 5.0 –Limited Soil Investigation) revealed low concentrations of lead in a single soil sample from site soils. The concentrations were less than applicable residential screening values, and within acceptable levels for reuse per Caltrans (Caltrans, 2012) and DTSC guidance; therefore, further investigation does not appear to be warranted at this time. Additionally, according to the Client, the soils from the subject property will not be relocated or reused (i.e. placed beneath a residential use area), during construction of the proposed Lilac Hills Ranch Development.

- Historical REC's – No historical REC's have been revealed during the preparation of this ESA.
- *De Minimis* Conditions – No de minimis conditions have been revealed during the preparation of this ESA.

7.0 DATA GAPS AND DEVIATIONS FROM ASTM PRACTICES

Section 3.2.20 (ASTM 1527-05) defines a data gap as “a lack or inability to obtain information required by the practice despite good faith efforts of the environmental professional to gather such information.”

7.1 Historical Data Gaps

Based on the information obtained during the course of this investigation, the following historical data gaps were encountered.

Specific Gaps

Information regarding the current and past owners of the subject property was not readily available; therefore, this historical source was not researched.

Resolution Efforts

EEI researched historic topographic maps, historic aerial photographs, and internet research to supplement historical information.

Opinions on Data Gap Significance

Based on the information gathered from readily available sources, EEI does not consider the absence of this interview to effect the validity of this Phase I ESA.

7.2 Regulatory Data Gaps

No regulatory data gaps were identified during our research efforts.

7.3 On-site Data Gaps

No on-site data gaps were identified during our research efforts.

7.4 Deviations from ASTM Practices

Section 12.10 (ASTM 1527-05), states that all deletions and deviations from this practice shall be listed individually and in detail, including Client imposed constraints, and all additions should be listed.

EEI believes that there are no exceptions to, or deletions from, the ASTM Designation E1527-05 Guidelines.

8.0 CONCLUSIONS

We have performed a Phase I Environmental Site Assessment (ESA) in conformance with the scope and limitations of ASTM Designation E1527-05 for the proposed roadway expansion property including ramp segments at the intersection of Old Highway 395 and Interstate 15 (I-15), situated east and west of I-15, Escondido, California. Any exceptions to, or deletions from, this practice are described in Section 7.0 of this report. This Phase I ESA has revealed no evidence of *recognized environmental conditions* in connection with the property. Therefore, no further investigation appears to be warranted at this time.

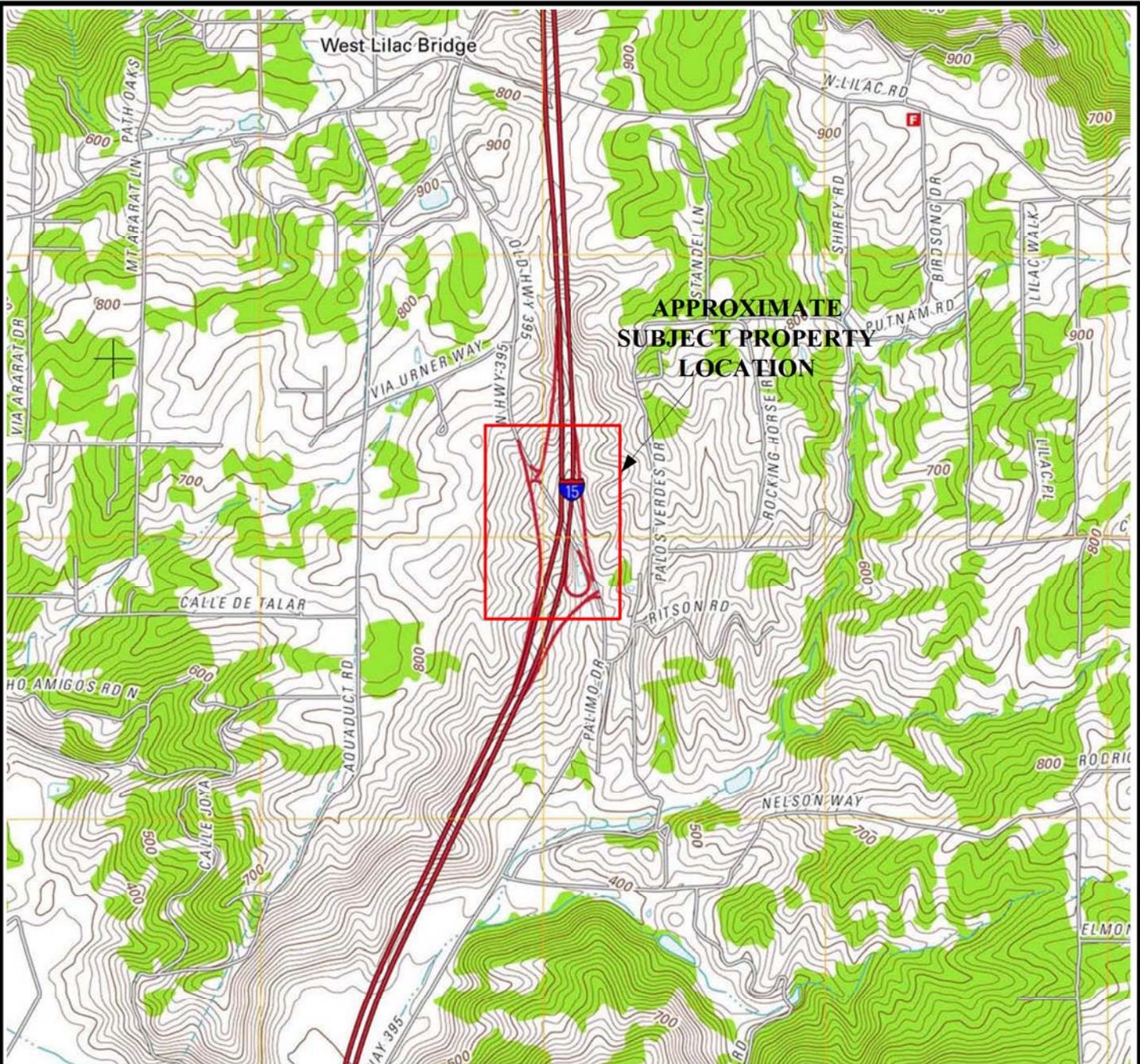
9.0 REFERENCES

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- United Nations Environmental Programme, 1999, Guidelines for the Identification of PCBs and Materials Containing PCBs.

United States Department of Agriculture (USDA), Natural Resources Conservation Service, Website (<http://websoilsurvey.nrcs.usda.gov/app/>) Web Soil Survey, accessed August 2012.

United States Geological Survey (USGS, 1975, photograph inspected 2012, Bonsall, 7.5-Minute Quadrangle.

FIGURES



Map Source: USGS, Bonsall, California 7.5 Minute Quadrangle map (USGS, 2012)

SITE LOCATION MAP

ACCREITIVE INVESTMENTS, INC.

Lilac Hills Ranch

Old Highway 395 and Interstate 15 Ramp Segments

Escondido, California 92026

EEl Project Number ACR-71497.1d

Created August 2012



Scale: 1" = 1,600'



Note All Locations Are Approximate



FIGURE 1



Map Source: Google Earth®, August 23, 2010



Scale: 1" = 400'



Note All Locations Are Approximate

AERIAL SITE MAP

ACCRETIVE INVESTMENTS, INC.

Lilac Hills Ranch

Old Highway 395 and Interstate 15 Ramp Segments

Escondido, California 92026

EEI Project Number ACR-71497.1d

Created August 2012



FIGURE 2



Map Source: Google Earth®, August 23, 2010

LEGEND

○ EEI Soil Boring Location
HA-1



Scale: 1" = 400'



Note All Locations Are Approximate

SOIL BORING MAP
 ACCRETIVE INVESTMENTS, INC.
 Lilac Hills Ranch
 Old Highway 395 and Interstate 15 Ramp Segments
 Escondido, California 92026
 EEI Project Number ACR-71497.1d
 Created August 2012



FIGURE 3

APPENDIX A
RESUME OF ENVIRONMENTAL PROFESSIONAL



Polly Ivers

Project Scientist

HIGHLIGHTS OF QUALIFICATIONS

- Experienced in project management duties for conducting field research, data collection, inventory, analyses and report development in the Environmental Science industry.
- Knowledgeable of environmental compliance and regulations and technical writing specifications for environmental documentation and regulatory reporting.
- Excellent communication and interpersonal skills. Diplomatic and experienced in working with diverse populations including the public, colleagues, clients and agency representatives.
- Strong analytical, detail-oriented, organizational, and verbal/written communication skills.
- Proficient in MS Office, MS Visio, CADD, ArcGIS 9.1, Adobe Acrobat and internet research.

EDUCATION

UNIVERSITY OF COLORADO, Boulder, CO B.S. Biology 1987
WETLANDS TRAINING INSTITUTE, San Diego, CA 2004
UNIVERSITY OF UTAH, Salt Lake City, UT GIS/Environmental Science Coursework 2002 - 2010

PROFESSIONAL EXPERIENCE

EEI, INC., (*Geotechnical and Environmental Solutions*), Carlsbad, CA 2004 - Present

Environmental Project Scientist (4/05 - Present)

- Oversee the execution and management of Phase I Environmental Site Assessments (ESA) for over 200+ sites in California, Nevada, and Arizona.
- Direct Phase II limited site investigations, including Soil and Agricultural Chemical Surveys (drilling, sampling, and monitoring). Supervised small field crews on key client projects.
- Assisted with Biological Assessment reports and Wetland Delineation Surveys.
- Manage budgets ensuring fiscal responsibility on each project.
- Supervise and mentor two staff members in daily duties and perform yearly peer reviews.
- Write ESA reports based on researched technical data. Edit and review co-worker reports.
- Contributed compliance documents for Environmental Impact Reports (under NEPA and CEQA regulation) and Storm Water Pollution Prevention Plans (SWPPP).

Environmental Staff Scientist (3/04 - 3/05)

- Worked closely with Project Managers: conducted field visits to project sites for evaluation; used topographic maps, aerial photographs, GPS units, and scientific tools and equipment; attended meetings; and managed project files and database.

CERTIFICATIONS

40-Hour Hazardous Waste Operations and Emergency Response (HAZWOPPER)

APPENDIX B
ROADWAY EXPANSION FIGURES/FIRM

↑
N

300-scale



ance program at 1-800-638-6620.



MAP SCALE 1" = 1000'



NFIP

NATIONAL FLOOD INSURANCE PROGRAM

PANEL 0495G

FIRM

FLOOD INSURANCE RATE MAP
SAN DIEGO COUNTY,
CALIFORNIA
AND INCORPORATED AREAS

PANEL 495 OF 2375

(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

COMMUNITY NUMBER 050284
SAN DIEGO COUNTY PANEL 0495
SUFFIX 0

Notice to User: The Map Number shown below should be used when placing map orders, the Community Number shown above should be used on insurance applications for the subject community.

MAP NUMBER
06073C0495G
MAP REVISED
MAY 16, 2012



Federal Emergency Management Agency

This is an official copy of a portion of the above referenced flood map. It was extracted using F-MIT On-Line. This map does not reflect changes or amendments which may have been made subsequent to the date on the title block. For the latest product information about National Flood Insurance Program flood maps check the FEMA Flood Map Store at www.msc.fema.gov

APPENDIX C
HISTORICAL AERIAL PHOTOGRAPHS/TOPOGRAPHIC MAPS



Historical Aerial Photo
2008

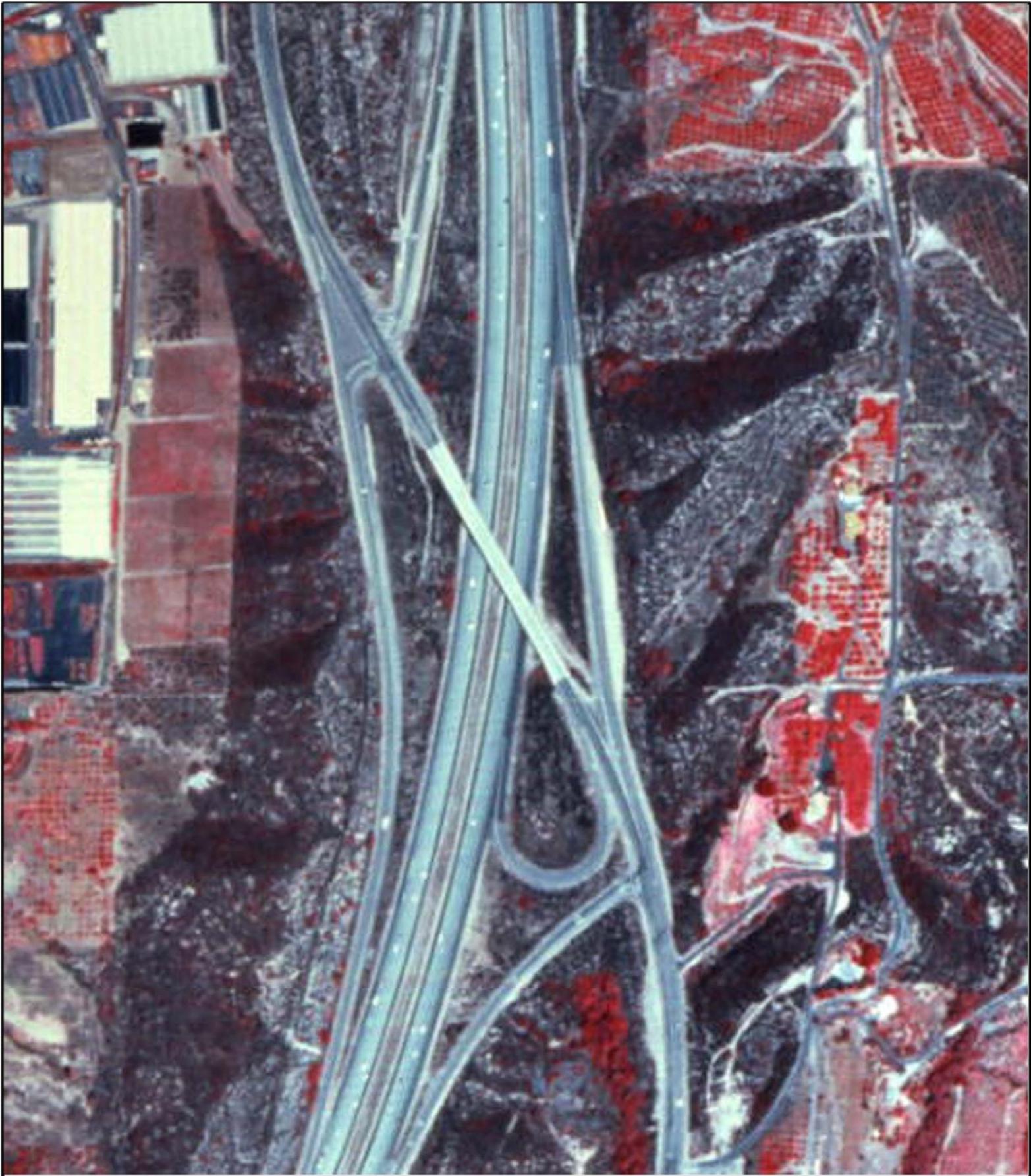
**OLD HWY 395
ESCONDIDO, CA 92026**



FIRSTSEARCH

Target Site: 33.286131, -117.149450 Job Number: ACE-71497.1d
(EARTH EXPLORER)

1 inch equals 340 feet



Historical Aerial Photo
2002

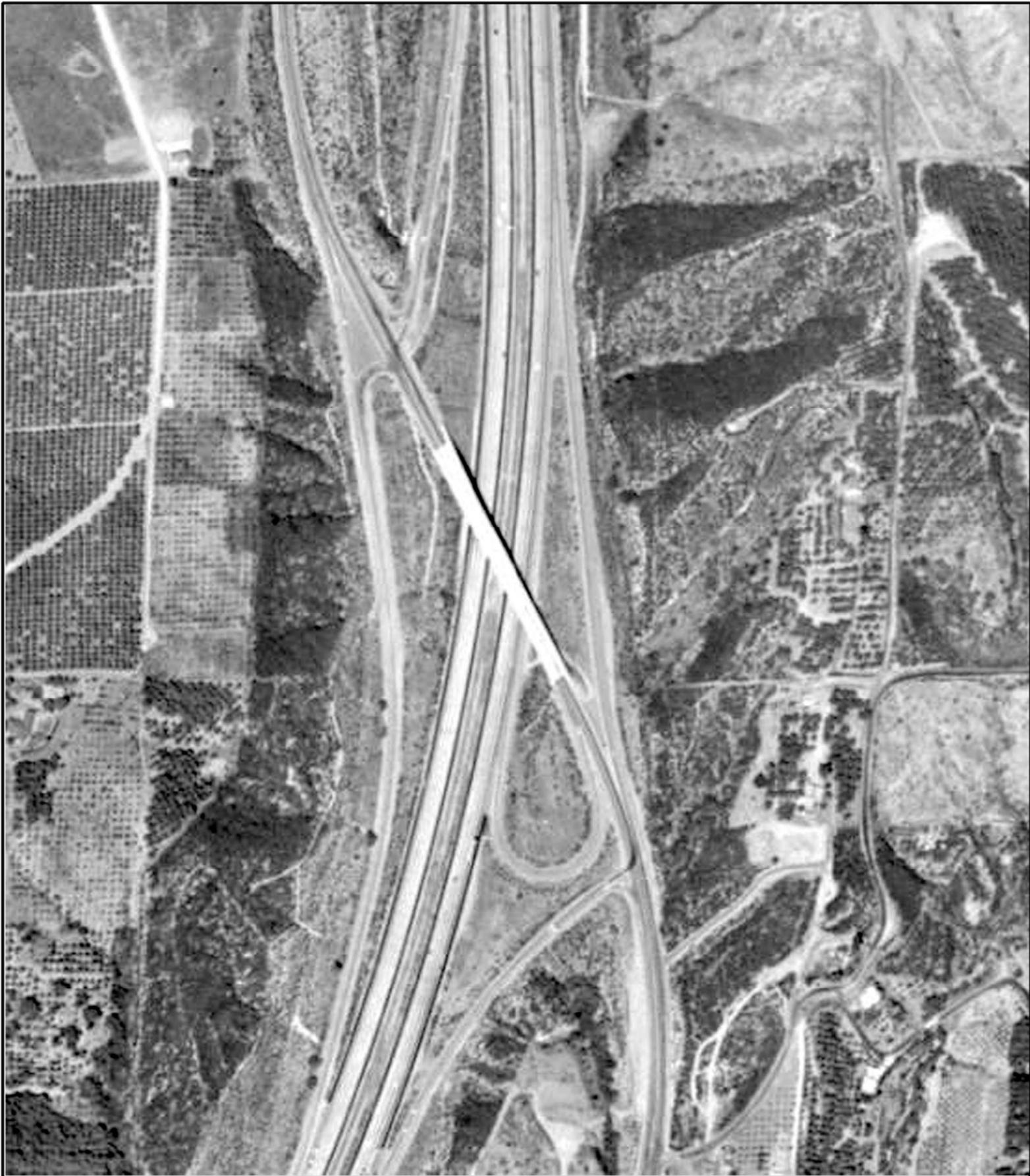
**OLD HWY 395
ESCONDIDO, CA 92026**



FIRSTSEARCH

Target Site: 33.286131, -117.149450 Job Number: ACE-71497.1d
(NAPP-3C_12474-180)

1 inch equals 340 feet



Historical Aerial Photo

1990-1991

**OLD HWY 395
ESCONDIDO, CA 92026**



FIRSTSEARCH

Target Site: 33.286131, -117.149450 Job Number: ACE-71497.1d
(AMI-SD-90-91_12580)

1 inch equals 340 feet