

APPENDIX E

Phase I Environmental Site Assessment

APPENDIX E-1

Phase 1 Environmental Site Assessment



PHASE I ENVIRONMENTAL SITE ASSESSMENT

**INTEGRAL COMMUNITIES
Gateway Project
Former Escondido Police Station
700 West Grand Avenue
APN 232-100-16-00
City of Escondido
County of San Diego, California 92025**

September 24, 2016

EEI Project Number IPF-72198.1

PHASE I ENVIRONMENTAL SITE ASSESSMENT

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Subject property location:

Gateway Project
Former Escondido Police Station
700 West Grand Avenue
APN 232-100-16-00
City of Escondido
County of San Diego, California 92025

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EEI Project Number IPF-72198.1

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GENERAL SUBJECT PROPERTY INFORMATION

Project Information: Gateway Project

EEI Project Number: IPF-72198.1

Subject Property Information:

700 West Grand Avenue
APN 232-100-16-00
City of Escondido
County of San Diego, California 92025

Subject Property Access Contact: Ninja Hammond, Integral Communities (Ph. 760-944-7511)

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Inspection Date: September 2, 2015; **Report Date:** September 24, 2015

Client Information:

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Site Assessor:

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EP Certification:

I declare that, to the best of my professional knowledge and belief, I meet the definition of Environmental Professional as defined in 40 CFR 312.10 (**Resume, Appendix A**).

.Bernard A. Sentianin – Principal Geologist

AAI Certification:

We have the specific qualifications based on education, training, and experience to assess a property of the nature, history, and setting of the subject property. We have developed and performed the all appropriate inquiries in conformance with the standards and practices set forth in 40 CFR Part 312.

Bernard A. Sentianin – Principal Geologist

EXECUTIVE SUMMARY

At the request and authorization of the Client (Integral Communities), EEI conducted a Phase I Environmental Site Assessment (ESA) for the property located at 700 West Grand Avenue, in the City of Escondido, County of San Diego, California. The purpose of this Phase I ESA was to assess the presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: (1) due to any release to the environment; (2) under conditions indicative of a release to the environment; or (3) under conditions that pose a material threat of a future release to the environment (i.e., *recognized environmental condition* as delineated in ASTM E1527-13). A *de minimis* condition is not considered a *recognized environmental condition*.

The property encompasses 2.6-acres located on a single parcel identified by Assessor's Parcel Number (APN) 232-100-16-00. The property is occupied with a single two-story building, consisting of 18,000 square feet (sf), and paved parking areas on the east side. The onsite building previously served as the Escondido Police station, and is currently occupied by the Warfighter Academy, a gunfighter tactical school.

According to the Client, a residential and commercial development is proposed for the subject property and includes the construction of 148 condominium units and a limited amount of ground floor retail (3,000 sf) space, along with parking and other improvements.

In general, the subject property is located in a mixed residential and commercial area in the central portion of the City of Escondido. The subject property is immediately bound by West Valley Parkway, beyond which is the Escondido Transit Center. To the south, the subject property is bound by West Grand Avenue, beyond which is the Hawthorne Country Store and Mission Pools (675 and 755 West Grand Avenue). Farther south, lays the O.H. Kruse Grain and Milling facility (aka Vitagold Brands Coop) at 135 South Quince Street. To the east, the subject property is bound by asphalt-covered parking areas and a commercial structure occupied by California Bank and Trust (613 West Valley Parkway). To the west, the subject property is bound by railroad tracks, beyond which are an asphalt-covered parking area followed by North County Stone and Tile (800 West Grand Avenue). The San Diego Union Tribune building and commercial shopping center is located to the northwest of the subject property across West Grand Avenue. According to the City of Escondido Planning Department, the property is located within the Downtown Revitalization Area Specific Plan (S-P).

Based on historical records such as aerial photographs, topographic maps, and Sanborn maps, portions of the subject property and adjacent property to the east was occupied by the Escondido Lumber Hay and Grain Company from at least 1907 through the early 1960's. In addition, the southwest corner of the subject property was occupied by the Escondido Fruit Growers Association, Lemon Packing House in 1927 Sanborn map, and with a Bonded Winery in maps dating 1940 through 1962. By 1979, the existing onsite building and parking area was located on the subject property. Development of the adjacent and surrounding area for increased commercial uses began in the 1960's.

EEI contacted the County of San Diego Department of Environmental Health (CSDDEH), California Department of Toxic Substances Control (DTSC), State Water Resources Control Board (SWRCB), and reviewed other State and Federal databases to determine if the subject property, or any adjacent properties, were listed as hazardous waste generators, underground storage tank releases (UST), or as having other environmental concerns (i.e., spill, leak, or aboveground tank). The subject property was not listed on any of the databases researched. The former occupant of the subject property, City of Escondido Police Department (700 West Grand Avenue) was listed under the Hazardous Waste Facility and Manifest data (HAZNET), Underground Storage Tank (UST), San Diego County Hazardous Materials Division (HMD), and other Historical UST databases (SWEEPS and Hist UST) as the site of a former diesel fuel storage UST (2,000-gallons). The former UST was removed from the subject property October 14, 2010.

The site was also listed under the Leaking Underground Storage Tank Database (LUST) as the site of release discovered during tank removal. EEI reviewed files regarding the subject property with the CSDDEH Land and Water Quality Division (LWQD). A summary of the background information indicated that on October 14, 2010, a diesel UST and associated piping were removed from the site under the supervision of a SAM specialist. Soil samples collected beneath the former UST and product line, as well as from beneath the former slab at depths of 13.6 and 14.9 feet below ground surface (bgs), respectively on the northeast side of the excavation, and were analyzed for total petroleum hydrocarbons as gasoline and diesel (TPHg and TPHd), benzene, toluene, ethylbenzene, and xylenes (BTEX) and fuel oxygenates. No TPHg, BTEX, or fuel oxygenate concentrations were reported above the respective laboratory reporting limit (LRL). However, a TPHd concentration of 254 mg/kg was reported for the sample collected at 13.6 feet bgs and 98.6 mg/kg for the sample collected at 14.9 feet bgs. The analytical data was submitted to the CSDDEH LWQD and subsequently an Unauthorized Release Report (URR) was filed (Case #H28848-001).

In October 2011, five boreholes (HP-1 through HP-5) were advanced and temporary wells installed at locations around the former UST location; soil and groundwater samples were collected. TPHd concentrations of 100 mg/kg and 190 mg/kg were reported in two soils samples collected from HP-3; no BTEX, methyl tert-butyl ether (MTBE) or other oxygenate concentrations above LRLs were reported in the sample with the highest reported TPHd concentration (190 mg/kg). Other soil sample analytical results were below 100 mg/kg TPHd or the LRLs. TPHd concentrations (160 to 1,600 µg/l) were reported in groundwater samples collected from all five temporary wells. Based on the dissolved concentrations, the SAM requested additional assessment to define the limits of hydrocarbon impacted groundwater.

In June 2012, the consultant at that time, Environmental Applications, Inc. (EAI) conducted an additional assessment which included soil sampling for chemical analysis of four boreholes (MW-1 through MW-4). Samples were collected at approximately five foot intervals, the capillary fringe, and at a maximum depth drilled (22 to 23 feet bgs). Nine soil samples were selected and submitted for laboratory analysis for TPHd. Analytical results indicated no TPHd concentrations were reported in the soil samples analyzed, except for TPHd concentration of 27 mg/kg in sample MW-1 at 10 feet. This assessment also included the installation and monitoring of groundwater wells MW1 through MW-4. Groundwater samples were submitted for laboratory analysis for TPHd. Analytical results indicated no TPHd concentrations were reported above LRLs in the four groundwater samples analyzed. BTEX and fuel oxygenate concentrations were not analyzed in either the soil or groundwater samples.

Based on results of the additional assessment and previous assessments, EAI concluded that the area of TPHd-impacted soil greater than 100 mg/kg appeared localized and limited to the immediate vicinity of the former UST location. Based upon the soil sampling conducted during the assessments, TPHd impacted soil greater than 100 mg/kg was reported in samples collected between 10 and 13.5 feet bgs. Samples with reported TPHd concentrations less than or equal to 100 mg/kg were collected between 15 and 17.5 feet bgs and were likely the result of soil dragdown during drilling operations. Furthermore, the groundwater did not appear to fluctuate more than 1 to 2 feet in the vicinity (based on the GeoTracker file review of nearby sites), and thus a five foot smear zone is unlikely to explain the deeper soil impact. Thus with the additional data, a revised conservative volume estimate of impacted soil with TPHd concentrations greater than 100 mg/kg would encompass an area of up to 3 feet beyond portions of the former UST location and to depths between 10 and 14 feet bgs for an approximate volume of 19 to 35 cubic yards. Groundwater impact appeared to be localized and limited to between the former hydropunch sample locations and the wells installed during the additional assessment. Though a well could not be installed to the west of HP-3 due to the site configuration, the extent of the TPHd plume can be extrapolated based on the distance relationship between wells and the former hydropunch locations and the calculated flow direction.

Based on this information, EAI recommended conducting the three consecutive quarterly groundwater sampling events to evaluate groundwater quality during all seasons, as well as to demonstrate stability and reproducibility of the initial sampling, which was outlined in the work plan dated March 28, 2012 and subsequently approved by the CSDDEH.

Per the aforementioned approved work plan, on November 5, 2012, four (4) groundwater monitoring wells were gauged, purged and sampled (MW-1, MW-2, MW-3 and MW-4). In June 17, 2013, EAI reported on the final quarterly groundwater monitoring report (2nd Quarter 2013) and summarized the four consecutive quarterly groundwater sampling events, as outlined in the work plan dated March 28, 2012. The final groundwater monitoring report indicated depth to groundwater was 10.61 feet bgs to 11.94 feet bgs. The groundwater gradient was reported to be towards the northwest at 0.006feet/foot, which was consistent with the previous sampling event. The report concluded that the lack of TPHd concentrations (<100 µg/L) from the sampling event demonstrated repeated duplicity of the previous three sampling events. The approximated extent of the dissolved plume based on the initial hydropunch samplings in the vicinity of the former UST appeared to be stable, as there was no evidence that it had extended to the location of the wells. With this sampling event, the requirement of four quarterly sampling events for newly installed wells had been satisfied. Additionally, the site met the groundwater specific criteria for Low-Threat UST Case Closure Policy, as the dissolved plume is less than 100 feet in length, there was no free product, there was no water supply well or surface water body within 250 feet, and the source had been removed. EAI stated that remediation of residual TPHd concentrations reported in soil and groundwater are most effectively addressed through natural attenuation processes. Thus EAI recommended the regulatory agency consider closure of the site without any further reported requirements.

CSDDEH concurred with the consultant's recommendations and conclusions in the report and on June 5, 2015, issued a Case Closure Letter which stated that the agency found the site investigation and corrective action carried out at the USTs site in compliance with their regulations, and no further action related to the petroleum release at the site was required.

On September 2, 2015, EEI personnel conducted a site reconnaissance to physically observe the subject property and adjoining properties for conditions indicating a potential 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 environmental concern was noted on the subject property during our site reconnaissance efforts.

EEI performed a Vapor Encroachment Screen (VES) for the subject property, in accordance with ASTM E2600-10. The purpose was to evaluate whether sites (e.g., gas stations, dry cleaners, or other listings of environmental concern) that store or dispose of potential chemicals of concern or have documented releases, may migrate as vapors onto the property, as a result of contaminated soil and/or groundwater which may be present on or near the property (i.e., a potential Vapor Encroachment Condition or pVEC). Based on EEI's Tier 1 Screening evaluation, the former diesel fuel tank and documented release associated with the subject property is considered to pose a pVEC at the subject property. However, based on the lack of volatile compounds detected in soil and groundwater during the previous investigations, a pVEC can be ruled out.

The nearby **Vitagold Brands Coop** (135 South Quince Street, 0.10 miles southeast), was identified as a release site within the Area of Concern (AOC). However, based on the results of a Tier 2 screening, EEI concluded that a pVEC can be ruled out for the site based on site-specific data indicating that the edge of the groundwater plume related to the release case is located at approximately 400 feet, which is greater than the critical distance of 30 feet for dissolved petroleum hydrocarbon chemicals of concern (COC). In addition, the groundwater flow direction was reported to be towards the north-northeast, which would be parallel (or cross-gradient) to the subject property.

We have performed a Phase I Environmental Site Assessment in conformance with the scope and limitations of ASTM Practice E1527-13 of APN 232-100-16-00, the *subject property*. Any exceptions to, or deletions from, this practice are described in Section 7.0 of this report. This assessment has revealed no evidence of *recognized environmental conditions* in connection with the *subject property*, except for the following:

- The subject property is the location of a former 2,000 gallon diesel fuel UST which was removed from the subject property under the direction of the CSDDEH in October 2010. TPHd-impacted soil was discovered during tank removal and a release case was opened. Subsequent soil and groundwater investigations revealed TPHd concentrations at <100 µg/L. The site met the groundwater specific criteria for Low-Threat UST Case Closure Policy, and the CSDDEH issued a closure letter in June 2015. Although the site has been granted regulatory closure, it is possible that residual petroleum hydrocarbon contaminated soil remains in the area of the former UST location at depths of 10 to 14 feet bgs. If stained or suspicious soil is encountered during future site improvements, EEI recommends that the material be evaluated and if deemed necessary, excavated and characterized for proper disposal.

Although not considered to be RECs, the following non-scope considerations were identified:

- There is a potential for ACM, and LBP to be present in building materials, and PCB-containing equipment to be present onsite. At the Clients request, an ACM, LBP, and limited universal waste survey was conducted at the subject property by Altec Testing and Engineering, Inc. concurrently with this Phase I ESA, and will be provided under separate cover from this Phase I ESA.

1.0 INTRODUCTION

1.1 Purpose

The purpose of this Phase I Environmental Site Assessment (ESA) was to assess the possible presence of *recognized environmental conditions* for the property located at 700 West Grand Avenue, in the City of Escondido, County of San Diego, California (**Figure 1**). *Recognized environmental conditions (RECs)* include property uses that may indicate the presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: (1) due to any release to the environment; (2) under conditions indicative of a release to the environment; or (3) under conditions that pose a material threat of a future release to the environment. The term *RECs* is not intended to include *de minimis* conditions that generally do not present a material risk of harm to public health or the environment, and that would not be subject to enforcement action by a regulatory agency.

This ESA was performed in general conformance with the American Society for Testing and Materials (ASTM) *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process*, Designation E1527-13.

1.2 Scope of Services

The following scope of services was conducted by EEI:

- A review of readily available documents which included topographic, geologic, and hydrogeologic conditions associated with the subject property.
- A review of readily available maps, aerial photographs and other documents relative to historical subject property usage and development.
- A review of previous environmental reports and regulatory file information pertaining to both existing and historic property conditions.
- A review of readily available federal, state, county, and city documents and database files concerning hazardous material storage, generation and disposal, active and inactive landfills, existing environmental concerns, and associated permits related to the subject property and/or immediately adjacent sites.
- A site reconnaissance to ascertain current conditions of the subject property.
- Interviews with person(s) knowledgeable of the subject property.
- The preparation of this report which presents our findings, conclusions, and recommendations.

1.3 Reliance

This ESA has been prepared for the sole use of Integral Communities (Client). This assessment should not be relied upon by other parties without the express written consent of EEI and the 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 onsite 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 and information (both documentary and oral) provided by the Client, City of Escondido, San Diego County, Environmental Data Resources Inc. (EDR®) (i.e., agency database search), and 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

The subject property is located on the north side of West Grand Avenue, approximately one-eighth of a mile east of the intersection of West Grand Avenue and West Valley Parkway. The site is approximately one-half of a mile east of Interstate 15 (I-15), in the City of Escondido, San Diego County, California (**Figure 2**). The property encompasses 2.6-acres located on a single parcel identified by Assessor's Parcel Number (APN) 232-100-16-00 (**Appendix B**). The property is occupied with a single two-story building, consisting of 18,000 square feet (sf), and paved secured and public parking areas on the east side. The address associated with the property is 700 West Grand Avenue.

The onsite building previously served as the Escondido Police station, and is currently occupied by the Warfighter Academy, a gunfighter tactical school. According to the Client, a residential and commercial development is proposed for the subject property and includes the construction of 148 condominium units and a limited amount of ground floor retail (3,000 sf) space, along with parking and other improvements.

In general, the subject property is located in a mixed residential and commercial area in the central portion of the City of Escondido. The subject property is immediately bound by West Valley Parkway, beyond which is the Escondido Transit Center. To the south, the subject property is bound by West Grand Avenue, beyond which is the Hawthorne Country Store and Mission Pools (675 and 755 West Grand Avenue). Farther south, lays the O.H. Kruse Grain and Milling facility (aka Vitagold Brands Coop) at 135 South Quince Street. To the east, the subject property is bound by asphalt-covered parking areas and a commercial structure occupied by California Bank and Trust (613 West Valley Parkway). To the west, the subject property is bound by railroad tracks, beyond which are an asphalt-covered parking area followed by North County Stone and Tile (800 West Grand Avenue). The San Diego Union Tribune building and commercial shopping center is located to the northwest of the subject property across West Grand Avenue. According to the City of Escondido Planning Department, the property is located within the Downtown Revitalization Area Specific Plan (S-P).

Based on historical records such as aerial photographs, topographic maps, and Sanborn maps, portions of the subject property and adjacent property to the east was occupied by the Escondido Lumber Hay and Grain Company from at least 1907 through the early 1960's. In addition, the southwest corner of the subject property was occupied by the Escondido Fruit Growers Association, Lemon Packing House in 1927 Sanborn map, and with a Bonded Winery in maps dating 1940 through 1962. By 1979, the existing onsite building and parking area was located on the subject property. Development of the adjacent and surrounding area for increased commercial uses began in the 1960's.

The property address, 700 West Grand Avenue, was first listed in a City Directory dated 1955 with two occupants including the Escondido Transit Mix Concrete and Roy's Radio Television. In 1956 and 1962, the address was listed with Farr's Ready Mix Co. In 1965, the address was listed with San Diego Consolidated Co. From 2006 through 2013, the address was listed with the Escondido Cit Police Station. The address of 750 West Grand Avenue was listed with the Escondido Winery and Distillery in directories dated 1940 and 1945.

2.2 Topography

The subject property is located on the United States Geological Survey (USGS), Escondido, 7.5-Minute Quadrangle (USGS, 1996). The subject property is located at an elevation of approximately 650 feet above mean sea level (amsl). The overall property locale is characterized by a gentle, northward slope; and, based on topography; it appeared that any surface runoff generated on the property would flow to the north, into the local storm drain system along West Grand Avenue.

2.3 Regional and Local Geology

The subject property and vicinity lies within the Peninsular Ranges Geomorphic Province of California (CDMG, 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. Three (3) major fault zones and some subordinate fault zones are found in this province. The Elsinore Fault zone and the San Jacinto Fault zones trend northwest-southeast, and are found near the middle of the province. The San Andreas Fault zone borders the northeasterly margin of the province, whereas, a fault related to the San Andreas Transform Fault System, the Newport-Inglewood-Rose Canyon Fault zone exists near the western margin and Continental Borderland Geomorphic Province (CDMG, 1977).

Soils beneath the subject property and vicinity have been identified by the United States Department of Agriculture – Natural Resources Conservation Service, Web Soil Survey as sandy loam of the Placentia Series, ranging from 2 to 9 percent slopes (USDA, 2015). Placentia soils are nearly level to moderately sloping and are on fans and terraces at elevations of 50 to 2,500 feet. They formed in alluvium from granite and other rocks of similar composition and texture. These soils are well or moderately well drained, have slow to rapid runoff, and very slow permeability.

Based on field observations during onsite assessment activities (EAI, 2012), subsurface soils, generally consist of silty sand from 10 to 20 feet bgs and is underlain by well graded sand and clayey sand or sandy clay to approximately 24 feet bgs, the maximum depth of exploration.

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 Escondido Hydrologic Subareas (HAS), of the Escondido Creek Hydrologic Area (HA), within the Carlsbad Hydrologic Unit (HU-904.00). Groundwater in the Escondido Hydrologic Subareas has existing beneficial use designations for agricultural, industrial service and municipal supply purposes (SDRWQCB, 1994).

Based on topography, and general knowledge of the hydrogeology in the site vicinity, groundwater is estimated to flow generally towards the southwest. Groundwater depth and flow direction beneath the site may vary due to proximity to creeks and streams, local irrigation practices, seasonal rainfall, and fracture systems in the underlying bedrock units.

EEI reviewed the California Department of Water Resources, Water Data Library website (WDL, 2015) for additional information pertaining to groundwater and water supply wells on or close to the subject property. According to the website, there are no water supply wells located on the property or in the immediate site vicinity.

EEI reviewed previous groundwater investigation reports which have taken place at the subject property. According to the data from the most report regarding onsite groundwater monitoring (EIA, 2013), the depth to groundwater was reported to range between 10.61 feet bgs to 11.94 feet bgs. The groundwater gradient was reported to be towards the northwest at 0.006 feet/foot, which was consistent with the previous sampling events.

2.5 Hydrologic Flood Plain Information

EEI reviewed the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) online database to determine if the subject property was in a flood zone. According to FIRM Number FM06073C1077G, Panel 1077 of 2375 (effective May 2012), the subject property is located within flood Zone X. FEMA defines Zone X as an area of minimal flood hazard, usually depicted on FIRMs as above the 500-year flood level (**Appendix B**).

3.0 SUBJECT PROPERTY BACKGROUND

3.1 Subject Property Ownership

Information regarding property ownership was obtained from a Preliminary Title Report (PTR) prepared by Chicago Title Company, dated June 23, 2015. According to the information reviewed, the current owner of the subject property is listed as Grand Avenue Financial Center Partnership, a general partnership. The detailed parcel and legal descriptions are outlined in the PTR, which is included in **Appendix B**.

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 aerial photographs, USGS maps, City of Escondido Planning and Building and Safety Department files. The information sources are reviewed in the following sections.

3.2.1 Historical Use Review

Aerial photographs and historical topographical maps, provided by EDR®, were reviewed to identify historical land development and any surface conditions which may have impacted the subject property. Photographs and historical topographic maps dating between 1893 and 2012 were reviewed. A 2015 aerial photograph was obtained from Google Earth®, a copy of which is included herein (**Figure 2**). **Table 1** summarizes the results of the aerial photograph and historical topographic map review. Copies of the aerial photographs and historical topographic maps provided by EDR®, Inc. are included in **Appendix C**.

Based on the information reviewed, the subject property was occupied by a structure from at least 1939 through the mid-1970's. In 1979, the existing onsite building and parking area was located on the subject property. The subject property remained in this configuration through the 2015 photograph. Development of the adjacent and surrounding area for increased commercial uses began in the 1960's.

TABLE 1
Summary of Historical Use Review

Year	Source and Scale	Comments
1893/ 1901/ 1904	Topographic Map 1:62,500/250,000	Scale of the map did not allow for a detailed review of the subject property. Urban development was shown in the site vicinity and labeled as Escondido.
1939	Aerial Photograph 1:500	A single structure was located on the subject property. A railway ran northwest to southeast along the western property boundary. Structures occupied the adjacent property to the east and along Grand Avenue. Adjacent and surrounding property appeared with rural residential and commercial development and agriculture, including orchards.
1947/ 1949	Topographic Map 1:50,000/24,000	A single structure was noted on the subject property. A railway ran adjacent to the west of the subject property.
1947/ 1953/ 1964	Aerial Photograph 1:500	Subject property appeared with a single rectangular structure on the central portion adjacent to the railway. Commercial type structures remained adjacent to the east and to the south. A mix of residential, commercial and agricultural development remained in the site vicinity.
1968	Topographic Map 1: 24,000	The site vicinity appeared shaded pink indicating urban development. Increased development appeared in the site vicinity.
1970	Aerial Photograph 1:500	A structure remained on the central portion of the subject property. A railway connection was present to the north. Increased structural development appeared in the site vicinity.
1975	Topographic Map 1:24,000	No apparent changes were noted to the subject property since the 1968 topographic map. Increased development appeared in the surrounding area including the Civic Center Plaza northeast of the subject property.
1979	Aerial Photograph 1:500	Subject property appeared in its current configuration with a single structure and surrounding parking area. West Valley Parkway appeared to the north. Increased development appeared in the site vicinity.
1985/ 1989/ 1995	Aerial Photograph 1:500	Subject property remained with a single structure. Adjacent property to the east appeared with a commercial type structure. The transit center was present to the north and I-15 could be seen to the far west.
1996	Topographic Map 1:24,000	No apparent changes were noted to the subject property since the 1975 map. Increased development appeared in the site vicinity.
2005/ 2009/ 2010/ 2012	Aerial Photograph 1:500	No apparent changes were noted to the subject property since the 1995 photograph. Increased development appeared in the site vicinity including an expansion of the transit center to the north.
April 2015	Aerial Photograph <u>GoogleEarth®</u>	The subject property appeared as its current configuration, consisting of a single commercial type structure and surrounding parking area. A railway ran adjacent and to the west of the subject property. Adjacent property appeared with similar commercial development, including the transit center to the north. The site vicinity appeared with a mix of commercial/light industrial and residential development.

3.2.2 City/County Directories

Directory listings associated with the subject property addresses was obtained from EDR ®, an environmental information/database retrieval service. The property address, 700 West Grand Avenue, was first listed in 1955 with two occupants including the Escondido Transit Mix Concrete and Roy's Radio Television. In 1956 and 1962, the address was listed with Farr's Ready Mix Co. In 1965, the address was listed with San Diego Consolidated Co. From 2006 through 2013, the address was listed with the Escondido Cit Police Station. The address of 750 West Grand Avenue was listed with the Escondido Winery and Distillery in directories dated 1940 and 1945.

The 700 Block of West Valley Parkway to the north was listed with Greyhound Bus Lines in 2000 and 2008. Occupants of nearby street addresses appeared as a mix of residential, agricultural, and small business occupants. A copy of the City Directory report is included in **Appendix C**.

3.2.3 Sanborn Fire Insurance Maps

EEI researched available Sanborn Fire Insurance Maps of the subject property. Sanborn Maps provide detailed information on site structures, uses, and occupancies and were typically utilized by insurance companies to evaluate potential fire risk. EEI requested a Sanborn map search from EDR ®, an environmental information/database retrieval service. EDR provided Sanborn Maps with coverage of the subject property from 1907, 1911, 1927, 1940, 1949, and 1962. Copies of the Sanborn maps reviewed by EEI are included in **Appendix C**. **Table 2** is a summary of the information obtained by EEI.

TABLE 2
Summary of Sanborn Map Review

Sanborn Map Year	Address 700 West Grand Avenue
1907, 1911	The Escondido Lumber Hay and Grain Company occupied portions of the subject property and the adjacent property to the east. Hay barns appeared closest to or in the immediate vicinity of the subject property. Grand Avenue was present to the south. A rail road was present to the west. A rail road depot and flour mill was present to the south of Grand Avenue.
1927	The southwest corner of the subject property was occupied by the Escondido Fruit Growers Association, Lemon Packing House. The eastern portions remained occupied by the Escondido Lumber Hay and Grain Company. Hay barns appeared closest to or in the immediate vicinity of the subject property. Grand Avenue was present to the south. A rail road was present to the west. A rail road depot and flour mill was present to the south of Grand Avenue.
1940, 1949, and 1962	The building at the southwest corner of the subject property was now occupied by a Bonded Winery. The eastern portions remained occupied by the Escondido Lumber Hay and Grain Company. Residential dwellings appeared to the northeast in the 1949 and 1962 maps.

3.2.4 City of Escondido Building Department Files

EEI visited the City of Escondido Building Department to review existing building records as they relate to development of the subject property. A records request for the property address, 700 West Grand Avenue was submitted to the building department; however, at the time of this report, the request for records was pending.

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 EDR®, an environmental information/database retrieval service. A copy of the EDR® report is provided in **Appendix D**, along with a description of the individual databases. Following is a list of databases that were reviewed in the preparation of this report.

The former occupant of the subject property, City of Escondido Police Department - Engineering (700 West Grand Avenue) was listed under the Hazardous Waste Facility and Manifest data (HAZNET), database, which tracks hazardous waste manifests that are received each year by the DTSC. The type of waste was listed at tank bottom waste (2010), aged or surplus organics (2004), and organic liquid mixture (1993).

In addition, the site was listed under the Underground Storage Tank (UST), San Diego County Hazardous Materials Division (HMD), and other Historical UST databases (SWEEPS and Hist UST) as the site of a former diesel fuel storage UST (2,000-gallons). The status of the tank was listed as “removed” as of October 14, 2010. The site was also listed as a Leaking Underground Storage Tank Database (LUST) as the site of release discovered during tank removal, and was closed by the CSDDEH in June 2015. Additional details regarding the former onsite UST and release case are provided below in Section 3.4.2 County of San Diego Department of Environmental Health (CSDDEH).

3.3.1 Federal Databases

Federal National Priority site list (NPL) – No listings were reported within a one mile radius of the subject property.

Federal Delisted NPL site list – No listings were reported within a one mile radius of the subject property.

Federal Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS) list – One listing was reported within a one-half mile radius of the subject property. Based on the location of the listing (i.e., farther than one-eighth mile from the subject property and situated hydrologically cross- to down-gradient), and the oversight by a regulatory agency, this site is not considered to be an environmental concern.

Federal CERCLIS No Further Assessment Planned (NFRAP) site list – One listing was reported within a one-half mile radius of the subject property. Based on the location of the listing (i.e., farther than one-eighth mile from the subject property and/or situated hydrologically cross- to down-gradient), and the oversight by a regulatory agency, this site is not considered to be an environmental concern.

Federal Resource Conservation Recovery Act (RCRA) Corrective Action Sites (CORRACTS) facilities list – No listings were reported within a one mile radius of the subject property.

Federal RCRA non-CORRACTS facilities list – No listings were reported within a one mile radius of the subject property.

Federal RCRA non-CORRACTS Treatment, Storage and Disposal (TSD) facility list (RCRA-TSDF) – No listings were reported within a one-half mile radius of the subject property.

Federal RCRA generators list (RCRA-LOG SQG CESQG) – Three listings were reported within a one-quarter mile radius of the subject property. Generator permits are not generally rationale for environmental concern, unless a release has occurred at the site. Two of the aforementioned sites were listed with a release on the LUST database; however, are located farther than one-eighth of a mile from the subject property; therefore, are not considered an environmental concern.

Federal institutional controls/engineering controls (IC/EC) registries – No listings were reported within a one-half mile radius of the subject property.

Federal Emergency Response Notification System (ERNS) – No listings were reported for the subject property.

3.3.2 State and Regional Sources

State and Tribal equivalent NPL sites – No listings were reported within a one mile radius of the subject property.

State/Tribal equivalent CERCLIS (ENVIROSTOR) sites – Eleven (11) listings were reported within a one mile radius of the subject property. This database by the California DTSC tracks facilities with known contamination with hazardous substances and uncharacterized properties which may be contaminated. All of the listings are located greater one-quarter of a mile from the subject property. Based on the location (i.e. greater than one-eighth mile from the subject property and/or situated hydrologically cross- to down-gradient), and the oversight by the appropriate regulatory agency, these listings are not considered to be an environmental concern.

State and tribal landfill and/or solid waste disposal site lists – No listings were reported within a one-half mile radius of the subject property.

State and tribal leaking storage tank lists (LUST) – Eighty (80) listings (some duplicated) were reported within a one-half mile radius of the subject property. Of the 80 listings, 75 sites have been closed by a regulatory agency, and/or are located more than one-quarter mile of the subject property and are situated hydrologically cross- to down-gradient. Based on the relative distance, regulatory status, and/or inferred direction of groundwater flow; these sites are not expected to represent a significant environmental concern.

Of the listings located within a one quarter mile of the subject property, it was determined that there were only 3 individual sites, due to dual database listings. Regarding these 3 listings, EEI reviewed the online database GeoTracker, which provides records on LUSTs, and Cleanup Program Sites, maintained by the State Water Resources Control Board (SWRCB), for more information regarding the case. The following is a summary of the information reviewed:

Vitagold Brands Coop (135 South Quince Street, 0.10 miles southeast), an agricultural feed elevator and warehouse, reported a diesel fuel release during tank removal in 1991. Site remediation is under the direction of the SDRWQCB and has included soil excavation in 1992, and groundwater monitoring since 2011. The case was opened by the CSDDEH SAM which provided oversight of the release until November 4, 2013, when the case was transferred to the SDRWQCB. EEI reviewed the most recent groundwater monitoring report available, First Quarter 2014 (DES) dated April 10, 2014. The report stated that historically detected product plume was a continuing source of TPHg and benzene impacts in the groundwater. And that the dissolved TPHg and benzene plume had been partially assessed to the southwest of the tank source. The consultant added that the detection of Methyl tert-butyl ether (MTBE) in groundwater was due to the impact of a more recent, upgradient,

offsite petroleum-hydrocarbon release, characterized by the presence of MTBE as a groundwater-contaminant plume component. The petroleum hydrocarbon release associated with the Vitagold source was identified by a lack of MTBE, characteristic of an older release of fuel, occurring prior to the introduction and use of MTBE as an additive. At the time of the report, the site was not suitable for closure under the Low-Threat Closure Policy (LTCP) because the lateral extent of historical free product at MW2 had not been assessed. The consultant recommended 1) implementing the previously-submitted Site Assessment Work Plan (October 10, 2011) to assess dissolved-phase contaminant groundwater data gaps (and associated impacts downgradient of the contaminant source area; and 2) continued quarterly groundwater monitoring to develop a more comprehensive database of site-assessment information in response to the likely presence of product at the site. According to the report, the depth to groundwater was reported to range between 8.71 to 9.69 feet bgs. The groundwater direction was reported to be to the north at a gradient of 0.0039 feet/foot. The report also indicated that the primary groundwater flow direction was reported to be towards the northwest in January 2014.

The most recent document in the GeoTracker files indicates that in November 2014, three additional groundwater monitoring wells and three soil-gas probes were installed at the site under the direction of DES, to further assess the impact to groundwater. No information dating post 2014 was available on GeoTracker.

EEI reviewed the groundwater monitoring analytical plume maps associated with the report. There are four groundwater monitoring wells located on the south side of the onsite buildings where the known contamination has been reported. Based on this information, the edge of the contaminated plume is located approximately 400 feet southeast of the southern boundary of the subject property. In addition, the groundwater direction was reported on the maps to be towards the north-northeast, which would be parallel or cross-gradient to the subject property. Additional information regarding this nearby release site is provided below in Section 5.0 Vapor Encroachment Screening.

Allstar (aka Apro 19) Service Station (555 West Grand Avenue, 0.10 miles east), reported a gasoline release in 1998 during tank removal. The case was closed by the SDRWQCB in August 2013. According to the No Further Action (NFA) letter issued, any land use changes at the site would require reevaluation to determine if the change would pose an unacceptable risk to human health. The last groundwater monitoring report available for review reported that there were six onsite and six offsite monitoring wells at the site. The reported depth to groundwater at the site ranged between 8.05 to 8.95 feet bgs. The reported groundwater flow direction was towards the north-northwest at a gradient of 0.004 feet/foot which was consistent with previous quarterly results (FEI).

Based on the case closed status by a regulatory agency, and location (i.e. and situated cross-gradient in respect to groundwater flow direction), this site is not considered to be an environmental concern.

Phil Hoadley (540 West Grand Avenue, 0.10 northeast), reported a release in 1990, which reportedly impacted the soil only. The case was closed by the SCDEH in March 1994. No other information was provided on GeoTracker. Based on the case closed status by a regulatory agency, this site is not considered to be an environmental concern.

State and tribal leaking storage tank lists (SLIC) – Twenty two (22) listings (some duplicated) were reported within a one-half mile radius of the subject property. All of the listings are located greater one-quarter of a mile from the property, with the exception of one site (Phil Hoadley at 540 West Grand Avenue) which was discussed above. Based on the location (i.e. greater than one-eighth mile from the property), and the oversight by the appropriate regulatory agency, the remaining sites are not considered to be an environmental concern.

San Diego County Site Assessment and Mitigation (SAM) – Forty six (46) listings were reported within a one-half mile radius of the subject property. These listings were either dual listed on the LUST database above, and discussed there, or located more than one-eighth mile of the property and/or have been closed by a regulatory agency. Based on the relative distance, regulatory status, these sites are not expected to represent a significant environmental concern.

State and tribal registered storage tank (USTs) lists – One listing was reported within a one mile radius of the subject property. Operating permits are not generally considered rationale for environmental concern, unless the facility has a dual listing, or a reported release. The listing, **Allstar Service Station** (555 West Grand Avenue, 0.10 miles east), has documented a release and is listed on the LUST databases as a closed case. See the LUST section above.

Above-ground storage tank (ASTs) lists – Three listings were reported within a one mile radius of the subject property. Operating permits are not generally considered rationale for environmental concern, unless the facility has a dual listing, or a reported release. The listings are located greater than one-eighth of mile from the subject property; therefore, are not considered an environmental concern.

State and Tribal voluntary cleanup sites – No listings were reported within a one-half mile radius of the subject property.

Local Brownfield lists – No listings were reported within a one-half mile radius of the subject property.

Local Lists of Landfill/Solid Waste Disposal and Hazardous Waste/Contaminated Sites – One listing was reported within a one mile radius of the subject property. The listing is located greater than one-eighth of mile from the subject property; therefore, are not considered an environmental concern.

Facility Inventory Database (CA FID) – No listings were reported within a one-quarter mile radius of the subject property.

Statewide Environmental Evaluation and Planning System (SWEEPS) – Fifteen (15) listings were reported within a one-quarter mile radius of the subject property. This underground storage tank database was updated and maintained by a company contacted by the SWRCB in the early 1990s. The database is no longer updated or maintained. The sites located within a one-eighth radius of the subject property, were either dual listed and previously discussed under the LUST and UST/AST databases or were reported as no longer active.

Historical UST (HIST UST) – Thirteen listings were reported within a one-quarter mile radius of the subject property. The sites located within a one-eighth radius of the subject property, were either dual listed and previously discussed under the LUST and UST/AST databases or were reported as no longer active.

Local Land Records – No listings were reported within a one-half mile radius of the subject property.

Records of Emergency Release Reports – No listings were reported for the subject property.

California Hazardous Material Incident Report System (CHMIRS) – No listings were reported.

Recorded Land Use Restrictions (DEED) - One listing was reported within a one-half mile radius of the subject property. The listing is located greater than one-eighth of mile from the subject property; therefore, are not considered an environmental concern.

RCRA Non-GEN – Two listings were reported within a one quarter mile radius of the subject property. NonGen listings do not currently generate hazardous waste; therefore, these listings are not considered a concern.

DTSC's Hazardous Waste and Substances Site List - Site Cleanup (CORTESE) – No listings were reported within a one mile radius of the subject property. One listing was reported within a one mile radius of the subject property. The listing is located greater than one-eighth of mile from the subject property; therefore, are not considered an environmental concern.

Hist CORTESE – Thirty nine (39) listings were reported within a one-half mile radius of the subject property. This database is no longer updated by the state agency. The sites were either dual listed and previously discussed under the LUST and UST/AST databases; and/or are located more than one-eighth mile of the subject property and are situated hydrologically cross- to down-gradient; therefore; these sites are not expected to represent a significant environmental concern.

Notify 65– Two listings were reported within a one mile radius of the subject property. Both listings are located more than one-quarter mile of the subject property and/or are situated hydrologically cross- to down-gradient; therefore; these sites are not expected to represent a significant environmental concern.

Manufactured Gas Plant - One listing was reported within a one mile radius of the subject property. The listing is located greater than one-eighth of mile from the subject property; therefore, are not considered an environmental concern.

Drycleaners – No listings were reported within a one-quarter mile radius of the subject property.

EDR US Historical Auto Station list – Seven listings (one duplicated) were reported within a one-quarter mile radius of the subject property. Operating permits are not generally considered rationale for environmental concern, unless the facility has a dual listing, or a reported release. The listings include **Allstar (aka Apro 19) Service Station** (555 West Grand Avenue, 0.10 miles east), which documented a release and discussed above under the LUST section. The remaining listings appeared as automobile repair facilities and have not documented a release on any of the other database searched. Based on this information and the location (i.e. farther than one-eighth mile of the subject property and/or are situated hydrologically cross- to down-gradient); therefore; these sites are not expected to represent a significant environmental concern.

EDR US Historical Cleaners – One listing was reported within a one-quarter mile radius of the subject property. The listing, **Escondido Oriental Rug Cleaning and Twins Crown Carpet Cleaning** (721 4th Avenue, 0.22 miles southeast); reportedly occupied the site since 2007.

Operating permits are not generally considered rationale for environmental concern, unless the facility has a dual listing, or a reported release. The aforementioned listing has not documented a release on any of the other database searched. Based on this information, the nature of the listing as non-dry cleaning facilities, and the location (i.e. farther than one-eighth mile of the subject property and/or are situated hydrologically cross- to down-gradient); therefore; these sites are not expected to represent a significant environmental concern.

EDR Recovered Government Archives– No listings were reported for the subject property.

Orphan Summary - The EDR® database search report lists a number of sites identified as “orphans.” EDR was unable to confirm the physical locations of these sites relative to the subject property or to assess whether they were located within the designated search radii. EEI attempted to locate these “orphan” sites, to the extent possible, using various maps and our knowledge of the site area. Any of the “orphan” sites determined to be within the designated search radii were included in our evaluation of the various listed sites potential to result in a recognized environmental condition relative to the subject property.

3.4 Regulatory Agency Review

3.4.1 City of Escondido Fire Department

EEI contacted the City of Escondido Fire Department concerning any permit, inspection, UST, or cleanup information available for the subject property. Personnel from the department indicated that all records regarding hazardous materials and USTs are held with the County Certified Unified Program Agency (CUPA), which is the County of San Diego Department of Environmental Heath Hazardous Materials Davisson. See Section 3.4.2.

3.4.2 County of San Diego Department of Environmental Health

EEI contacted the County of San Diego Department of Environmental Health (CSDDEH) concerning any permit, inspection, UST, or cleanup information available for the subject property. According to Ms. Joyce Elman, Office Support Specialist, a search of the CSDDEH Hazardous Materials Division (HMD)/UST and Site Assessment and Mitigation (SAM) databases revealed that records were on file related to the former occupant of the subject property, City of Escondido Police Station and the UST case (Unauthorized Release #H28848-001).

A summary of the background information indicated that on October 14, 2010, a diesel UST and associated piping were removed from the site under the supervision of a SAM specialist. Soil samples collected beneath the former UST and product line were analyzed for total petroleum hydrocarbons as gasoline and diesel (TPHg and TPHd) using Environmental Protection Agency (EPA) Modified Method 8015 and one sample was additionally analyzed for BTEX and fuel oxygenates by EPA Method 8260B. No concentrations above laboratory limits (LRL) were reported for the analyzed soil samples. On October 15, 2010, the anchoring concrete slab located beneath the former UST was removed. Soil samples were collected from beneath the former slab at depths of 13.6 and 14.9 feet below ground surface (bgs), respectively on the northeast side of the excavation and analyzed for TPHg/TPHd, BTEX, and fuel oxygenates. No TPHg, BTEX, or fuel oxygenate concentrations were reported above the respective laboratory reporting limit. A TPHd concentration of 254 mg/kg was reported for the sample collected at 13.6 feet bgs and 98.6 mg/kg for the sample collected at 14.9 feet bgs. The analytical data was submitted to the CSDDEH Land and Water Quality Division (LWQD) and subsequently an Unauthorized Release Report (URR) was filed (Unauthorized Release No. H28848-001).

The following is a summary of the related URR documents reviewed presented in chronological order:

Site Assessment and Mitigation (SAM) files on record for the subject property:

- October 14, 2010 – The UST System Closure Report documented the removal and closure of 2,000-gallon diesel UST. Analytical results from two samples collected were attached (EnviroMatrix Analytical, Inc.).

- March 5, 2011 – UST Unauthorized Release Contamination Site Report. No TPHg, BTEX or oxygenate concentrations were detected in the five samples collected. TPHd was detected above 100 mg/kg in one of the five samples collected (254 mg/kg).
- February 22, 2011 – A directive letter requiring a work plan for assessment was issued from the CSDDEH LWQD, dated February 22, 2011. SAM staff had reviewed the Unauthorized Release Report dated February 5, 2011, and stated that it conformed to the initial reporting requirements.
- April 5, 2011- The Environmental Applications, Inc. (EAI), Work Plan for Site Assessment. The purpose of the assessment was to evaluate the extent of hydrocarbon-impacted soil and groundwater in the vicinity of the former UST. The plan called for installing five boreholes to a depth of approximately two feet below the first encountered groundwater. Soil and groundwater sampling was proposed. The EAI work plan was approved on August 23, 2011.
- November 22, 2011 –EAI, Site Assessment Report. In October 2011 five boreholes (HP-1 through HP-5) were advanced and temporary wells installed at locations around the former UST location; soil and groundwater samples were collected. TPHd concentrations of 100 mg/kg and 190 mg/kg were reported in two soils samples collected from HP-3; no BTEX, MTBE or other oxygenate concentrations above laboratory reporting limits (LRLs) were reported in the sample with the highest reported TPHd concentration (190 mg/kg). Other soil sample analytical results were below 100 mg/kg TPHd or the LRLs. TPHd concentrations (160 to 1,600 µg/l) were reported in groundwater samples collected from all five temporary wells. Based on the dissolved concentrations, the SAM requested additional assessment to define the limits of hydrocarbon impacted groundwater.
- November 5, 2012 - EAI, Additional Site Assessment Report. EAI submitted a work plan for additional assessment activities on March 28, 2012. The work plan was approved on June 26, 2012. The assessment included soil sampling for chemical analysis of four boreholes (MW-1 through MW-4). Samples were collected at approximately five foot intervals, the capillary fringe, and at a maximum depth drilled (22 to 23 feet bgs). Nine soil samples were selected and submitted for laboratory analysis for TPHd by EPA Method 8015. Analytical results indicated no TPHd concentrations were reported in the soil samples analyzed, except for TPHd concentration of 27 mg/kg in sample MW-1 at 10 feet. BTEX and fuel oxygenate concentrations were not analyzed.

The assessment also included the installation and monitoring of groundwater wells MW1 through MW-4. Groundwater samples were submitted for laboratory analysis for TPHd by EPA Method 8015B. Analytical results indicated no TPHd concentrations were reported above laboratory reporting limit in the four groundwater samples analyzed. BTEX and fuel oxygenate concentrations were not analyzed.

Based on results of the additional assessment and previous assessments, EAI made the following conclusions:

The area of TPHd-impacted soil greater than 100 mg/kg appeared localized and limited to the immediate vicinity of the former UST location. Based upon the soil sampling conducted during the assessments, TPHd impacted soil greater than 100 mg/kg was reported in samples collected between 10 and 13.5 feet bgs. Samples with reported TPHd concentrations less than or equal to 100 mg/kg were collected between 15 and 17.5 feet bgs and were likely the result of soil dragdown during drilling operations.

Furthermore, EAI stated, the groundwater did not appear to fluctuate more than 1 to 2 feet in the vicinity (based on the GeoTracker file review of nearby sites), and thus a five foot smear zone is unlikely to explain the deeper soil impact. Thus with the additional data, a revised conservative volume estimate of impacted soil with TPHd concentrations greater than 100 mg/kg would encompass an area of up to 3 feet beyond portions of the former UST location and to depths between 10 and 14 feet bgs for an approximate volume of 19 to 35 cubic yards

Groundwater impact appeared to be localized and limited to between the former hydropunch sample locations and the wells installed during the additional assessment. Though a well could not be installed to the west of HP-3 due to the site configuration, the extent of the TPHd plume was extrapolated based on the distance relationship between wells and the former hydropunch locations and the calculated flow direction.

Based on this information, EAI recommended conducting the three consecutive quarterly groundwater sampling events outlined in the work plan. The purpose of quarterly sampling was to evaluate groundwater quality during all seasons, as well as to demonstrate stability and reproducibility of the initial sampling. No additional assessment was recommended.

- January 10, 2013 – EAI, Groundwater Monitoring and Progress Report. On November 5 2012, four (4) groundwater monitoring wells were gauged, purged and sampled (MW-1, MW-2, MW-3 and MW- 4). The static Depth-to-Water (DTW) measurements ranged from 10.68 feet bgs in MW-3 to 12.03 feet bgs in MW-1. Groundwater elevations ranged from 632.75 feet to 633.08 feet above mean sea level (MSL). The calculated groundwater flow direction was to the northwest at an approximate gradient of 0.005 vertical feet per horizontal foot, which was consistent with previous events. Groundwater samples were analyzed for TPHd by EPA Method 8015m per the approved work plan dated March 28, 2012. No TPHd concentrations were reported above laboratory reporting limits (LRLs) in samples collected from MW-1, MW-2, MW-3, and MW-4. EAI recommended performing the remaining, required two consecutive quarterly sampling events proposed in the work plan.
- June 17, 2013 – EAI, Work Plan for Additional Assessment, and Groundwater Monitoring and Progress Report (2nd Quarter 2013). The final quarterly report summarized the four consecutive quarterly groundwater sampling events, as outlined in the work plan dated March 28, 2012 and subsequently approved by the DEH. As stated in the work plan, if the cumulative data demonstrated stability and/or decreasing trends, the report prepared following the final event would request no further action and closure. The attached groundwater monitoring report documented that no TPHd concentrations (<100 µg/L) were reported for any of the wells during the four consecutive quarters of sampling and that the site met the groundwater specific criteria for the Low-Threat UST Case Closure Policy. Therefore, no additional groundwater sampling had been recommended and was not scheduled to be performed, and case closure had been requested. The consultant proposed destruction of the wells pending SAM approval and closure request.

The groundwater monitoring report indicated depth to groundwater was 10.61 feet bgs to 11.94 feet bgs. The groundwater gradient was reported to be towards the northwest at 0.006 feet/foot, which was consistent with the previous sampling event. The report concluded that the lack of TPHd concentrations (<100 µg/L) from the sampling event demonstrated repeated duplicity of the previous three sampling events. The approximated extent of the dissolved plume based on the initial hydropunch samplings in the vicinity of the former UST appeared to be stable, as there was no evidence that it had extended to the location of the wells. With this sampling event, the requirement of four quarterly sampling events for newly installed

wells had been satisfied. Additionally, the site met the groundwater specific criteria for Low-Threat UST Case Closure Policy, as the dissolved plume is less than 100 feet in length, there was no free product, there was no water supply well or surface water body within 250 feet, and the source had been removed. EAI stated that remediation of residual TPHd concentrations reported in soil and groundwater are most effectively addressed through natural attenuation processes. Thus EAI recommended the regulatory agency consider closure of the site without any further reported requirements. EAI proposed the report be utilized in lieu of a Corrective Action Plan for public review and closure processes.

- August 8, 2013 – CSDDEH reviewed the Additional Site Assessment Report dated November 5, 2012 by EAI. SAM concurred with the consultant's recommendations and conclusions in the report. SAM stated that after the three consecutive quarterly groundwater monitoring/sampling periods, they would reevaluate the site for further assessment.
- October 8, 2014 – CSDDEH Notification Letters to the RP (i.e. City of Escondido) and the adjacent property owners North San Diego County Transit Development Board (APN 232-090-62-00), and Grand Avenue Financial Center Partnership (APNs 232-100-20-00 and -21-00), the City of Escondido Building Department, and Rincon Del Diablo Municipal Water District. The letter was to inform the RP that the CSDDEH SAM intended to make a determination that no further action was required at the above site and to issue a closure letter. Based on their review of the case, it had met the criteria in the SWRCB Low Threat UST Case Closure Policy adopted by State Water Resource Resolution 2012-0016.
- June 5, 2015 - CSDDEH Land and Water Quality Division, UST Case #H28848-001, Closure Letter. The letter confirmed the completion of a site investigation and corrective action for the USTs formerly located at the subject property. The letter stated that the agency found the site investigation and corrective action carried out at the USTs site in compliance with their regulations, and no further action related to the petroleum release at the site was required.

Underground Storage Tank (UST) files on record for the subject property:

- UST Compliance Inspection Reports on file were dated: September 16, 1997, November 17, 1998 January 26, 2000, July 26, 2001, August 1, 2002, August 23, 2004, February 2, 2006, February 22, 2007, February 13, 2008, February 23, 2009, and January 27, 2010
- June 6, 1996- UST Unauthorized Release/Contamination Site Report. The purpose of the report was to notify the SAM of the discovery of a piping leak. The piping serviced the emergency generator at the subject property.
- September 8, 1998- UST System Closure Report
- September 10, 1998 – UST Certification of Monitoring Equipment Installation
- March 10, 1999 – UST Monitoring Program, Written Monitoring Procedures and Emergency Response Plan
- September 5, 2001 – UST Operating Permit Extension (expired December 9, 2001).
- November 18, 2002 – UST Secondary Containment Testing Report. Notes indicated that the collars did not appear to be glassed.

- August 14, 2003 – Failed Secondary Containment Testing of UST System (see above).
- December 3, 2003 – Permit Application UST Facility
- April 21, 2004 – UST Pressure Test/Secondary Containment Inspection Report
- September 14, 2004 – UST system Closure Report
- June 22, 2006- UST Monitoring System Certification
- December 6, 2006 – Owner Statement of Understanding/Compliance with UST Regulations
- December 9, 2007 – UST Operating Permit
- February 13, 2008 – UST Monitoring System Certification
- February 27, 2008 –Certification of Financial Responsibility
- May 28, 2008 – UST Pressure Test, Secondary Containment Inspection Report
- May 30, 2008 – UST Secondary Containment Testing Report
- August 12, 2008 – Operating Permit Application
- January 27, 2010 – UST Monitoring System Certification/Hazardous Materials Questionnaire
- June 15, 2010 – City of Escondido letter indicating to the CSDDEH that the tank was empty and would be removed after July 2010.

3.4.3 Department of Toxic Substances Control

EEI contacted the Department of Toxic Substances Control (DTSC, 2015) regarding any records for the subject property. EEI also research the DTSC online database EnviroStor for listings on or adjacent to the subject property. Neither the subject property nor adjacent property was listed on any of the other databases researched.

3.4.4 State Water Resources Control Board

EEI reviewed the online database GeoTracker (2015), which provides records on LUSTs and Spills, Leaks, Investigation and Cleanup (SLIC) sites, which is maintained by the State Water Quality Control Board. The subject property was listed on the database as the site of an Unauthorized Release Case (Case No. H28848-001), and is discussed above in Section 3.4.2 CSDDEH. No adjacent 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 at the subject property during our site reconnaissance. A review of the California Division of Oil, Gas, and Geothermal Resources Website for oil and gas fields in California and Alaska (CDOGGR, 2015) did not indicate the presence of oil and gas wells on or adjacent to the subject property (Township 12 South Range 02 West Section 21).

A single oil/gas well appears located in the immediate site vicinity. The well, identified as API 07300054, is located approximately 0.6 miles south of the subject property was listed with a status of “unknown,” and the operator was listed as Stanley S. Turner.

3.4.6 National Pipeline Mapping System

EEI reviewed the National Pipeline Mapping System (NPMS, 2015) public viewer website for gas transmission pipelines and hazardous liquid trunklines on or close to the subject property. According to the information reviewed, no pipelines are located on or in close proximity to the subject property.

3.5 Interview with Current Property Owner

EEI contacted the property owner representative, Ms. Debra Lundy, Real Property Manager, for information regarding the subject property. Ms. Lundy on behalf of Grand Avenue Financial Center Partnership provided the information documented below.

3.5.1 Past or Present Uses Indicating Environmental Concern

Ms. Lundy stated that the subject property is currently leased to a private company for tactical training drills. According to Ms. Lundy, the subject property is the former Escondido Police Headquarters.

3.5.2 Environmental Liens or Governmental Notification

Ms. Lundy stated that she is not aware of any environmental liens or governmental notification relating to past or recurrent violations of environmental laws with respect to the property or any facility located on the property.

3.5.3 Presence of Hazardous Substances or Environmental Violations

Ms. Lundy stated that a UST was removed from the subject property and the CSDDEH case closure summary was provided to the Buyer. Ms. Lundy referred to this and other documents detailing the UST removal and clean up history, which were provided to EEI and reviewed below in Section 3.7 Previous Assessments.

3.5.4 Previous Assessments

Ms. Lundy stated that previous environmental reports related to the CSDDEH case closure have been prepared for the subject property and were provided to EEI for review. See Section 3.7 Previous Assessments below for a full description of the previous report.

3.5.5 Legal Proceedings

Ms. Lundy stated that she is not aware of any past, threatened, or pending lawsuits or administrative proceedings concerning a release or threatened release of any hazardous substance or petroleum products involving the property by any owner or occupant of the property.

3.6 User Specific Information

Pursuant to ASTM E1527-13, EEI provided a Phase I ESA User Specific Questionnaire to the “user” (the person on whose behalf the Phase I ESA is being conducted), Ms. Ninia Hammond with Integral Communities. The User Specific Information provided by Ms. Hammond is documented in the following sections. A list of the user specific questions (per ASTM E1527-13) with associated responses is included in **Appendix E**.

3.6.1 Environmental Liens or Activity and Use Limitations

Ms. Hammond stated that it is unknown as to whether there are any environmental liens or activity and use limitations (AULs) in association with the subject property. To supplement this information, the Client provided EEI with a PTR prepared by Chicago Title Company, dated June 23, 2015. A review of the PTR report confirmed the absence of any environmental liens or AULs associated with the subject property.

3.6.2 Specialized Knowledge

In regards to a question regarding specialized knowledge or experience related to the property or nearby properties (i.e., knowledge of the chemicals or processes used by a type of business), Ms. Hammond stated that the question was non-applicable.

3.6.3 Valuation Reduction for Environmental Issues

Ms. Hammond stated that it is unknown if the purchase price being paid for the subject property reasonably reflects the fair market value of the property.

3.6.4 Presence or Likely Presence of Contamination

Ms. Hammond stated that it is unknown whether or not there are any environmental issues related to the subject property.

3.6.5 Other

Ms. Hammond stated that the Phase I ESA is required for due diligence requirements prior to the purchase of the subject property.

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 Materials (ACM) were 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.

Based on the age of the subject property structures, the presence of ACM is considered to be likely. At the Clients request, an ACM survey was conducted at the subject property by Altec Testing and Engineering, Inc. concurrently with this Phase I ESA, and will be provided under separate cover from this Phase I ESA.

3.7.2 Lead-Based Paint

Lead-Based Paint has been identified by Occupational Safety and Health Administration (OSHA), the United States Environmental Protection Agency (U.S. EPA) and the Department of Housing and Urban Development (HUD) as being a potential health risk to humans, particularly children, based on 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.

Based on the age of the subject property structures, the presence of lead-based paint is considered to be likely. At the Clients request, a LBP survey was conducted at the subject property by Altec Testing and Engineering, Inc. concurrently with this Phase I ESA, and will be provided under separate cover from this Phase I ESA.

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 U.S. 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 than 2 pCi/L). EEI does not consider radon as a significant environmental concern at this time.

4.0 SITE RECONNAISSANCE

4.1 Purpose

The purpose of our site reconnaissance was to physically observe the subject property, site structures, and adjoining properties for conditions indicating an existing release, past release, or threatened release of any hazardous substances or petroleum products into structures on the subject site, 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, USTs, ASTs, illegal dumping, or improper waste storage/handling. Detailed information pertaining to our site reconnaissance is provided in the following text.

4.2 Subject Property

On September 2, 2015, EEI personnel mobilized to the subject property. Visual conditions observed during the site reconnaissance of the subject property, are documented in a Photographic Log (**Appendix F**) and summarized in **Table 3**.

The subject property is located at 700 West Grand Avenue in Escondido, California and is located on a single parcel, denoted by the APN 232-100-16-00. The parcel comprises approximately 2.6-acres. The subject property is currently occupied by a two-story brick and stucco structure which previously served as the Escondido Police station, and is now operate as The Warfighter Academy, a gunfighter tactical school.

The subject property is immediately bound to the north by West Valley Parkway, beyond which is the Escondido Transit Center, to the south, by West Grand Avenue, beyond which is the Hawthorne Country Store and Mission Pools (675 and 755 West Grand Avenue). Farther south, lays the O.H. Kruse Grain and Milling facility (aka Vitagold Brands Coop) at 135 South Quince Street. To the east, the subject property is bound by asphalt-covered parking areas and a commercial structure occupied by California Bank and Trust (613 West Valley Parkway), and to the west by railroad tracks, beyond which are an asphalt-covered parking area followed by North County Stone and Tile (800 West Grand Avenue). The San Diego Union Tribune building and commercial shopping center is located to the northwest of the subject property across West Grand Avenue.

With the exception of a secured parking lot located along the northern boundary of the subject property and south of West Valley Parkway, access to the subject property's grounds by foot was unimpeded. EEI accessed the subject property by car from the only open driveway, which was located on the southern side of the property off of West Grand Avenue.

The subject property consists of an approximately 18,000 sf two story brick and stucco structure with asphalt and concrete-paved parking areas and landscaping surrounding the building. The overall property locale is characterized by a gentle, northward slope; and, based on topography; it appeared that any runoff generated on the property would flow to the north.

EEI staff observed overhead power lines trending northwest to southeast located west of the railroad tracks near the western boundary of the subject property. A pad-mounted transformer was observed along the subject property's southeastern boundary and within the subject property's HVAC containment area. Pole mounted transformers were observed on adjacent properties, however, none were located on the subject property. EEI staff also noted minimal amounts of litter and debris within the subject property's grounds. A fair amount of the building's interior walls and flooring were covered in paint as a result of war game activities conducted by the current tenants of the subject property. In addition to the paint residue, some minor trash was observed within several of the rooms within the building; these are not considered environmental concerns at this time.

Mr. Matthew Quinn, current tenant of the subject property, stated that he thought two diesel USTs were previously removed from the site. Mr. Quinn could not provide capacities of the USTs, nor could he provide exact locations. Mr. Quinn did state that he thought two soil mounds located within the grass-covered area adjacent to the subject property's enclosed HVAC area may be where the USTs were stored. Mr. Quinn also stated that an approximate 3-foot diameter asphalt patch located within the subject property's secured parking area may have been where a small UST was removed. A 2-inch diameter pipe of fiberglass construction was observed protruding from retaining wall located in the vicinity of the asphalt patch. Mr. Quinn did not know the purpose of the fiberglass pipe.

Apart from the indication of a former UST, no evidence of contamination, distressed vegetation, petroleum-hydrocarbon surface staining, waste drums, USTs, ASTs, illegal dumping, or improper waste storage/handling was noted during the site reconnaissance.

TABLE 3 Summary of Site Reconnaissance		
Item	Concerns	Comments
General Housekeeping	No	No concerns observed.
Surface Spills	No	No concerns observed.
Stained Surfaces	No	No concerns observed.
Fill Materials	No	No concerns observed.
Pits/Ponds/Lagoons	No	No concerns observed.
Surface Impoundments	No	No concerns observed.
ASTs/USTs	No	No concerns observed.
Distressed Vegetation	No	No concerns observed.
Wetlands	No	No concerns observed.
Electrical Substations	No	Located approximately 0.12 mile south-southeast of the subject property.
Areas of Dumping	No	No concerns observed.
Transformers	No	No concerns observed. Pad-mounted transformers located along West Grand Avenue and within subject property's HVAC enclosure. No signs of staining observed with either transformer.
Waste/Scrap Storage	No	No concerns observed. Two 55-gallon steel drums located within HVAC enclosure. One drum was empty with no odors, while a second drum was partially filled, sealed and reported by tenant to contain water.
Chemical Use/Storage	No	No concerns observed. Compressed gas used to power air rifles and small quantities of household cleansers stored onsite.

4.3 Adjacent Properties

EEI 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 located in a mixed residential and commercial area in the central portion of the City of Escondido. The subject property is immediately bound to the north by West Valley Parkway, beyond which is the Escondido Transit Center, to the south, by West Grand Avenue, beyond which is the Hawthorne Country Store and Mission Pools (675 and 755 West Grand Avenue). Farther south, lays the O.H. Kruse Grain and Milling facility (aka Vitagold Brands Coop) at 135 South Quince Street. To the east, the subject property is bound by asphalt-covered parking areas and a commercial structure occupied by California Bank and Trust (613 West Valley Parkway), and to the west by railroad tracks, beyond which are an asphalt-covered parking area followed by North County Stone and Tile (800 West Grand Avenue). The San Diego Union Tribune building and commercial shopping center is located to the northwest of the subject property across West Grand Avenue.

The nearby sites located within a one-eighth mile radius of the subject property, listed as release sites and/or sites of potential concern were discussed above in Section 3.3 Regulatory Database Search and are not repeated here.

5.0 VAPOR ENCROACHMENT SCREEN

ASTM Standard E2600-10 Standard Guide for Vapor Encroachment Screening (VES) on Property Involved in Real Estate Transactions was used as guidance for conducting a VES for the subject property. The purpose of the screening is to determine whether a potential Vapor Encroachment Condition (pVEC) exists from chemicals of concern (COC) that may migrate as vapors onto a property as a result of contaminated soil and groundwater on or near the subject property. The screening involves a two tiered approach to assessing pVEC risk as described below. The VES process includes a review of site conditions (e.g., aerial photographs, city directories, and environmental database information), which is information typically collected during a Phase I ESA, user provided information, and in some instances the use of a third-party vapor encroachment application. The following sections describe the VES performed on the subject property.

5.1 Subject Property Conditions

The subject property is located at an elevation of approximately 650 feet amsl. The overall property locale is characterized by a gentle, northward slope; and, based on topography; it appeared that any surface runoff generated on the property would flow to the north, into the local storm drain system along West Grand Avenue.

Based on field observations during onsite assessment activities (EAI, 2012), subsurface soils, generally consist of silty sand from 10 to 20 feet bgs and is underlain by well graded sand and clayey sand or sandy clay to approximately 24 feet bgs, the maximum depth of exploration.

EEI reviewed previous groundwater investigation reports which have taken place at the subject property. According to the data from the most report regarding onsite groundwater monitoring (EIA, 2013), the depth to groundwater was reported to range between 10.61 feet bgs to 11.94 feet bgs. The groundwater gradient was reported to be towards the northwest at 0.006 feet/foot, which was consistent with the previous sampling events.

5.2 User Provided Information

To assist EEI in the completion of the VES, s. Ninja Hammond with Integral Communities completed a Vapor Encroachment Screen - User Questionnaire (**Appendix G**). The questionnaire provided basic information regarding the use, condition, and proposed development of the subject property.

According to Ms. Hammond the current subject property type is commercial and the proposed construction is unknown at this time. Ms. Hammond stated that it is unknown if there have been any environmental problems or reported instances of gas stations, cleaners, storage tanks, odors, chemicals, or health concerns reported on the property.

5.3 Tier 1 Screening – Search Distance Test/Chemicals of Concern

A Tier 1 Screening includes the search distance test that involves a review of the regulatory database report and available historical records obtained during the Phase I ESA process to make a determination if any *known or suspect potentially contaminated* properties exist within the Area of Concern (AOC). High risk sites are typically current and former gas stations, former and current dry cleaners, manufactured gas plants, and industrial sites (Brownfields). The AOC is defined as any up gradient sites within the ASTM E1527-13 standard search distances and any cross or down gradient sites within 1/3 mile for solvents and petroleum products.

If the contamination at the known or potentially contaminated sites within the AOC consists of Chemicals of Concern (COCs), then a potential Vapor Encroachment Condition (pVEC) exists, and a Tier 2 Screening evaluation is recommended. If no known or potentially contaminated sites with COCs exist within the AOC, no further inquiry is necessary.

Based on EEI's Tier 1 Screening evaluation, the release case at the subject property, and one site identified within the AOC were considered to pose a pVEC at the subject property. A summary of the sites is provided below.

1. The subject property is the location of a former 2,000 gallon diesel fuel UST which was removed from the subject property under the direction of the CSDDEH in October 2010. TPHd-impacted soil was discovered during tank removal and a release case was opened. Subsequent soil and groundwater investigations revealed TPHd concentrations at <100 µg/L. The site met the groundwater specific criteria for Low-Threat UST Case Closure Policy, and the CSDDEH issued a closure letter in June 2015. Although the site has been granted regulatory closure, it is possible that residual petroleum hydrocarbon contaminated soil and groundwater remains beneath the site. However, based on the lack of volatile compounds detected in soil and groundwater during the previous investigations, a pVEC can be ruled out.
2. **Vitagold Brands Coop** (135 South Quince Street, 0.10 miles southeast), an agricultural feed elevator and warehouse, was the site of a diesel fuel release during tank removal in 1991, and soil and groundwater beneath the site is impacted with TPHg, benzene, and MTBE from a more recent, upgradient source. Site remediation is under the direction of the SDRWQCB. Based on the presence of the up-gradient release site, EEI performed a Tier 2 Screening, which is described below.

5.4 Tier 2 Screening – Plume Test

Based on the results of our Tier 1 Screening evaluation, a Tier 2 Screening, or Plume Test was conducted for the **Vitagold Brands Coop** site. The Plume Test assesses whether or not documented soil and groundwater contamination is close enough to the subject property to result in a VEC. There are two parts to the plume test:

1. Critical Distance Determination - Determine the distance from the subject property to edge of plume in any direction (vertical, horizontal, lateral).
2. VEC exists if a plume of volatile organic compounds (VOCs), semi-volatile organic compounds (S-VOCs,) or Volatile Inorganic Compounds or free-phase petroleum product accumulating above the water table is located within 100 feet of the subject property, or if a plume of dissolved volatile petroleum hydrocarbons is located within 30-feet of the property.

EEI reviewed the most recent monitoring report on the GeoTracker Website, related to the **Vitagold Brands Coop** site. According to the information reviewed, the edge of the contaminated plume is located approximately 400 feet southeast of the southern boundary of the subject property. In addition, the groundwater direction was reported on the maps to be towards the north-northeast, which would be cross-gradient to the subject property.

5.4 Findings

Based on the results of a Tier 1 and Tier 2 Vapor Encroachment Screening (VES), EEI concluded that a pVEC cannot be ruled out for the subject property because of a former UST release, and the reported residual petroleum hydrocarbon left in soils and groundwater beneath the subject property.

A pVEC can be ruled out for the off-site **Vitagold Brands Coop** (135 South Quince Street, 0.10 miles southeast) site, based on site-specific data indicating that the edge of the groundwater plume related to the release case is located at approximately 400 feet, which is greater than the critical distance of 100 feet for petroleum chemicals of concern, and 2) the groundwater flow direction was reported to be towards the north-northeast, which would be cross-gradient to the subject property.

6.0 FINDINGS AND OPINIONS

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

- *Known or suspected RECs* – are defined by the ASTM Standard Practice E 1527-13 as the presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: (1) due to any release to the environment; (2) under conditions indicative of a release to the environment; or (3) under conditions that pose a material threat of a future release to the environment.

No *known or suspected RECs* have been revealed during the preparation of this ESA.

- *Controlled RECs (CRECs)* – are defined by the ASTM Standard Practice E 1527-13 as a REC resulting from a past release of hazardous substances or petroleum products that has been addressed to the satisfaction of the applicable regulatory authority (e.g., as evidenced by the issuance of a NFA letter or equivalent, or meeting risk-based criteria established by regulatory authority), with hazardous substances or petroleum products allowed to remain in place subject to the implementation of required controls (e.g., property use restrictions, AULs, institutional controls, or engineering controls).
 - No *CRECs* have been revealed during the preparation of this ESA.
- *Historical Recognized Environmental Conditions (HRECs)* – are defined by the ASTM Standard Practice E 1527-13 as a past release of any hazardous substances or petroleum products that has occurred in connection with the property and has been addressed to the satisfaction of the applicable regulatory authority or meeting unrestricted residential use criteria established by a regulatory authority, without subjecting the property to any required controls (e.g., property use restrictions, AULs, institutional controls, or engineering controls).
 - The following *HREC* has been revealed during the preparation of this ESA.

The subject property is the location of a former 2,000 gallon diesel fuel UST which was removed from the subject property under the direction of the CSDDEH in October 2010. TPHd-impacted soil was discovered during tank removal and a release case was opened. Subsequent soil and groundwater investigations revealed TPHd concentrations at <100 µg/L. The site met the groundwater specific criteria for Low-Threat UST Case Closure Policy, and the CSDDEH issued a closure letter in June 2015. Although the site has been granted regulatory closure, it is possible that residual petroleum hydrocarbon contaminated soil remains in the area of the former UST location at depths of 10 to 14 feet bgs. If stained or suspicious soil is encountered during future site improvements, EEI recommends that the material be evaluated and if deemed necessary, excavated and characterized for proper disposal.

- *De Minimis* Conditions – include environmental concerns identified which may warrant discussion but do not qualify as RECs, as defined by the ASTM Standard Practice E 1527-13.
 - No *de minimis* conditions were identified during the preparation of this ESA.
- Although not considered to be RECs, the following non-scope considerations were identified:
 - There is a potential for ACM, and LBP to be present in building materials, and PCB-containing equipment to be present onsite. At the Client's request, an ACM, LBP, and limited universal waste survey was conducted at the subject property by Altec Testing and Engineering, Inc. concurrently with this Phase I ESA, and will be provided under separate cover from this Phase I ESA.

7.0 DATA GAPS AND DEVIATIONS FROM ASTM PRACTICES

Section 3.2.20 (ASTM 1527-13) 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, no historical data gaps were encountered.

7.2 Regulatory Data Gaps

Based on the information obtained during the course of this investigation, no regulatory data gaps were encountered.

7.3 Onsite Data Gaps

Based on the information obtained during the course of this investigation, no onsite data gaps were encountered.

7.4 Deviations from ASTM Practices

Section 12.10 (ASTM 1527-13), 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 E1527-13 Guidelines.

8.0 CONCLUSIONS

We have performed a Phase I Environmental Site Assessment in conformance with the scope and limitations of ASTM Practice E1527-13 of APN 232-100-16-00, the *subject property*. Any exceptions to, or deletions from, this practice are described in Section 7.0 of this report. This assessment has revealed no evidence of *recognized environmental conditions* in connection with the *subject property*, except for those identified in Section 6.0 of this report.

9.0 REFERENCES

California Division of Mines and Geology (CDMG), 2002 California Geological Survey, California Geomorphic Provinces Note 36, Electronic Copy, Revised December 2002.

California Division of Mines and Geology (CDMG), 1977, Recency and Character of Faulting Along the Elsinore Fault Zone in Southern Riverside County, California, Special Report 131, Plate 1.

California Department of Toxic Substances (DTSC), Website (<http://www.envirostor.dtsc.ca.gov/public/>), EnviroStor database, accessed September 2015.

California Department of Water Resources, Water Data Library (WDL), Website (<http://www.water.ca.gov/waterdatalibrary>), accessed September 2015.

California Division of Oil, Gas, and Geothermal Resources (CDOGGR) website, www.consrv.ca.gov, Oil and Gas Maps District 1, accessed September 2015.

County of San Diego Land Use and Environmental Group (LUEG), KIVA, Website (<http://landinfo.sdcounty.ca.gov/permit/index.cfm>), accessed September 2015.

Donan Environmental Services, Inc. (DES), Technical Report, First Quarter 2014 Groundwater Assessment, Global ID No. T0607300860; Vitagold Brands Cooperative Association, 135 South Quince Street, Escondido, California 92025, dated April 10, 2014.

Environmental Applications, Inc. (EAI), Work Plan for Additional Assessment, and Groundwater Monitoring and Progress Report (2nd Quarter 2013), Former Escondido Police Station, 700 West Grand Avenue, Escondido, California, June 17, 2013.

Environmental Applications, Inc. (EAI), Additional Site Assessment Report, Former Escondido Police Station, 700 West Grand Avenue, Escondido, California, November 5, 2012.

Federal Emergency Management Agency (FEMA) website, (www.fema.gov), accessed September 2015.

Frey Environmental, Inc. (FEI), Quarterly Groundwater Monitoring and Site Status Updates, First Half 2012, APRO 19, 555 W. Grand Avenue, Escondido, California, dated August 10, 2012.

National Pipeline Mapping System (NPMS), Public Map Viewer Website, (<https://www.npms.phmsa.dot.gov/PublicViewer/>), accessed September 2015.

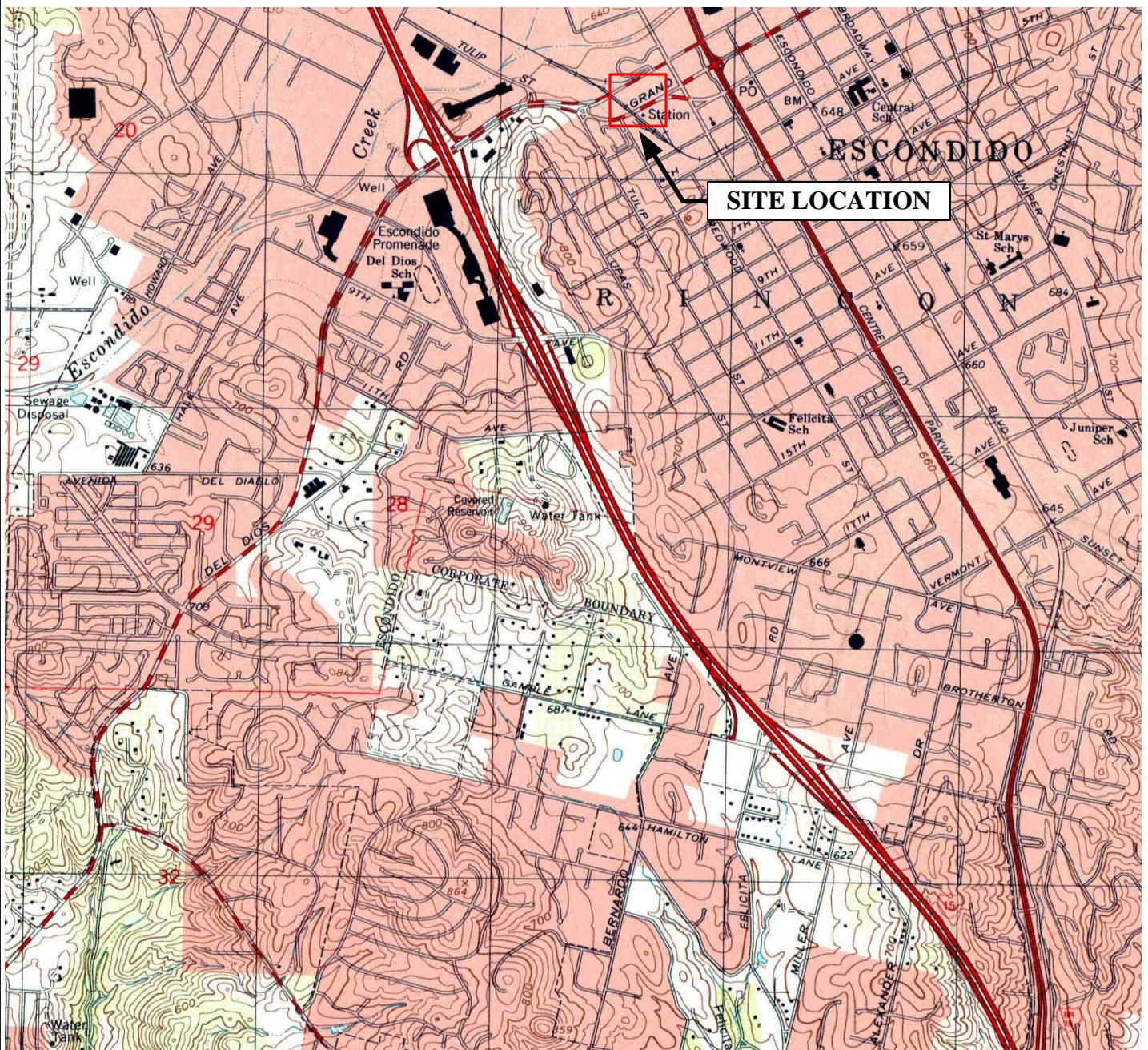
San Diego Regional Water Quality Control Board –Region 9 (SDRWQCB): *Water Quality Control Plan for the San Diego Basin (9)*, September 8, 1994 (with amendments effective on or before April 4 2011), California State Water Resources Control Board Publication.

State Water Resources Control Board, Website, GeoTracker database, (<http://www.geotracker.swrcb.ca.gov/>), accessed September 2015.

United States Department of Agriculture (USDA), Natural Resources Conservation Center, Website, Web Soil Survey (<http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx>), accessed September 2015.

United States Geological Survey (USGS), 1996, 7.5' Topographic Map, Escondido, California Quadrangle.

FIGURES



Map Source: USGS, Escondido, California 7.5 Minute Quadrangle map (USGS, 1996)

LEGEND



Scale: 1" = 1,800'



Note: All Locations Are Approximate

SITE LOCATION MAP

Integral Communities
Former Escondido Police Station
 700 West Grand Avenue
 APN 232-100-16-00
 City of Escondido
 San Diego County, California 92025
 EEI Project No. IPF-72198.1
 Created September 2015



FIGURE 1



Source: Google Earth, 2015; Image Date: April 14, 15

LEGEND



Scale: 1" = 100'



AERIAL SITE MAP

Integral Communities
Former Escondido Police Station
700 West Grand Avenue
APN 232-100-16-00
City of Escondido
San Diego County, California 92025
EEI Project No. IPF-72198.1
Created September 2015



FIGURE 2

**APPENDIX A
RESUME OF ENVIRONMENTAL PROFESSIONAL**

**APPENDIX B
COUNTY OF SAN DIEGO ASSESSORS PARCEL MAP/FIRM/
PRELIMINARY TITLE REPORT**

**APPENDIX C
HISTORICAL AERIAL PHOTOGRAPHS/TOPOGRAPHIC MAPS/
DIRECTORY REPORT/SANBORN MAP REPORT**

**APPENDIX D
ENVIRONMENTAL RECORDS SEARCH**

**APPENDIX E
CSDDEH CASE CLOSURE LETTER
(Unauthorized Release No. H28848-001)**

**APPENDIX F
USER PROVIDED INFORMATION**

**APPENDIX G
PHOTOGRAPHIC LOG**

**APPENDIX H
VAPOR ENCROACHMENT SCREEN USER QUESTIONNAIRE**