



AEI Consultants

February 28, 2019

PHASE I ENVIRONMENTAL SITE ASSESSMENT

Property Information:

30940 Hawthorne Boulevard
Rancho Palos Verdes, Los Angeles County, California 90275

Project Information:

AEI Project No. 400935
Client Reference No. PO#20190925
Client Reference Name: Point Vicente Park / Civic Center

Prepared For:

Rancho Palos Verdes
30940 Hawthorne Boulevard
Rancho Palos Verdes, California 90275

Prepared By:

AEI Consultants
2207 West 190th Street
Torrance, California 90504

Environmental
Due Diligence

Building Assessments

Site Investigation
& Remediation

Energy Performance
& Benchmarking

Industrial Hygiene

Construction
Risk Management

Zoning Analysis
Reports & ALTA
Surveys

National Presence
Regional Focus
Local Solutions

February 28, 2019

Mr. Matt Waters
Rancho Palos Verdes
30940 Hawthorne Boulevard
Rancho Palos Verdes, California 90275

Subject: Phase I Environmental Site Assessment
30940 Hawthorne Boulevard
Rancho Palos Verdes, California 90275
AEI Project No. 400935
Client Reference No. PO#20190925
Client Reference Name: Point Vicente Park / Civic Center

Dear Mr. Waters:

AEI Consultants is pleased to provide the *Phase I Environmental Site Assessment* of the above referenced property. This assessment was authorized and performed in accordance with the scope of services engaged.

We appreciate the opportunity to provide services to you. If you have any questions concerning this report, or if we can assist you in any other matter, please contact me at (310) 798-4255 or abennett@aeiconsultants.com.

Sincerely,



Adam Bennett
Vice President
AEI Consultants

PROJECT SUMMARY

**30940 Hawthorne Boulevard, Rancho Palos Verdes, Los Angeles County,
California 90275
AEI Project No. 400935**

Report Section		REC	CREC	HREC	OEC	Recommended Action
1.0	Introduction					None
2.0	Site and Vicinity Description					None
3.0	Historical Review of Site and Vicinity	✓			✓	See Findings below
4.0	Regulatory Agency Records Review					None
5.0	Regulatory Database Records Review					None
6.0	Interviews and User Provided Information					None
7.0	Site Reconnaissance					None
8.1	Asbestos-Containing Building Materials				✓	See Findings below
8.2	Lead-Based Paint				✓	See Findings below
8.3	Radon				✓	None
8.4	Mold					None



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EXECUTIVE SUMMARY

AEI Consultants (AEI) was retained by Rancho Palos Verdes to conduct a Phase I ESA in conformance with AEI's contract and the scope and limitations of ASTM Standard Practice E1527-13 and the EPA Standards and Practices for All Appropriate Inquiries (40 CFR Part 312) for the property located at 30940 Hawthorne Boulevard, Rancho Palos Verdes, Los Angeles County, California (the "subject property"). Any exceptions to, or deletions from, this practice are described in Sections 1.4, 1.5, and 1.6 of this report.

Pertinent subject property information is noted below:

PROPERTY INFORMATION	
Site Address(es)	30940 Hawthorne Boulevard, Rancho Palos Verdes, Los Angeles County, California 90275
Property ID (APN or Block/Lot)	7573-002-908, 7573-002-909 (portions), and 7573-002-913
Location	South side of Hawthorne Boulevard
Property Type	Office
SITE AND BUILDING INFORMATION	
Approximate Site Acreage/Source	Approximately 23-acres/Assessor Parcel map and Previous Report
Number of Buildings	Six (plus ancillary buildings)
Building Construction Date(s)	City Hall Building: Pre 1963 Community Development Department: Pre 1963 Community Development Department (former Computer Training Building): Pre 1963 Senior Center: 2007 TV Studio Building: Pre 1963 Public Works Storage Building: Pre 1963 Road Sign Storage Pre 1963 Please note, the subject property is believed to have been first developed as the Point Vicente Military Reservation as early as 1932.
Building Square Footage (SF)/Source	City Hall Building: 17,530 SF Community Development Department: 4,604 SF Community Development Department (former Computer Training Building): 3,083 SF Senior Center: TV Studio Building: 1,242 SF Public Works Storage Building: 890 SF Road Sign Storage Building: 880 SF
Number of Floors/Stories	City Hall Building: Two Community Development Department: One Community Development Department (former Computer Training Building): One Senior Center: One TV Studio Building: One Public Works Storage Building: One Road Sign Storage Building: One



Basement or Subgrade Area(s)	Yes, portions of the maintenance yard appear to be developed with a basement to access and/or service the historical missile silos
Number of Units	One
Additional Improvements	Dog park, cell phone tower, helipad, parking areas, and associated landscaping
On-site Occupant(s)	City of Rancho Palos Verdes
Current On-site Operations/Use	Administrative, senior services, broadcasting, and general equipment storage
Current Use of Hazardous Substances	Yes; refer to Section 7.1
REGULATORY INFORMATION	
Regulatory Database Listing(s)	Haznet (8), FINDS (4), LACoHMS (2), ERNS, ENF, and CIWQS (x2)

A chronological summary of historical subject property information is as follows:

Date Range	Subject Property Description and Use (Historical Addresses)	Source(s)
1928-1932	Vacant and agricultural land	Aerial photographs
1942-1979	Point Vicente - military use with missile control offices/buildings with the following construction dates <ul style="list-style-type: none"> • Historical barracks (Circa 1947-1953)- historical structures • City Hall Building: Pre 1963 • Community Development Department: Pre 1963 • Community Development Department (former Computer Training Building): Pre 1963 • TV Studio Building: Pre 1963 • Public Works Storage Building: Pre 1963 • Road Sign Storage Pre 1963 	Aerial photographs, historical topographic maps, and previous reports
1979-Present	City of Rancho Palos Verdes Civic Center <ul style="list-style-type: none"> • Senior Center constructed in 2007 	Aerial photographs, previous reports, building records, interviews, agency records, and observations

Based on AEI's review of historical and regulatory records, the subject property was vacant land as early as 1928. Between 1932 and 1979, the subject property is believed to have been utilized for military purposes including as part of the Harbor Defense of Los Angeles, Nike Ajax, and Nike Hercules anti-aircraft missile systems. Historical structures located on the site were military related and presumably included barracks with support buildings. These historical structures were noted between 1947 and 1953. Current improvements, except for the Senior Center, were noted as early as 1963. The military use of the site is believed to have been decommissioned by 1979 with the City of Rancho Palos Verdes taking ownership of the property and remaining the occupant as of this report date. The Senior Center is believed to have been completed in 2007.

Additional improvements on the subject property include two silos which historically held anti-aircraft fire control and gun emplacements. The exterior of these silos were also observed by AEI at the time of the site reconnaissance.

The immediately surrounding properties consist of the following:

Direction	Tenant/Use (Address)	Regulatory Database Listing(s)
North	Vacant land/nature reserve/military land as well as Hawthorne Boulevard beyond which appears vacant land	Refer to Section 5.1.
East	Peninsula Racquet Club (30850 Hawthorne Boulevard)	None identified
South	Vacant land/nature reserve/military land and agricultural fields	Refer to Section 5.1.
West	Vacant land/nature reserve/military land	Refer to Section 5.1.

If the surrounding properties are listed in the regulatory database, please refer to Section 5.1 for discussion.

FINDINGS

Recognized Environmental Condition (REC) is defined by the ASTM Standard Practice E1527-13 as the presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: (1) due to 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 subject property was historically used for military purposes/Nike Missile Facilities, these included the developed of anti-aircraft fire control and gun emplacements. The site was designated as Los Angeles Defense Area (LADA) #55, a part of the air defense system of Los Angeles during the Cold War. The Nike defense system operated until approximately 1974. The Nike Ajax missile was put in service in 1953 and used several acid or corrosive mixtures in the propellant system. The starting fluid was 99% Unsymmetrical Dimethylhydrazine (UDMH). The propellant was 83% JP-4 turbine engine fuel and 17% UDMH. The missile oxidizer was Inhibited Red Fuming Nitric Acid (IRFNA), composed of 83% Nitric Acid, 14% Nitrogen Dioxide, 0.6% Hydrofluoric Acid. The Nike Hercules missile was put in service in 1958 and did not use liquid propellants. According to the Department of Defense (DOD), potentially hazardous materials used at the subject property during the operation of the Nike Missile Facility may have included nitrosamines, JP fuel, octane, gasoline, 2-propanol, trichloroethylene (TCE), acetone, 2-Butanone (MEK), tetrachloroethylene (PCE) polychlorinated biphenyls (PCBs), waste oils, paints, and ethylene glycol. Furthermore, based on a review of previous reports and regulatory agency records, at least three USTS were removed from the subject property and several 55-gallon drums were identified (undisclosed contents) during military decommissioning activities (circa late 1970s). Sampling was reportedly completed at the time of UST removal, however, the sampling data associated with these excavated USTs was not found by AEI nor by previous consultants. Previous reports identified several hazardous waste and/or materials on site. These included; paints, acids, fuels, waste/



mixed oils, PCBs, unspecified organic liquid mixture, and household wastes. Limited sampling events were completed in 2005 and 2009, results of this sampling event had non-detect to low-levels of constituents including; metals and pesticides. However, the subject property is slated for redevelopment (pending government approval) as a new community/civic center, thus additional investigations are warranted to determine if the former uses of the property have impacted the subject property.

Controlled Recognized Environmental Condition (CREC) is defined by the ASTM Standard Practice E1527-13 as a past release of hazardous substances or petroleum products that has been addressed to the satisfaction of the applicable regulatory authority, with hazardous substances or petroleum products allowed to remain in place subject to the implementation of required controls.

- AEI did not identify evidence of CRECs during the course of this assessment.

Historical Recognized Environmental Condition (HREC) is defined by the ASTM Standard Practice E1527-13 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 use criteria established by a regulatory authority, without subjecting the property to any required controls.

- According to the Los Angeles County Department of Public Works (LACDPW), two 3,800-gallon stove-oil USTs were removed from the site in 1996. According to LACDPW staff, a closure letter for these tanks was issued on January 30, 1997. AEI requested a review of this file, however, was informed by LACDPW staff that the physical file has been lost. Based on the "lost" status of this file, this missing information represents a data gap. As a result, AEI is unable to determine if these USTs represent a CREC. However, based on the verbal confirmation (by LACDPW staff), that a NFA Letter was issued, AEI considers these USTs a HREC at this time.

Other Environmental Considerations (OEC) warrant discussion, but do not qualify as RECs as defined by the ASTM Standard Practice E1527-13. These include, but are not limited to, de minimis conditions and/or environmental considerations such as the presence of ACMs, LBP, radon, mold, and lead in drinking water, which can affect the liabilities and financial obligations of the client, the health and safety of site occupants, and the value and marketability of the subject property.

- Based on a review of aerial photographs and previous reports, the subject property was historically used for agricultural purposes. There is a potential that agricultural chemicals, such as pesticides, herbicides and fertilizers, were used on site, and that the subject property has been impacted by the use of such agricultural chemicals. In general, historical agricultural use is not the subject of environmental enforcement actions by regulatory agencies, and therefore, could be considered a de minimis condition. However, AEI understands that the subject property is slated for redevelopment. As such, the concurrent Phase II Subsurface Investigation includes analysis of Organochlorine Pesticides (OCPs) to determine if the subject property has been impacted by former agricultural uses.
- Radon sampling was not requested as part of this assessment. According to the California Department of Health Services Radon Database, 447 tests were conducted for



radon levels in the subject property zip code (90275) in 2016. It was reported that 90 of the 447 tests exceeded the action level of 4.0 pCi/L set forth by the US EPA. Radon sampling would be required to determine site-specific radon levels.

- According to the previously issued report (and information obtained from Mr. Matt Waters' interview), there are AULs associated with the subject property parcels, specifically the parent parcel which is shared with the neighboring areas. As a result, general uses are limited to public park, educational, research, recreation, community center, and other related governmental and public uses. As a result, a Covenant to Restrict Use of Property; Environmental Restriction was issued for the parcels -908, -909, 910, and -913 as agreed upon by the city of Rancho Palos Verdes and the DTSC. AEI recommends that the relevant portions of this agreement be adhered to in accordance with the agreement.
- According to the Mr. Waters, demolition of the subject property buildings is potentially planned for the near future - pending governmental agency approval. Regardless of building construction date, the EPA's NESHAP requires that a thorough asbestos survey be performed prior to demolition or renovation activities that may disturb ACMs. This requirement may be enforced by federal, state and local regulatory agencies, and specifies that all suspect ACMs be sampled to determine the presence or absence of asbestos prior to any renovation or demolition activities which may disturb them to prevent potential exposure to workers, building occupants, and the environment. Similarly, OSHA regulations require that specific work practices be implemented when handling construction materials and debris that contain asbestos and/or lead-containing materials.
- Due to the age of the subject property buildings, there is a potential that LBP is present. According to the Mr. Waters, demolition of the subject property buildings is potentially planned for the near future - pending governmental agency approval. AEI recommends that the property owner consult with a certified Lead Risk Assessor to determine options for control of possible LBP hazards. Stringent local and State regulations may apply to LBP in association with building demolition/renovations and worker/occupant protection. It should be noted that construction activities that disturb materials or paints containing any amount of lead may be subject to certain requirements of the OSHA lead standard contained in 29 CFR 1910.1025 and 1926.62.
- The subject property is developed with two historical missile silos. According to Mr. Waters, these silos were decommissioned when the property was taken over by the City of Rancho Palos Verdes (1979). Mr. Waters indicated the silos, and associated subterranean areas, have remained vacant/untouched since being decommissioned. No equipment or supplies remains in place. Based on this information, these features are not expected to represent a significant environmental concern. However, should these features be removed, additional investigations may be deemed warranted to ensure they are properly closed out.

CONCLUSIONS, OPINIONS, AND RECOMMENDATIONS

We have performed a Phase I Environmental Site Assessment in conformance with the scope and limitations of ASTM Standard Practice E1527-13 and the EPA Standards and Practices for All Appropriate Inquiries (40 CFR Part 312) of 30940 Hawthorne Boulevard, Rancho Palos Verdes, Los Angeles County, California, the *subject property*. Any exceptions to, or deletions



from, this practice are described in Sections 1.4, 1.5, and 1.6 of this report.

AEI did not identify evidence of RECs or CRECs in connection with the property except for those previously identified in the Findings section. AEI recommends the following:

- Phase II Site Investigation

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1.0 INTRODUCTION

This report documents the methods and findings of the Phase I Environmental Site Assessment performed in conformance with AEI's contract and scope and limitations of ASTM Standard Practice E1527-13 and the EPA Standards and Practices for All Appropriate Inquiries (40 CFR Part 312) for the property located at 30940 Hawthorne Boulevard, Rancho Palos Verdes, Los Angeles County, California (Appendix A: Figures and Appendix B: Property Photographs).

1.1 SCOPE OF WORK

The purpose of the Phase I ESA is to assist the client in identifying potential RECs, in accordance with ASTM E1527-13, associated with the presence of any hazardous substances or petroleum products, their use, storage, and disposal at and in the vicinity of the subject property. Property assessment activities focused on: 1) a review of federal, state, tribal, and local databases that identify and describe underground fuel tank sites, leaking underground fuel tank sites, hazardous waste generation sites, and hazardous waste storage and disposal facility sites within the ASTM approximate minimum search distance; 2) a property and surrounding site reconnaissance, and interviews with the past and present owners and current occupants and operators to identify potential environmental contamination; and 3) a review of historical sources to help ascertain previous land use at the site and in the surrounding area.

1.2 ADDITIONAL SERVICES

Other Environmental Considerations such as ACMs, LBP, lead in drinking water, radon, mold, and wetlands can result in business environmental risks for property owners which may disrupt current or planned operations or cash flow and are generally beyond the scope of a Phase I assessment as defined by ASTM E1527-13. Based upon the agreed-on scope of services this ESA did not include subsurface or other invasive assessments, business environmental risks, or other services not specifically identified and discussed herein.

1.3 SIGNIFICANT ASSUMPTIONS

The following assumptions are made by AEI in this report. AEI relied on information derived from secondary sources including governmental agencies, the client, designated representatives of the client, property contact, property owner, property owner representatives, computer databases, and personal interviews. AEI has reviewed and evaluated the thoroughness and reliability of the information derived from secondary sources including government agencies, the client, designated representatives of the client, property contact, property owner, property owner representatives, computer databases, or personal interviews. It appears that all information obtained from outside sources and reviewed for this assessment is thorough and reliable. However, AEI cannot guarantee the thoroughness or reliability of this information.

Groundwater flow, unless otherwise specified by on-site well data or well data from the subject property or nearby sites, is inferred from contour information depicted on the USGS topographic maps. AEI assumes the property has been correctly and accurately identified by the client, designated representative of the client, property contact, property owner, and property owner's representatives.

1.4 LIMITATIONS

Property conditions, as well as local, state, tribal, and federal regulations can change significantly over time. Therefore, the recommendations and conclusions presented as a result of this assessment apply strictly to the environmental regulations and property conditions existing at the time the assessment was performed. Available information has been analyzed using currently accepted assessment techniques and it is believed that the inferences made are reasonably representative of the property. AEI makes no warranty, expressed or implied, except that the services have been performed in accordance with generally accepted environmental property assessment practices applicable at the time and location of the assessment.

Considerations identified by ASTM as beyond the scope of a Phase I ESA that may affect business environmental risk at a given property include the following: ACMs, radon, LBP, lead in drinking water, wetlands, regulatory compliance, cultural and historical resources, industrial hygiene, health and safety, ecological resources, endangered species, indoor air quality, mold, and high voltage lines. These environmental issues or conditions may warrant assessment based on the type of the property transaction; however, they are considered non-scope issues under ASTM Standard Practice E1527-13.

If requested by the client, these non-scope issues are discussed herein. Otherwise, the purpose of this assessment is solely to satisfy one of the requirements for qualification of the innocent landowner defense, contiguous property owner or bona fide prospective purchaser under CERCLA. ASTM Standard Practice E1527-13 and the United States EPA Standards and Practices for All Appropriate Inquiries (40 CFR Part 312) constitute the "all appropriate inquiry into the previous ownership and uses of the property consistent with good commercial or customary practice" as defined in:

1. 42 U.S.C. § 9601(35)(B), referenced in the ASTM Standard Practice E1527-13.
2. Sections 101(35)(B) (ii) and (iii) of CERCLA and referenced in the EPA Standards and Practices for All Appropriate Inquiries (40 CFR Part 312).
3. 42 U.S.C. § 9601(40) and 42 U.S.C. § 9607(q).

The Phase I Environmental Site Assessment is not, and should not be construed as, a warranty or guarantee about the presence or absence of environmental contaminants that may affect the property. Neither is the assessment intended to assure clear title to the property in question. The sole purpose of assessment into property title records is to ascertain a historical basis of prior land use. All findings, conclusions, and recommendations stated in this report are based upon facts, circumstances, and industry-accepted procedures for such services as they existed at the time this report was prepared (i.e., federal, state, and local laws, rules, regulations, market conditions, economic conditions, political climate, and other applicable matters). All findings, conclusions, and recommendations stated in this report are based on the data and information provided, current subject property use, and observations and conditions that existed on the date and time of the property reconnaissance.

Responses received from local, state, or federal agencies or other secondary sources of information after the issuance of this report may change certain facts, findings, conclusions, or circumstances to the report. A change in any fact, circumstance, or industry-accepted procedure upon which this report was based may adversely affect the findings, conclusions, and recommendations expressed in this report.



AEI's limited radon screening, if included, is intended to provide a preliminary screening to evaluate the potential presence of elevated radon concentrations at the site. The proposed scope is not intended to define the full extent of the presence of radon at the subject property. As such, the results should be used for lending purposes only. The recommendations and conclusions presented as a result of the limited preliminary radon screening apply strictly to the property conditions existing at the time the sampling was performed. The sample analytical results are only valid for the time, place, and condition of the site at the time of collection and AEI does not warrant that the results will be repeatable or are representative of past or future conditions.

1.5 LIMITING CONDITIONS/DEVIATIONS

The performance of this assessment was limited by the following:

- While additional assessments may have been conducted on the subject property, these documents must be provided for AEI's review in order for the information to be summarized/included in this report. Please refer to Section 6.3 for a summary of previous reports and other documentation provided to AEI during this assessment.
- Due to the size of the subject property, AEI performed a reconnaissance of the property utilizing a field technique of traversing the site in an attempt to provide an overlapping field of view. Due to the size of the property and the vegetation present on site, isolated areas of the site may have not been accessible for direct observation during AEI's field reconnaissance.
- Due to access issues (closed and/or missing keys), AEI observed a representative sample of interior spaces. Due to the administrative and storage nature of occupancy, this limited inspection method is expected to be adequate for the purposes of this assessment. AEI observed the interiors of the following buildings; City Hall, Community Development, and Senior Center.
- On February 1, 2019, AEI contacted the Los Angeles County Public Health Investigation (LACPHI) and Los Angeles County Fire Department (LACoFD) for information on the subject property. Files at these agencies may contain information regarding hazardous substance storage and use, underground storage tanks, unauthorized releases of petroleum hydrocarbons or other contaminants that may affect the soil or groundwater in the area, wells and/or septic systems. As of this report date responses from the LACPHI and LACoFD have not been received. However, based on the quality of information obtained from other sources such as; the regulatory database, aerial photographs, city directories, the Department of Toxic Substance Control Hazardous Waste Tracking System (DTSC HWTS) website, South Coast Air Quality Management District (SCAQMD), the Regional Water Quality Control Board (RWQCB) GeoTracker database, interviews, and onsite observations, these pending responses are not expected to alter the findings of this investigation.



- Due to the presence of stored products and miscellaneous features within the buildings, direct visual observation of some of the floor and wall areas of the buildings was not possible. Additionally, due to the presence of parked vehicles or other miscellaneous features, isolated portions of exterior ground areas were not available for direct visual observation. Features may be present that were not observed during AEI's site inspection.

1.6 DATA FAILURE AND DATA GAPS

According to ASTM E1527-13, data gaps occur when the Environmental Professional is unable to obtain information required by the Standard, despite good faith efforts to gather such information. Pursuant to ASTM E1527-13, only significant data gaps, defined as those that affect the ability of the Environmental Professional to identify RECs, need to be documented.

Data failure is one type of data gap. According to ASTM E1527-13, data failure occurs when all of the standard historical sources that are reasonably ascertainable and likely to be useful have been reviewed and yet the objectives have not been met. Pursuant to ASTM E1527-13, historical sources are required to document property use back to the property's first developed use or back to 1940, whichever is earlier, or periods of five years or greater.

1.6.1 DATA FAILURE

The following data failure was identified during the course of this assessment:

Data Failure	The earliest historical resource obtained during this assessment was an aerial photograph from 1928 indicating that the subject property was developed agriculturally. The lack of historical sources for the subject property dating back to first developed use represents historical data source failure. However, as it is assumed that the subject property would have been previously used for agricultural purposes, if not undeveloped, this data failure is not expected to significantly alter the findings of this assessment.
Information/Sources Consulted	Aerial photographs

Data Failure	Historical sources were not obtained at five-year intervals. AEI was not able to track the history of the subject property between the years 1932 and 1942 as none of the historical sources utilized as part of this assessment covered this time period. In the 1932 topographic map, the subject property appears as vacant/agricultural land. According to previous reports, the subject property is believed to have been first used as a military base in 1942. Thus, it is assumed that during this time period the subject property would have still been vacant and/or agricultural land. Therefore, this data failure is not expected to significantly alter the findings of this assessment.
Information/Sources Consulted	Previous report and topographic maps

1.6.2 SIGNIFICANT DATA GAPS

AEI did not identify significant data gaps which affected our ability to identify RECs.

1.7 RELIANCE

All reports, both verbal and written, are for the benefit of Rancho Palos Verdes. This report has no other purpose and may not be relied upon by any other person or entity without the written consent of AEI. Either verbally or in writing, third parties may come into possession of this report or all or part of the information generated as a result of this work. In the absence of a written agreement with AEI granting such rights, no third parties shall have rights of recourse or recovery whatsoever under any course of action against AEI, its officers, employees, vendors, successors or assigns. Reliance is provided in accordance with AEI's contract and Terms and Conditions executed by Rancho Palos Verdes on January 30, 2019. The limitation of liability defined in the Terms and Conditions is the aggregate limit of AEI's liability to the client and all relying parties.

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2.0 SITE AND VICINITY DESCRIPTION

2.1 SITE LOCATION AND DESCRIPTION

PROPERTY INFORMATION	
Site Address(es)	30940 Hawthorne Boulevard, Rancho Palos Verdes, Los Angeles County, California 90275
Property ID (APN or Block/Lot)	7573-002-908, 7573-002-909 (portions), and 7573-002-913
Location	South side of Hawthorne Boulevard
Property Type	Office
SITE AND BUILDING INFORMATION	
Approximate Site Acreage/Source	Approximately 23-acres/Assessor Parcel map and Previous Report
Number of Buildings	Six (plus ancillary buildings)
Building Construction Date(s)	<p>City Hall Building: Pre 1963 Community Development Department: Pre 1963 Community Development Department (former Computer Training Building): Pre 1963 Senior Center: 2007 TV Studio Building: Pre 1963 Public Works Storage Building: Pre 1963 Road Sign Storage Pre 1963</p> <p>Please note, the subject property is believed to have been first developed as the Point Vicente Military Reservation as early as 1932.</p>
Building Square Footage (SF)/Source	<p>City Hall Building: 17,530 SF Community Development Department: 4,604 SF Community Development Department (former Computer Training Building): 3,083 SF Senior Center: TV Studio Building: 1,242 SF Public Works Storage Building: 890 SF Road Sign Storage Building: 880 SF</p>
Number of Floors/Stories	<p>City Hall Building: Two Community Development Department: One Community Development Department (former Computer Training Building): One Senior Center: One TV Studio Building: One Public Works Storage Building: One Road Sign Storage Building: One</p>
Basement or Subgrade Area(s)	Yes, portions of the maintenance yard appear to be developed with a basement to access and/or service the historical missile silos
Number of Units	One
Additional Improvements	Dog park, cell phone tower, helipad, parking areas, and associated landscaping
On-site Occupant(s)	City of Rancho Palos Verdes

Current On-site Operations/Use	Administrative, senior services, broadcasting, and general equipment storage
Current Use of Hazardous Substances	Yes; refer to Section 7.1
REGULATORY INFORMATION	
Regulatory Database Listing(s)	Haznet (8), FINDS (4), LACoHMS (2), ERNS, ENF, and CIWQS (x2)

2.2 ON-SITE UTILITIES

Utility	Source/System Information
Heating System	Electricity
Cooling System	Electricity
Potable Water	California Water Service
Sewage Disposal/Treatment	City of Rancho Palos Verdes

Utility source/system information listed in the table above is provided by Mr. Matt Waters/key site manager, unless otherwise noted above.

2.3 SITE AND VICINITY CHARACTERISTICS

The subject property is located in a mixed commercial, residential, and undeveloped area of Rancho Palos Verdes, California. The immediately surrounding properties consist of the following:

Direction	Tenant/Use (Address)	Regulatory Database Listing(s)
North	Vacant land/nature reserve/military land as well as Hawthorne Boulevard beyond which appears vacant land	Refer to Section 5.1.
East	Peninsula Racquet Club (30850 Hawthorne Boulevard)	None identified
South	Vacant land/nature reserve/military land and agricultural fields	Refer to Section 5.1.
West	Vacant land/nature reserve/military land	Refer to Section 5.1.

If the surrounding properties are listed in the regulatory database, please refer to Section 5.1 for discussion.

2.4 PHYSICAL SETTING

Geologic Unit: Description/Source	Hillside slopes and human-transported material consisting mostly of colluvium and/or residuum weathered from calcareous shale/USGS and United States Department of the Interior
Soil Series: Description/Source	Based on a review of the USDA Soil Survey for the area of the subject property, the soils in the vicinity of the subject property are classified as Urban Land. The Urban Land designation indicates that more than 85 percent of the original soils have been disturbed or covered by paved surfaces, buildings or other structures. Due to the variability of the soil material, on-site investigation would be required to determine the specific soil composition at the subject property.
Groundwater Flow Direction/Source	Southwest/Topographic map interpretation

Estimated Depth to Groundwater/ Source	Over 20 feet bgs/Phase I ESA issued by PSI (September 8, 2010)
Surface waters on the subject property or adjacent sites	None
Additional notes	None

Note: Groundwater flow direction can be influenced locally and regionally by the presence of local wetland features, surface topography, recharge and discharge areas, horizontal and vertical inconsistencies in the types and location of subsurface soils, and proximity to water pumping wells. Depth and gradient of the water table can change seasonally in response to variation in precipitation and recharge, and over time, in response to urban development such as storm water controls, impervious surfaces, pumping wells, cleanup activities, dewatering, seawater intrusion barrier projects near the coast, and other factors.

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3.0 HISTORICAL REVIEW OF SITE AND VICINITY

Reasonably ascertainable standard historical sources as outlined in ASTM Standard E1527-13 were used to determine previous uses and occupancies of the subject property that are likely to have led to RECs in connection with the subject property. A chronological summary of historical data found, including but not limited to aerial photographs, historical city directories, Sanborn fire insurance maps, and agency records, is as follows:

Date Range	Subject Property Description and Use (Historical Addresses)	Source(s)
1928-1932	Vacant and agricultural land	Aerial photographs
1942-1979	Point Vicente - military use with missile control offices/ buildings with the following construction dates <ul style="list-style-type: none"> • Historical barracks (Circa 1947-1953)- historical structures • City Hall Building: Pre 1963 • Community Development Department: Pre 1963 • Community Development Department (former Computer Training Building): Pre 1963 • TV Studio Building: Pre 1963 • Public Works Storage Building: Pre 1963 • Road Sign Storage Pre 1963 	Aerial photographs, historical topographic maps, and previous reports
1979-Present	City of Rancho Palos Verdes Civic Center <ul style="list-style-type: none"> • Senior Center constructed in 2007 	Aerial photographs, previous reports, building records, interviews, agency records, and observations

Based on AEI’s review of historical and regulatory records, the subject property was vacant land as early as 1928. Between 1932 and 1979, the subject property is believed to have been utilized for military purposes including as part of the Harbor Defense of Los Angeles, Nike Ajax, and Nike Hercules anti-aircraft missile systems. Historical structures located on the site were military related and presumably included barracks with support buildings. These historical structures were noted between 1947 and 1953. Current improvements, except for the Senior Center, were noted as early as 1963. The military use of the site is believed to have been decommissioned by 1979 with the City of Rancho Palos Verdes taking ownership of the property and remaining the occupant as of this report date. The Senior Center is believed to have been completed in 2007.

Additional improvements on the subject property include two silos which historically held anti-aircraft fire control and gun emplacements. The exterior of these silos were also observed by AEI at the time of the site reconnaissance.

The subject property was historically used for military purposes/Nike Missile Facilities, these included the developed of anti-aircraft fire control and gun emplacements. The site was designated as Los Angeles Defense Area (LADA) #55, a part of the air defense system of Los

Angeles during the Cold War. The Nike defense system operated until approximately 1974. The Nike Ajax missile was put in service in 1953 and used several acid or corrosive mixtures in the propellant system. The starting fluid was 99% Unsymmetrical Dimethylhydrazine (UDMH). The propellant was 83% JP-4 turbine engine fuel and 17% UDMH. The missile oxidizer was Inhibited Red Fuming Nitric Acid (IRFNA), composed of 83% Nitric Acid, 14% Nitrogen Dioxide, 0.6% Hydrofluoric Acid. The Nike Hercules missile was put in service in 1958 and did not use liquid propellants. According to the Department of Defense (DOD), potentially hazardous materials used at the subject property during the operation of the Nike Missile Facility may have included nitrosamines, JP fuel, octane, gasoline, 2-propanol, trichloroethylene (TCE), acetone, 2-Butanone (MEK), tetrachloroethylene (PCE) polychlorinated biphenyls (PCBs), waste oils, paints, and ethylene glycol. Furthermore, based on a review of previous reports and regulatory agency records, at least three USTS were removed from the subject property and several 55-gallon drums were identified (undisclosed contents) during military decommissioning activities (circa late 1970s). Sampling was reportedly completed at the time of UST removal, however, the sampling data associated with these excavated USTs was not found by AEI nor by previous consultants. Previous reports identified several hazardous waste and/or materials onsite. These included; paints, acids, fuels, waste/mixed oils, PCBs, unspecified organic liquid mixture, and household wastes. Limited sampling events were completed in 2005 and 2009, results of this sampling event had non-detect to low-levels of constituents including; metals and pesticides. However, the subject property is slated for redevelopment (pending government approval) as a new community/civic center, thus additional investigations area warranted to determine if the former uses of the property have impacted the areas.

If available, copies of historical sources are provided in the report appendices.

3.1 AERIAL PHOTOGRAPHS

AEI reviewed aerial photographs of the subject property and surrounding area. A search was made of the EDR collection of aerial photographs. Aerial photographs were reviewed for the following years:

Year(s)	Subject Property Description	Adjacent Site Descriptions
1928	Appears as vacant land and agricultural fields	NORTH: Appears as vacant and agricultural land EAST: Appears as vacant and agricultural land SOUTH: Appears as vacant and agricultural land WEST: Appears as vacant and agricultural land
1947 and 1953	The northwestern portion of the subject property appears to be developed with several military related structures, presumably barracks and related structures. The remaining areas of the site remain unchanged from the previously noted vacant and agricultural land	NORTH: Hawthorne Boulevard beyond which appears vacant land EAST: No significant changes SOUTH: No significant changes WEST: Appears as vacant and agricultural land as well as roadways



Year(s)	Subject Property Description	Adjacent Site Descriptions
1963	Appears to be developed with the current City Hall, Developmental Services, TV Studio, and maintenance buildings. Additionally, the maintenance area appears to be developed with the historical missile silo areas. The remaining areas of the subject property appear as vacant land and/or agricultural. The current tennis court is also noted.	NORTH: No significant changes EAST: Appears as vacant land traversed by various dirt roads SOUTH: Appears as vacant land WEST: No significant changes
1972	No significant changes with the exception of the current helipad being noted.	NORTH: Vacant land developed small, presumably military-related, structures as well as Hawthorne Boulevard beyond which is vacant land EAST: Appears as vacant land traversed by roadways SOUTH: Vacant and agricultural land WEST: Vacant land developed small, presumably military-related, structures
1977, 1971, 1983, 1990, 1994, 2002, and 2005	No significant changes	NORTH: No significant changes EAST: Current commercial improvements SOUTH: No significant changes WEST: No significant changes
2009, 2012, and 2016	No significant changes with the exception of the construction of the current Senior Center.	NORTH: Hawthorne Boulevard beyond which is vacant land EAST: No significant changes SOUTH: Mix of vacant land and agricultural land WEST: Vacant land

Based on a review of aerial photographs and previous reports, the subject property was historically used for agricultural purposes. There is a potential that agricultural chemicals, such as pesticides, herbicides and fertilizers, were used on site, and that the subject property has been impacted by the use of such agricultural chemicals. In general, historical agricultural use is not the subject of environmental enforcement actions by regulatory agencies, and therefore, could be considered a de minimis condition. However, AEI understands that the subject property is slated for redevelopment. As such, the concurrent Phase II Subsurface Investigation includes analysis of Organochlorine Pesticides (OCPs) to determine if the subject property has been impacted by former agricultural uses.

3.2 SANBORN FIRE INSURANCE MAPS

Sanborn Fire Insurance maps were developed in the late 1800s and early 1900s for use as an assessment tool for fire insurance rates in urbanized areas. A search was made of the EDR collection of Sanborn Fire Insurance maps.

Sanborn map coverage was not available for the subject property.

3.3 CITY DIRECTORIES

A search of historical city directories was conducted for the subject property utilizing EDR. No potential tenants of concern were identified based on AEI's review of the historical city directories. Directories were reviewed in approximate five-year increments from 1920 to 2014. The first listing for the subject property appeared in 1980. Please refer to the appendices for a complete list of historical subject property tenants identified by EDR.

Year(s)	Address - Occupant Listed
1980	Costume Closet
1985	Costume Closet and Abalone Cove Landslide Abatement District
2001	Abalone Cove
2010	Community Forum Inc., GabiTV.com, Los Serenos De Point Vicente, PC Labs, Palos Verdes on Net, and City of Rancho Palos Verdes
2014	City of Rancho Palos Verdes, Building and Safety, Community Forum Inc., and Palos Verdes on Net

If listed above, XXXX indicates that the address is valid but there is no occupancy information available.

AEI did not identify potential environmental concerns in association with the historical use of the subject property during the city directory review.

3.4 HISTORICAL TOPOGRAPHIC MAPS

A search of historical topographic maps was conducted for the subject property utilizing Nationwide Environmental Title Research, LLC's (historicaerials.com). Topographic maps were reviewed for the following years:

Year(s)	Subject Property Description	Adjacent Site Descriptions
1928 and 1932	Identified as Point Vicente (vacant land)	All identified as Point Vicente (vacant land)
1942, 1944, 1953, 1956, and 1965	Identified as the Point Vicente with small, presumably military-related, structures.	NORTH: Vacant land with the identified as Point Vicente EAST: Vacant land with the identified as Point Vicente SOUTH: Vacant land with the identified as Point Vicente WEST: Vacant land with the identified as Point Vicente

AEI did not identify potential environmental concerns in association with the historical use of the subject property during the historic topographic map review.

3.5 CHAIN OF TITLE

Based on the quality of information obtained from other sources, a chain of title search was not performed as part of this assessment.

4.0 REGULATORY AGENCY RECORDS REVIEW

Local and state agencies, such as environmental health departments, fire prevention bureaus, and building and planning departments are contacted to identify any current or previous reports of hazardous substance use, storage, and/or unauthorized releases that may have impacted the subject property. In addition, information pertaining to AULs, defined as legal or physical restrictions, or limitations on the use of, or access to, a site or facility, is requested.

4.1 LOCAL ENVIRONMENTAL HEALTH DEPARTMENT AND/OR STATE ENVIRONMENTAL AGENCY

Agency	Date Contacted	Method of Contact	Name & Title of Contact	Agency Response
Los Angeles County Public Health Investigation (LACPHI)	February 1, 2019	Fax	N/A	Response pending, refer to Section 1.5

4.2 FIRE DEPARTMENT

Agency	Date Contacted	Method of Contact	Name & Title of Contact	Agency Response
Los Angeles County Fire Department (LACoFD)	February 1, 2019	Website	N/A	Response pending, refer to Section 1.5

4.3 BUILDING DEPARTMENT

Agency	Date Contacted	Method of Contact	Name & Title of Contact	Agency Response
Rancho Palos Verdes Building Department (RPVBD)	February 19, 2019	Office visit	N/A	Records discussed below

Records Summary

Year(s)	Owner/Applicant	Description of Permit and Building Use
1975	City of Rancho Palos Verdes	Interior remodel of building to offices
1982	City of Rancho Palos Verdes	Sewer connection permit
2005	City of Rancho Palos Verdes	Request for a whip antenna mounted to a building
2007	City of Rancho Palos Verdes	Permit for two temporary trailers to be used as a Senior Center between 2006 and 2008
2010	City of Rancho Palos Verdes	Renewal of County Lease with the US Coast Guard
2010	City of Rancho Palos Verdes	Permit to install a new generator and two 2,500-gallon liquid propane tanks
2012	City of Rancho Palos Verdes	Permit to cap and repair a sewer line
2005	City of Rancho Palos Verdes	Request for whip antenna mounted to building
2015	City of Rancho Palos Verdes	Permit to replace existing AT&T antennas



Year(s)	Owner/Applicant	Description of Permit and Building Use
2015	City of Rancho Palos Verdes	Permit to remove and replace two Verizon antennas, monopole, and associated equipment
2018	City of Rancho Palos Verdes	Permit for alterations to an antenna

Evidence indicating current or prior use or storage of hazardous substances was not on file for the subject property with the RPVBD.

4.4 PLANNING DEPARTMENT

Agency	Date Contacted	Method of Contact	Name & Title of Contact	Agency Response
Rancho Palos Verdes Planning Department (RPVPD)	February 19, 2019	Office visit	N/A	No evidence indicating the existence of AULs on file for the subject property

4.5 ASSESSOR'S OFFICE

Agency	Date Contacted	Method of Contact	Name & Title of Contact	Agency Response
Los Angeles County Assessor's Office	February 1, 2019	Website	N/A	Information obtained is discussed below

Records Summary

APN	7573-002-908, 7573-002-909 (portions), and 7573-002-913
Current Owner	Not provided

4.6 OTHER AGENCIES SEARCHED

Agency	Date Contacted	Method of Contact	Name & Title of Contact	Agency Response
CA State Water Resources Control Board (SWRCB) GeoTracker	February 1, 2019	Website	N/A	Records discussed below
CA Department of Toxic Substances Control (DTSC) Hazardous Waste Tracking System (HWTS)	February 1, 2019	Website	N/A	Records discussed below
CA DTSC Envirostor	February 1, 2019	Website	N/A	Records discussed below
SCAQMD	February 1, 2019	Website	N/A	Records discussed below
LACDPW	February 1, 2019	Website	N/A	Records discussed below



AEI visited the online databases maintained by the CA State Water Resources Control Board (SWRCB) and CA DTSC Envirostor for information on the subject property. According to these online databases, the subject property and surrounding properties were identified as Military Evaluation sites. Refer to Sections 3.0 and 5.1 for further information.

AEI visited the **Hazardous Waste Tracking System (HWTS)** online database maintained by the Department of Toxic Substances Control (DTSC) for information regarding documented hazardous wastes generated at the subject property. The subject property was identified with the following EPA IDs;

- CAH111000844: Active ID (as of 2000) associated with LA County Sanitation District. Waste streams were identified as waste/mixed oil, PCBs, unspecified organic liquid mixture, and household wastes.
- CAC001372360: Inactive (1997-2000) ID associated with the City of Rancho Palos Verdes. Waste streams were documented as; aged/surplus organics, waste/mixed oil, organic solids.
- CAC002609619: Inactive (2006-2007) ID associated with the City of Rancho Palos Verdes Department of Public Works. Waste streams were documented as; unspecified aqueous solution and organic solids.
- CAC002814558: Inactive (2015) ID associated with the City of Rancho Palos Verdes. Waste streams were documented as; asbestos-containing waste, unspecified aqueous solution, and organic solids.
- CAH777000801: Inactive (1996-2003) ID associated with LA County Sanitation Districts. Identified a waste stream of household wastes.
- CAH777000919: Inactive (1997-2003) ID associated with LA County Sanitation. Waste stream was documented as household waste.
- CAH777001027: Inactive (1998-2003) ID associated with LA County Sanitation. Waste streams were documented as; aqueous solution with organic residue, waste/mixed oil, and household waste.
- CAH777001141: Inactive (1999-2003) ID associated with LA County Sanitation. Waste streams were documented as; aqueous solution with organic residue, waste/mixed oil, and household waste.

Based on the nature of the above-mentioned waste stream, lack of a documented release associated with the subject property, and the regulatory status, these listings are not expected to represent a significant environmental concern. Additionally, based on the age of the listing as well as the names of the entities, these listings are associated with the City of Rancho Palos Verdes and/or County uses. Mr. Water indicated the site historically housed areas where general equipment and vehicle maintenance/upkeep were performed but has since ceased ("several years ago"). Furthermore, no current areas of hazardous materials use/storage were noted at the time of the site reconnaissance with the exception of the propane tanks.

AEI visited the website maintained by the **South Coast Air Quality Management District (SCAQMD)** for information regarding any Permits to Operate (PTO), Notices of Violation (NOV), or Notices to Comply (NTC) records for the subject property associated with air emission

equipment primarily from stationary sources of air pollution, such as dry cleaning machines, boilers, and/or underground storage tanks.

- The subject property was identified as Facility ID 163963. The only PTO and equipment on file was noted as an emergency generator, first permitted in 2010. This generator is fueled by propane and both the tanks and equipment were observed at the time of the site walk. No NOVs and no NTCs were on file. Based on the nature of the equipment as well as the lack of a documented release, this listing is not expected to represent a significant environmental concern.

AEI contacted the **Los Angeles County Department of Public Works (LACDPW)** for information regarding the subject property. According to LACDPW, the subject property was identified with two “file numbers.” These are discussed as follows;

- 017035-022862: This file number was considered open with no actual information entered into the system. No physical file exists for review.
- 017035-023915: This file number pertained to the removal of two 3,800-gallon stove-oil tanks from the site in 1996. According to LACDPW staff, a closure letter for these tanks was issued on January 30, 1997. AEI requested a review of this file however, was informed by LACDPW staff that the physical file has been lost.

4.7 OIL AND GAS WELLS

Agency	Date Referenced	Resource	Oil or gas wells located within 500 feet of the subject property
California Department of Conservation Division of Oil Gas and Geothermal Energy (CA DOGGR)	February 1, 2019	CA DOGGR Map	No

4.8 OIL AND GAS PIPELINES

Agency	Date Referenced	Resource	Pipelines located within 500 feet of the subject property
National Pipeline Mapping System (NPMS)	February 1, 2019	NPMS Public Map Viewer	No

4.9 STATE ENVIRONMENTAL SUPERLIENS

In accordance with our approved scope of services, AEI did not assess whether the subject property is subject to any state environmental superliens.

4.10 STATE PROPERTY TRANSFER LAWS

In accordance with our approved scope of services, AEI did not assess whether the subject property is subject to any state property transfer laws.

5.0 REGULATORY DATABASE RECORDS REVIEW

AEI contracted EDR to conduct a search of publicly available information from federal, state, tribal, and local databases containing known and suspected sites of environmental contamination and sites of potential environmental significance. Data gathered during the current regulatory database search is compiled by EDR into one regulatory database report. Location information for listed sites is designated using geocoded information provided by federal, state, or local agencies and commonly used mapping databases with the exception of "Orphan" sites. Due to poor or inadequate address information, Orphan sites are identified but not geocoded/mapped by EDR, rather, information is provided based upon vicinity zip codes, city name, and state. The number of listed sites identified within the approximate minimum search distance from the federal and state environmental records database listings specified in ASTM Standard E1527-13 is summarized in Section 5.1, along with the total number of Orphan sites. A copy of the regulatory database report, which includes detailed descriptions of the databases noted below, is included in Appendix C of this report.

In determining if a listed site is a potential environmental concern to the subject property, AEI generally applies the following criteria to classify the site as lower potential environmental concern: 1) the site only holds an operating permit (which does not imply a release), 2) the site's distance from, and/or topographic position relative to, the subject property, and/or 3) the site has recently been granted "No Further Action" by the appropriate regulatory agency.

Regulatory database listings associated with the subject property, adjacent site(s) and/or nearby sites of concern that were determined to warrant additional discussion are identified and further discussed in Section 5.1.

5.1 RECORDS SUMMARY

Database	Search Distance (Miles)	Listings Within Search Distance	Subject Property	Adjacent Site(s)	Other Nearby Sites of Concern
NPL	1.0	0			
DELISTED NPL	0.5	0			
SEMS/CERCLIS	0.5	0			
SEMS-ARCHIVE/CERCLIS NFRAP	0.5	0			
RCRA CORRACTS	1.0	0			
RCRA-TSDF	0.5	0			
RCRA LQG, SQG, CESQGs, NLR	SP/ADJ	0			
US ENG CONTROLS	SP	0			
US INST CONTROLS	SP	0			
ERNS	SP	1	✓		
STATE/TRIBAL HWS	1.0	9			✓
STATE/TRIBAL SWLF	0.5	0			
STATE/TRIBAL REGISTERED STORAGE TANKS	SP/ADJ	0			
STATE/TRIBAL LUST	0.5	4			

Database	Search Distance (Miles)	Listings Within Search Distance	Subject Property	Adjacent Site(s)	Other Nearby Sites of Concern
STATE/TRIBAL EC and IC	SP	0			
STATE/TRIBAL VCP	0.5	0			
STATE/TRIBAL BROWNFIELD	0.5	0			
ORPHAN	N/A	1			
ADDITIONAL ENVIRONMENTAL RECORD SOURCES	SP/ADJ	11	✓		

Facility Name	AT&T Mobility, Rancho Palos Verdes, LA County Sanitation Divisoin, US Army Core of Engineers, Southern California Edison, Verizon Wireless, Point Vicente Battery
Address	30940 Hawthorne Boulevard
Distance & Direction	Subject Property
Hydrologic Position	N/A
Databases Listed	Haznet (8), FINDS (4), LACoHMS (2), ERNS, ENF, and CIWQS (x2)

Comments	<p>The Haznet and FINDS are related to the following EPA IDs:</p> <ul style="list-style-type: none"> • CAH111000844: Active ID (as of 2000) associated with LA County Sanitation District. Waste streams were identified as waste/mixed oil, PCBs, unspecified organic liquid mixture, and household wastes. • CAC001372360: Inactive (1997-2000) ID associated with the City of Rancho Palos Verdes. Waste streams were documented as; aged/surplus organics, waste/mixed oil, organic solids. • CAC002814558: Inactive (2015) ID associated with the City of Rancho Palos Verdes. Waste streams were documented as; asbestos containing waste, unspecified aqueous solution, and organic solids. • CAH777000801: Inactive (1996-2003) ID associated with LA County Sanitation Districts. Identified a waste stream of household wastes. • CAH777000919: Inactive (1997-2003) ID associated with LA County Sanitation. Waste stream was documented as household waste. • CAH777001027: Inactive (1998-2003) ID associated with LA County Sanitation. Waste streams were documented as; aqueous solution with organic residue, waste/mixed oil, and household waste. • CAH777001141: Inactive (1999-2003) ID associated with LA County Sanitation. Waste streams were documented as; aqueous solution with organic residue, waste/mixed oil, and household waste. <p>Based on the nature of the above-mentioned waste stream, lack of a documented release associated with the subject property, and the regulatory status, these listings are not expected to represent a significant environmental concern. Additionally, based on the age of the listing as well as the names of the entities, these listings are associated with the City of Rancho Palos Verdes and/or County uses. Mr. Water indicated the site historically housed areas where general equipment and vehicle maintenance/upkeep were performed but has since ceased ("several years ago"). Furthermore, no current areas of hazardous materials use/storage were noted at the time of the site reconnaissance with the exception of the propane tanks.</p> <p>The LACoHMS listings pertain to File IDs 017035-022862 and 017035-023915. These IDs are discussed in Section 4.6.</p> <p>The ERNS listing documents a release of raw sewage from a manhole which occurred in 1988. Based on the nature of the released material, this listing is not expected to represent a significant environmental concern.</p> <p>The ENF (and CIWQS) listings are associated with enforcement activities which occurred as the result of an accidental release of raw sewage in 2012. The media impacted was the Pacific Ocean. Based on the nature of the released material, this listing is not expected to represent a significant environmental concern.</p>
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Facility Name	Point Vicente Mil Res FC Sites
Address	Rancho Palos Verdes, CA
Distance & Direction	0.109-mile south
Hydrologic Position	Down-gradient
Databases Listed	Envirostor

Comments	Point Vicente Mil Res FC sites mapped as Palos Verdes was identified as an Envirostor site 80000422. The cleanup status is noted as "inactive-needs evaluation as of July 1, 2005." According to the online database, this is a 108 acres facility which was occupied by the US Army and established as Point Vicente Military Reservation between 1942 and 1945. The site consisted of 19 tracts distributed over a 10 square mile area. The area of this Envirostor site is believed to also include the subject property. Please see the Findings Section for discussion on historical military operations and associated concerns on the subject property.
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Facility Name	Point Vicente
Address	Palos Verdes Drive and Hawthorne Boulevard
Distance & Direction	0.008-mile east
Hydrologic Position	Up to cross-gradient
Databases Listed	Response, Envirostor, Historical Ca-Site, DEED, and Cortese
Comments	Point Vicente, mapped at the intersection of Palos Verdes Drive and Hawthorne Boulevard, was identified as an Envirostor site 19970023. The cleanup status is noted as "Certified/Operation & Maintenance as of January 6, 2009." According to the online database, this is a 26.4 acres site which was previously used as a defense site where a Nike Missile system was located. The site was noted as having soil contaminated with lead. The area of this Envirostor site is believed to also include the subject property. Please see the Findings Section for discussion on historical military operations and associated concerns on the subject property.

5.2 VAPOR MIGRATION

AEI reviewed reasonably ascertainable information for the subject and nearby properties, including a regulatory database, files for nearby release sites, and/or historical documentation, to determine if potential vapor-phase migration concerns may be present which could impact the subject property.

Based on a review of available resources as documented in this report, AEI did not identify significant on-site concerns and/or regulated listings from nearby sites which suggest that a vapor-phase migration concern currently exists at the subject property.

6.0 INTERVIEWS AND USER PROVIDED INFORMATION

6.1 INTERVIEWS

Pursuant to ASTM E1527-13, the following interviews were performed during this assessment in order to obtain information indicating RECs in connection with the subject property.

6.1.1 OWNER AND KEY SITE MANAGER

Relation to Property	Name	Date Interviewed	Method of Contact	Year First Associated w/ Property	Notes
Key Site Manager/ Owner Representative	Mr. Matt Waters	February 19, 2019	In Person	Circa 1994	Interviewed; see Interview Summary table below

Interview Summary

Question	Owner (Representative) Response/Comment	Key Site Manager Response/Comment
Do you have any knowledge of USTs, clarifiers or oil/water separators, sumps, or other subsurface features?	No	No
Do you have any knowledge of previous environmental investigations conducted on site?	Yes	Yes
Do you have any knowledge of current or past industrial operations and/or other operations which would involve the use of hazardous substances and/or petroleum products?	Yes	Yes
Are you aware of any known plans for site redevelopment or change in site use?	Yes	Yes
Are you aware of any pending, threatened, or past litigation relevant to hazardous substances or petroleum products in, on, or from the property?	No	No
Are you aware of any pending, threatened or past administrative proceedings relevant to hazardous substances or petroleum products in, on, or from the property?	No	No
Are you aware of any notices from any governmental entity regarding any possible violation of environmental laws or possible liability relating to hazardous substances or petroleum products?	No	No



Question	Owner (Representative) Response/Comment	Key Site Manager Response/Comment
Are you aware of any incidents of flooding, leaks, or other water intrusion, and/or complaints related to indoor air quality?	No	No
Additional information provided:	<p>Mr. Water informed AEI that previous environmental reports have been completed for the subject property. A previously issued Phase I ESA is discussed in Section 6.3</p> <p>Mr. Waters informed AEI that the subject property historically housed various missiles.</p> <p>Mr. Waters indicated that the City of Rancho Palos Verdes has proposed redeveloping the subject property as a new Civic Center Complex.</p>	<p>Mr. Water informed AEI that previous environmental reports have been completed for the subject property. A previously issued Phase I ESA is discussed in Section 6.3</p> <p>Mr. Waters informed AEI that the subject property historically housed various missiles.</p> <p>Mr. Waters indicated that the City of Rancho Palos Verdes has proposed redeveloping the subject property as a new Civic Center Complex.</p>

6.1.2 PAST OWNERS, OPERATORS, AND OCCUPANTS

AEI did not attempt to interview past owners, operators, and occupants of the subject property because information from these sources would likely be duplicative of information already obtained from other sources.

6.1.3 INTERVIEW WITH OTHERS

Information obtained during interviews with local government officials is incorporated into the appropriate segments of this report.



6.2 USER PROVIDED INFORMATION

User provided information is intended to help identify the possibility of RECs in connection with the subject property. According to ASTM E1527-13 and the EPA Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), certain items should be researched by the prospective landowner or grantee, and the results of such inquiries may be provided to the Environmental Professional. The responsibility for qualifying for LLPs by conducting the inquiries ultimately rests with the User, and providing the information to the Environmental Professional would be prudent if such information is available.

The User Questionnaire was completed by Mr. Matt Waters, Senior Analyst with the City of Rancho Palos Verdes. The following table represents information contained therein.

Question	Response/ Comment
<p>1. Environmental liens that are filed or recorded against the property (40 CFR 312.25)</p> <p>Did a search of recorded land title records (or judicial records where appropriate) identify any environmental liens filed or recorded against the property under federal, tribal, state or local law?</p>	<p>No</p>
<p>2. Activity and use limitations that are in place on the property or that have been filed or recorded against the property (40 CFR 312.26(a)(1)(v) and vi).</p> <p>Did a search of recorded land title records (or judicial records where appropriate) identify any AULs, such as engineering controls, land use restrictions or institutional controls that are in place at the property and/or have been filed or recorded against the property under federal, tribal, state or local law?</p>	<p>Yes, according to Mr. Waters "11.24 acres of property are currently constrained by a Federal Program of Utilization overseen by the National Park Service. Restricted to passive use without approval by NPS"</p>
<p>3. Specialized knowledge or experience of the person seeking to qualify for the LLP (40 CFR 312.28).</p> <p>Do you have any specialized knowledge or experience related to the property or nearby properties? For example, are you involved in the same line of business as the current or former occupants of the property or an adjoining property so that you would have specialized knowledge of the chemicals and processes used by this type of business?</p>	<p>No</p>
<p>4. Relationship of the purchase price to the fair market value of the property if it were not contaminated (40 CFR 312.29).</p> <p>Does the purchase price being paid for this property reasonably reflect the fair market value of the property? If you conclude that there is a difference, have you considered whether the lower purchase price is because contamination is known or believed to be present at the property?</p>	<p>N/A - property already owned by City. No purchase or sale considered.</p>



Question	Response/ Comment
<p>5. Commonly known or reasonably ascertainable information about the property (40 CFR 312.30).</p> <p>Are you aware of commonly known or reasonably ascertainable information about the property that would help the environmental professional to identify conditions indicative of releases or threatened releases? For example:</p> <p>(a) Do you know the past uses of the property?</p> <p>(b) Do you know of specific chemicals that are present or once were present at the property?</p> <p>(c) Do you know of spills or other chemical releases that have taken place at the property?</p> <p>(d) Do you know of any environmental cleanups that have taken place at the property?</p>	<p>Yes, Per Mr. Waters: The site is a former military base with known lead, asbestos, PCB, and hydraulic fluid located on the property. A cleanup was reportedly performed on part of the maintenance yard.</p>
<p>6. The degree of obviousness of the presence or likely presence of contamination at the property, and the ability to detect the contamination by appropriate investigation (40 CFR 312.31).</p> <p>Based on your knowledge and experience related to the property, are there any obvious indicators that point to the presence or likely presence of contamination at the property?</p>	<p>No</p>

6.3 PREVIOUS REPORTS AND OTHER PROVIDED DOCUMENTATION

Documentation was provided to AEI by Mr. Matt Waters with the City of Rancho Palos Verdes during this assessment. A summary of this information follows:

Phase I Environmental Site Assessment Upper Point Vicente 30940 Hawthorne Boulevard, issued by Professional Service Industries, Inc. (September 8, 2010)

Professional Service Industries, Inc (PSI) issued a Phase I ESA for the subject property on September 8, 2010. At the time this report was issued the site was developed with the current Rancho Palos Verdes City Hall complex which included; City Hall, the Community Development Department, Technology Center, a Senior Center, a television studio, a trash receptacle storage, public works storage, traffic control/sign storage, a tennis court, parking areas, and landscaped areas. Additional improvements were noted as historical missile silos.

According to PSI, the subject property was first developed in 1942 as part of the Harbor Defenses of Los Angeles, including anti-aircraft fire control and gun emplacements. In the early 1950s, the subject property was developed with administration and launch facilities for the Nike Ajax and Nike Hercules anti-aircraft missile systems. These systems became obsolete in the 1970's. By 1979, the site was decommissioned and turned over to the City of Rancho Palos Verdes.

PSI included a review of the following previously issued reports:

- Phase I ESA by RBF Consulting on September 15, 2000.

The findings of RBF's investigation were consistent with PSIs. Additionally, RBF included

the following information.

As part of the abandonment by the U.S. Army of the Nike Missile Facility (Nike Bunker Battery #55), three (3) abandoned fuel storage tanks and the sampling and disposal of seven 55-gallon drums were identified. Soil sampling was also conducted around these identified areas and in the area of the former paint storage shed and acid storage and fueling facilities. However, according to the historical research conducted by RBF Consulting, it is unclear whether the soil sampling actually was conducted.

- Investigation Report issued on September 7, 2005 (also by PSI).

This report was performed to address the recommendations presented by RBF in 2000. PSI performed a geophysical survey and limited soil sampling in the vicinity of the Nike Missile Silos, Public Works maintenance building, and sign storage building. Soil samples were collected from 24 soil borings advanced throughout the property and analyzed for petroleum hydrocarbons, volatile organic compounds, metals, pesticides, and PCBS. The results of the laboratory analysis identified several areas with concentrations of regulated metals that would require further analysis to determine waste disposal characteristics.

Additionally, a geophysical anomaly indicative of several underground storage tanks was identified near the Public Works maintenance building. PSI recommended that the areas of the metal and pesticide impacted soil be further evaluated and the soil above the geophysical anomaly be excavated to determine the presence of USTs.

One shallow soil location with a concentration of dieldrin (a pesticide) was found to be above residential health standards. This concentration, however, is below commercial/industrial land use human health guidelines. Based on the current usage of the subject property, this concentration is not considered to represent a recognized environmental condition.

- On March 12, 2009, PSI issued a Limited Site Investigation Report for the City of Rancho Palos Verdes. This report indicated that PSI collected soil samples from five soil borings in the vicinity of the elevated metals concentrations. The results of this analysis revealed no concentrations of regulated metals in excess of human health guidelines or soluble metal concentrations above hazardous waste disposal limits. No further assessment was recommended by PSI.
- On March 25, 2009, PSI issued an Underground Storage Tank Exploration Letter Report. PSI directed excavation activities in the area of the suspected USTs identified during the 2005 geophysical survey. The excavation revealed that the geophysical anomaly was actually a large concrete pad-like footing. No further assessment was recommended by PSI.

Groundwater was approximated at 20 feet bgs and was expected to flow to the southwest.

PSI observed the following during the site walk:



- Paints, oils, and flammable liquids in the Public Works Maintenance Building.
- Two ASTs containing propane. Used for the onsite emergency generator.
- Drums containing soil from the previously completed geotechnical investigation

No significant environmental concerns were identified by PSI and no further assessments were recommended.

Please note, according to the previously issued report (and information obtained from Mr. Matt Waters' interview), there are AULs associated with the subject property parcels, specifically the parent parcel which is shared with the neighboring areas. As a result, general uses are limited to public park, educational, research, recreation, community center, and other related governmental and public uses. As a result, a Covenant to Restrict Use of Property; Environmental Restriction was issued for the parcels -908, -909, 910, and -913 as agreed upon by the city of Rancho Palos Verdes and the DTSC. AEI recommends that the relevant portions of this agreement be adhered to in accordance with the agreement.

A copy of the report is included in the appendices.

Note: If the above documentation was not prepared by AEI, the information obtained was not verified for accuracy and a critique of the information contained therein is beyond the scope of this assessment.

6.4 ENVIRONMENTAL LIEN SEARCH

In accordance with our approved scope of services, an environmental lien search was not performed as part of this assessment.

7.0 SITE RECONNAISSANCE

Site Reconnaissance Date	February 19, 2019
AEI Site Assessor(s)	Daniel Huerta
Property Escort(s)/ Relationship(s) to Property	Mr. Matt Waters/key site manager with the City of Rancho Palos Verdes
Units/Areas Observed	<ul style="list-style-type: none"> • Due to the size of the subject property, AEI performed a reconnaissance of the property utilizing a field technique of traversing the site in an attempt to provide an overlapping field of view. Due to the size of the property and the vegetation present on site, isolated areas of the site may have not been accessible for direct observation during AEI's field reconnaissance. • Due to access issues (closed and/or missing keys), AEI observed a representative sample of interior spaces. Due to the administrative and storage nature of occupancy, this limited inspection method is expected to be adequate for the purposes of this assessment. AEI observed the interiors of the following buildings; City Hall, Community Development, and Senior Center.
Area(s) not accessed and reason(s)	Refer to Section 1.5 for discussion of limiting condition(s).
Other Physical Constraints	Refer to Section 1.5 for discussion of limiting condition(s).

Reconnaissance Findings Summary

Feature	Observed on Subject Property (see Section 7.1)	Observed on Adjacent Property (see Section 7.2)
Regulated Hazardous Substances/Wastes and/or Petroleum Products in Connection with Property Use		
Aboveground/Underground Hazardous Substance or Petroleum Product Storage Tanks (ASTs/USTs)	✓	
Hazardous Substance and Petroleum Product Containers Not in Connection with Property Use		
Unidentified Substance Containers		
Electrical or Mechanical Equipment Likely to Contain Fluids	✓	
Interior Stains or Corrosion		
Strong, Pungent, or Noxious Odors		
Pools of Liquid		
Drains, Sumps, and Clarifiers		
Pits, Ponds, and Lagoons		
Stained Soil or Pavement		
Stressed Vegetation		
Solid Waste Disposal or Evidence of Fill Materials		
Waste Water Discharges		
Wells		

Feature	Observed on Subject Property (see Section 7.1)	Observed on Adjacent Property (see Section 7.2)
Septic Systems		
Biomedical Wastes		
Other	✓	

7.1 SUBJECT PROPERTY RECONNAISSANCE FINDINGS

During the site reconnaissance, AEI observed the items listed in the above Reconnaissance Findings Summary table, which are further discussed below.

ABOVEGROUND/UNDERGROUND HAZARDOUS SUBSTANCE OR PETROLEUM PRODUCT STORAGE TANKS (ASTs/USTs)

AST(s)

Size (gallons)	Contents	Installation Date	AST Condition	Location	Construction/Secondary Containment	P (A) U
2,500	Propane	2010	Good	Maintenance and Storage Yard/Area	N/A	
2,500	Propane	2010	Good	Maintenance and Storage Yard/Area	N/A	

Should an accidental release of propane occur, the liquid would immediately evaporate upon contact with ambient air. Due to the nature of the material, the presence of the propane does not present a significant environmental concern.

ELECTRICAL OR MECHANICAL EQUIPMENT LIKELY TO CONTAIN FLUIDS

Toxic PCBs were commonly used historically in electrical equipment such as transformers, fluorescent lamp ballasts, and capacitors. According to United States EPA regulation 40 CFR Part 761, there are three categories for classifying such equipment: <50 ppm of PCBs is considered "Non-PCB"; between 50 and 500 ppm is considered "PCB-Contaminated"; and >500 ppm is considered "PCB-Containing". Pursuant to 15 U.S.C. 2605(e)(2)(A), the manufacture, process, or distribution in commerce or use of any polychlorinated biphenyl in any manner other than in a totally enclosed manner was prohibited after January 1, 1977.

Transformers

Type	Quantity	Owner	Presumed Date of Installation	Spills or Stains Observed (Yes/No)	Non-PCB Label (Yes/No)
Pad-Mounted	1	Southern California Edison	Unknown	No	No

The management of potential PCB-containing transformers is the responsibility of the local utility or the transformer owner. Actual material samples need to be collected to determine if transformers are PCB-containing.

Transformers installed prior to 1977 may be PCB containing while transformers installed after 1977 are unlikely to be PCB containing. Federal Regulations (40 CFR 761 Subpart G) require any release of material containing >50 ppm PCB and occurring after May 4, 1987, be cleaned up by the transformer owner following the United States EPA's PCB spill cleanup policy.

AEI did not observe evidence of spills, staining, or leaks on or around the transformers. Based on the good condition of the equipment, the transformers are not expected to represent a significant environmental concern.

AEI did not observe evidence of spills, staining, or leaks on or around the transformer. Based on the good condition of the equipment, the transformer is not expected to represent a significant environmental concern.

Elevators

The subject property City Hall building is equipped with a hydraulic elevator. The hydraulic fluid contained within elevator systems can potentially contain toxic PCBs. Based on the construction date of the building (pre-1978), the potential exists that hydraulic fluid within the equipment may have contained PCBs. The equipment for the elevator is located within a locked room. No evidence of stains or leaks was observed at the base of the equipment during the site reconnaissance. The elevator is reportedly maintained by Otis Elevator. Based on the good condition and regular maintenance of the elevator, it is not expected to represent a significant environmental concern.

OTHER

The subject property is equipped with a cell phone tower, believed to be owned by AT&T. Cell phone towers are typically associated with the use of battery equipment that contains sulfuric acid. This equipment is generally stored on concrete within locked aboveground cabinets or shelters adjacent to the cell tower. No staining or evidence of a release was observed in the vicinity of the cell tower equipment. Based on this information, the presence of a cell tower and associated equipment on the subject property is not expected to represent a significant environmental concern.

The subject property is developed with two historical missile silos. According to Mr. Waters, these silos were decommissioned when the property was taken over by the City of Rancho Palos Verdes (1979). Mr. Waters indicated the silos, and associated subterranean areas, have remained vacant/untouched since being decommissioned. No equipment or supplies remains in place. Based on this information, these features are not expected to represent a significant environmental concern. However, should these features be removed, additional investigations may be deemed warranted to ensure they are properly closed out.

7.2 ADJACENT PROPERTY RECONNAISSANCE FINDINGS

During the site reconnaissance, AEI did not observe any of the items listed in the above Reconnaissance Findings Summary table.

8.0 NON-ASTM SERVICES

8.1 ASBESTOS-CONTAINING BUILDING MATERIALS

Asbestos is the name for a group of naturally occurring silicate minerals that can be separated into fibers. The fibers are strong, durable, and resistant to heat and fire. They are also long, thin and flexible, so they can even be woven into cloth. Because of these qualities, asbestos has been used in thousands of consumer, industrial, maritime, automotive, scientific and building products. During the 20th century, some 30 million tons of asbestos have been used in industrial sites, homes, schools, shipyards and commercial buildings in the United States. Commercial use of ACM began in the early 1900's and peaked in the period between 1940 and into the 1970's. Common ACMs include pipe-covering, insulating cement, insulating block, refractory and boiler insulation materials, transite board, fireproofing spray, joint compound, vinyl floor tile, ceiling tile, mastics, roofing products, and duct insulation for HVAC applications. Inhalation of asbestos fibers can result in deleterious health effects.

The potential for ACM was evaluated based the USEPA Guidance Document: Managing Asbestos in Place - A Building Owner's Guide to Operations and Maintenance Programs for Asbestos-Containing Materials (the Green Book). In 1973 the NESHAPS banned the use of most spray-applied surfacing ACM, specifically asbestos containing spray-on fireproofing and insulation. Subsequent revisions to this regulation in 1975 and 1978 effectively eliminated the use of friable pre-molded pipe, boiler, turbine, and duct insulation; and the spray application of friable asbestos-containing materials for all uses in buildings. In 1989 the EPA issued regulations to ban some asbestos-containing products and phase out most others over a multi-year period. The "Ban and Phase-Down" rule was challenged in court and the regulation remanded to the agency. As a result, any asbestos-containing products then "in commerce" would not be banned. Those not in commerce would be banned. Those materials "banned" could not be sold. It did not affect such materials already installed, or in use. Most US firms voluntarily ceased production of asbestos containing building materials not covered by the aforementioned Federal bans by the mid-1980's. In 1994, the OSHA determined that employers and building owners are required to treat installed thermal system installation and sprayed on and troweled-on surfacing materials, as well as vinyl or asphalt flooring material, as ACM in buildings constructed no later than 1980 until tested by laboratory analysis to prove otherwise.

The information below is for general informational purposes only and does not constitute an asbestos survey. In addition, the information is not intended to comply with federal, state or local regulations in regards to ACM.

Due to the age of the subject property buildings, there is a potential that ACMs are present. A limited list of typical suspect ACMs is included in the following table:



Material Type	Location
Plaster (acoustical and smooth)	Walls and ceilings
Ceiling tile	Ceiling systems
Thermal systems insulations, packings, and gaskets	Heating systems, cooling systems, domestic and heating and cooling piping, ductwork, and other equipment
Floor tile and associate mastics, flooring felts, and papers (under hardwood/other)	Floors
Vinyl sheet flooring and adhesives	Floors
Cove base and associated mastics	Walls
Ceramic tile adhesives and grouts	Walls, floors, and ceilings
All adhesives	Mirrors, wall coverings, construction, etc.
Grout and caulking	Windows and doors
Gypsum board, tape, and joint compound	Wall and ceiling systems
Insulation materials	Walls, ceilings, and attic spaces
Roofing materials (felts, rolled, shingle, flashings, adhesives, tar, and insulations)	Roof and parapet wall systems
Brick and block, mortars	Walls

The observed suspect ACMs at the subject property were in good condition at the time of the site reconnaissance and are not expected to pose a health and safety concern to the occupants of the subject property at this time. Based on the potential presence of ACMs, AEI recommends the implementation of an O&M Plan which stipulates that the repair and maintenance of damaged materials should be performed to protect the health and safety of the building occupants. In the event that building renovation or demolition activities are planned, a thorough asbestos survey to identify asbestos-containing building materials is required in accordance with the EPA NESHAP 40 CFR Part 61 prior to demolition or renovation activities that may disturb suspect ACMs.

8.2 LEAD-BASED PAINT

LBP is defined as any paint, varnish, stain, or other applied coating that has ≥ 1 mg/cm² (5,000 µg/g or 5,000 ppm) or more of lead by federal guidelines; state and local definitions may differ from the federal definitions in amounts ranging from 0.5 mg/cm² to 2.0 mg/cm². Section 1017 of the Housing and Urban Development (HUD) Guidelines, Residential Lead-Based Paint Hazard Reduction Act of 1992, otherwise known as "Title X", defines a LBP hazard as "any condition that causes exposure to lead that would result in adverse human health effects" resulting from lead-contaminated dust, bare, lead-contaminated soil, and/or lead-contaminated paint that is deteriorated or present on accessible, friction, or impact surfaces. Therefore, under Title X, intact LBP on most walls and ceilings would not be considered a "hazard", although the paint should be maintained and its condition monitored to ensure that it does not deteriorate and become a hazard. Additionally, Section 1018 of this law directed HUD and EPA to require the disclosure of known information on LBP and LBP hazards before the sale or lease of most housing built before 1978. Most private housing, public housing, or federally owned or subsidized housing is affected by this rule.

Under OSHA, LCP is defined as any paint with any detectable amount of lead present in it. Therefore, all LBP is considered LCP. Conversely, LCP may not meet the criteria to be considered LBP in accordance with HUD guidelines or some states' definition of LBP.

It is important to note that LCP may create a lead hazard when being removed. The condition of



these materials must be monitored when they are being disturbed. In the event LCP is subject to abrading, sanding, torching, and/or cutting during demolition or renovation activities, there may be regulatory issues that must be addressed.

The information below is for general informational purposes only and does not constitute a lead hazard evaluation. In addition, the information is not intended to comply with federal, state, or local regulations in regards to LBP.

In buildings constructed after 1978, it is unlikely that LBP is present; however, some paints utilized after 1978 will be LCP under OSHA. Structures built prior to 1978 and especially prior to the 1960s should be expected to contain LBP.

Due to the age of the subject property buildings, there is a potential that LBP is present. All observed painted surfaces were in good condition and are not expected to pose a health and safety concern to the occupants of the subject property at this time. Local regulations may apply to LBP in association with building demolition/renovations and worker/occupant protection. Actual material samples would need to be collected or an XRF survey performed in order to determine if LBP is present. It should be noted that construction activities that disturb materials or paints containing any amount of lead may be subject to certain requirements of the OSHA lead standard contained in 29 CFR 1910.1025 and 1926.62.

8.3 RADON

Radon is a naturally-occurring, odorless, and invisible gas. Natural radon levels vary and are closely related to geologic formations. Radon may enter buildings through basement sumps or other openings.

The United States EPA has prepared a map to assist National, State, and local organizations to target their resources and to implement radon-resistant building codes. The map divides the country into three radon zones, with Zone 1 being those areas with the average predicted indoor radon concentration in residential dwellings exceeding the EPA Action Limit of 4.0 pCi/L. It is important to note that the EPA has found homes with elevated levels of radon in all three zones, and the EPA recommends site specific testing in order to determine radon levels at a specific location. However, the map does give a valuable indication of the propensity of radon gas accumulation in structures.

Radon sampling was not requested as part of this assessment. According to the California Department of Health Services Radon Database, 447 tests were conducted for radon levels in the subject property zip code (90275) in 2016. It was reported that 90 of the 447 tests exceeded the action level of 4.0 pCi/L set forth by the US EPA. Radon sampling would be required to determine site-specific radon levels.

8.4 MOLD

Molds are simple microscopic organisms which can often be seen in the form of discoloration, frequently green, gray, white, brown, or black. When excessive moisture or water accumulates indoors, mold growth may occur, particularly if the moisture problem remains undiscovered or unaddressed. As such, interior areas of buildings characterized by poor ventilation and high humidity are the most common locations of mold growth. Building materials, including drywall,



wallpaper, baseboards, wood framing, insulation, and carpeting, often play host to such growth. Mold spores primarily cause health problems through the inhalation of spores or the toxins they emit when they are present in large numbers. This can occur when there is active mold growth within places where people live or work.

Mold, if present, may or may not visually manifest itself. Neither the individual completing this inspection, nor AEI has any liability for the identification of mold-related concerns except as defined in applicable industry standards. In short, this Phase I ESA should not be construed as a mold survey or inspection.

This activity was not designed to discover all areas which may be affected by mold growth on the subject property. Rather, it is intended to give the client an indication if significant (based on observed areas) mold growth is present at the subject property. Potential areas of mold growth, such as in pipe chases, HVAC systems, and behind enclosed walls and ceilings, were not observed as part of this limited assessment.

AEI observed interior areas of the subject property buildings to identify the potential presence of mold. AEI did not note obvious visual or olfactory indications of the presence of mold, nor did AEI observe obvious indications of significant water damage. As such, no bulk sampling of suspect surfaces was conducted as part of this assessment and no additional action with respect to suspect mold appears to be warranted at this time.

9.0 SIGNATURE OF ENVIRONMENTAL PROFESSIONALS

We declare that, to the best of our professional knowledge and belief, we meet the definition of Environmental Professional as defined in §312.10 of 40 CFR Part 312.

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.

Prepared By:



Daniel Huerta
Project Manager

Reviewed By:



Victor DeTroy, REPA
Senior Author

DRAFT



10.0 REFERENCES

Item	Date(s)	Source
Soils Information	February 2019	USDA Web Soil Survey http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx
Topographic Map	2018	USGS, Redondo Beach OE S, California
Depth to Groundwater Information	2010	Previous Report
Aerial Photographs	1928-2016 (non-inclusive)	EDR
Sanborn Map Report/Search	February 4, 2019	EDR
City Directories	1920-2014 (non-inclusive)	EDR
Historical Topographic Maps	1928-1965 (non-inclusive)	Nationwide Environmental Title Research, LLC's (historicaerials.com)
Building Department	February 19, 2019	Rancho Palos Verdes Building Department
Planning Department	February 19, 2019	Rancho Palos Verdes Planning Department
Assessor's Information and Parcel Map	February 1, 2019	Los Angeles County Assessor's Office
Other Agencies Searched	February 1, 2019	SWRCB GeoTracker, SCAQMD, DTSC HWTS, and DTSC Envirostor databases
Oil and Gas Wells	February 1, 2019	California Department of Conservation Division of Oil Gas and Geothermal Energy
Oil and Gas Pipelines	February 1, 2019	NPMS Public Map Viewer https://www.npms.phmsa.dot.gov/PublicViewer/composite.jsf
Regulatory Database Report	February 5, 2019	EDR
Interview with Key Site Manager	February 9, 2019	Mr. Matt Waters
Previous Report(s)	September 8, 2010	<i>Phase I Environmental Site Assessment, issued by PSI</i>
Radon Zone Information	1993	US EPA Map of Radon Zones https://www.epa.gov/radon

