

March 20, 2015
J.N. 14-201

Mr. Jonathan Weldy
MERIDIAN LAND DEVELOPMENT
19153 Town Center Drive, 106
Apple Valley, California 92308

Subject: Phase I Environmental Site Assessment; Lancaster 171 Project, Proposed Tentative Tract 71210, APNs 3204-010-54, -55, -62, -63 and 3204-011-023, -033 and -034, Southeast Corner of West Avenue K and 55th Street West, Lancaster, Los Angeles County, California 93536

Dear Mr. Weldy:

The Environmental Division of Petra Geosciences, Inc. (Petra) is pleased to present this Phase I Environmental Site Assessment for the above-referenced site. This assessment has been conducted in general accordance with our Proposal No. 14-201P, dated April 3, 2014, in general conformance with the scope and limitations of the standards set forth in the American Society for Testing and Materials (ASTM) Practice E 1527-13, and the EPA's All Appropriate Inquiry (AAI) regulations 40 CFR Part 312. This assessment has revealed no recognized environmental conditions on the subject site.


This opportunity to be of service to you is sincerely appreciated. Please do not hesitate to call this office if you have questions pertaining to this report.

Respectfully submitted,

Petra Geosciences, Inc.
ENVIRONMENTAL DIVISION



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PG 5975



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GE 2024

EXECUTIVE SUMMARY

PHASE I ENVIRONMENTAL SITE ASSESSMENT

Lancaster 171 Project, Proposed Tentative Tract 71210
APNs 3204-010-54, -55, -62, -63 and 3204-011-023, -033 and -034
Southeast Corner of West Avenue K and 55th Street West
Lancaster, Los Angeles County, California 93536

INTRODUCTION

The information presented in this report includes the results of our recent site reconnaissance, a review of pertinent literature, and recent federal, state, and local government agency records search. Our field reconnaissance, data gathering and compilation performed by Mr. Edward Lump, Associate Geologist, with oversight by Dr. Siamak Jafroudi, President and Principal Engineer.

SITE DESCRIPTION AND GENERAL INFORMATION

- Overall, the Lancaster 171 Project is situated west of the 138 Freeway, south of West Avenue K, east of 60th Street West, and north of West Avenue K-8 in the city of Lancaster, Los Angeles County, California. The subject property consists of approximately 40 acres of undeveloped land with Assessor Parcel Numbers (APN) 3204-010-054, -055, -062, -063 and 3204-011-023, -033, and -034. Access to the site from the north is via West Avenue K and an unimproved power line road (i.e., 55th Street West). Access from the south is from unimproved West Avenue K-8 and an unimproved power line road (55th Street West). Topographically, the site consists of level ground or gently sloping toward the north.
- Based upon our recent site reconnaissance, there is a basin, concrete slab, foundation remnants, and a capped steel riser pipe in the east central portion of property. Information provided in our review of United States Geological Survey (USGS) topographic map on the subject site area (Lancaster West 7.5 Minute Quad) suggests that the riser pipe is a water well. The groundwater depth in 1963 is reported at 144 feet according to California Department of Water Resources website (CDWR, 2015).
- Based on aerial photo information obtained during this assessment, the site appears to have been undeveloped desert land in 1928. By 1940, what appeared to be a small cluster of buildings (farm compound?) was visible near the east central edge of the site. A basin was depicted directly west-southwest. Access to the area was via a dirt road from West Avenue K. Row crops were visible on the northern half of the site, extending offsite to the east. The south half of the property appeared as native desert land. These same property conditions were noted in 1948 and 1953; however, vegetation clearing was visible in the northern portion of the south half of the site in 1953. Additionally, in 1948 what appears to be an oil derrick is visible offsite to the south approximately 600± feet. In 1968, the farming buildings appeared to be abandoned. Dirt roads crossing the property in an east-west direction were visible in the central and southern half of the property. Residential development was visible to the east along 50th Street West in 1968. Dirt roads increased onsite in 1977 and 1983. Minimal changes to readily detectable site conditions were noted from 1994 to the present. Topographic maps reviewed during this assessment depicted a well onsite and a dirt road along the eastern property boundary, with occasional depiction of a basin and small structure.

- Numerous piles of carpet, furniture, appliances, clothing and typical household trash have been dumped along the unimproved power line road on the west edge of the property (i.e., 55th Street West). None of these piles appeared to be associated with soil discoloration or hazardous materials; however, Petra's field personnel did not disturb the piles or plastic bags. Minor wind-blown debris was also noted onsite.
- An overhead transmission main line was observed along the unimproved dirt road along the west side of the property (i.e., 55th Street West). One cluster of pole-mounted transformers were observed on a wooden pole with a metal tag suggesting placement in 2005. The transformers appeared in good condition, and no surface discoloration was noted around the base of the pole.
- At the time of our reconnaissance, locally dense, small desert-type bushes and grasses were observed within the areas of the site. A few Joshua trees were noted in the southern half of the site.
- No vicinity sites were identified in our search of various government agency database records, which appear to have impacted the soils or groundwater beneath the subject site.
- There was no evidence of sumps, pits, pools, or lagoons identified during our site reconnaissance, except for the basin located near the onsite well and concrete foundation remnants.

RECOGNIZED ENVIRONMENTAL CONDITIONS

Recognized environmental conditions are defined by the American Society of Testing and Materials (ASTM) as any hazardous substance or petroleum product under conditions that indicate an existing, past, or material threat of release into the structures, ground, groundwater, or surface water at the subject site. If the presences of recognized environmental conditions are identified on a subject site, it may warrant additional research, site assessment, and/or action.

We have performed this Phase I Environmental Site Assessment in general conformance with the scope and limitations of ASTM Practice E 1527 for the *Lancaster 171 Project*, Proposed Tentative Tract 71210, in the city of Lancaster, Los Angeles County, California. Any exceptions to, or deletions from, this practice are described in section titled data gaps of this report. This assessment has revealed no evidence of recognized environmental conditions in connection with the property.

SITE CONSIDERATIONS

The following items are not considered recognized environmental conditions in accordance with ASTM 1527-13. However, these items may warrant considerations in conjunction with any planned development activities. The information regarding possible actions relative to these items has been provided as guidance.

- It is recommended that all dumped trash and household debris dumped along the western edge of the site be removed and disposed in accordance with current regulations.

- Unless planned for use, the water well near the east central edge of the site should be properly abandoned pursuant to California Department of Water Resources (CDWR) standards. In accordance with CDWR Bulletin 74-90, the upper surface of the sealing materials shall end at a depth of 5 feet below the ground surface (in urban areas). If the well casing was not extracted during destruction and sealing operations, a hole shall be excavated around the well casing to a depth of 5 feet below the ground surface (i.e., proposed finish pad grade) after sealing operations have been completed and the sealing material has adequately set and cured. The exposed casing shall then be removed by cutting the casing at the bottom of the excavation. The excavation shall be backfilled with clean, native soil or other suitable material (California Department of Water Resources, 1991). The procedure shall be conducted by a licensed water well contractor.
- It is unknown if the onsite buildings utilized an onsite sewage disposal system. It is recommended that if a system is encountered during earthwork the septic system should be removed in accordance with current regulations.
- As with any historic agricultural property, there is a potential for buried debris to be encountered during development of the site. As such, we recommend that any unanticipated buried containers/structures/debris encountered during clearing and grubbing or grading be evaluated in-place by Petra prior to removal from the subsurface.
- Our review of historical information indicates that the northern half of the property was utilized for agricultural development. Considering the water well and adjacent basin, there is some potential for buried irrigation lines to consist of asbestos containing materials. In the event asbestos-containing material is encountered during removal, the lines should not be disturbed until they are evaluated by a licensed asbestos consultant.

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PHASE I ENVIRONMENTAL SITE ASSESSMENT

***Lancaster 171 Project, Proposed Tentative Tract 71210,
APNs 3204-010-54, -55, -62, -63 and 3204-011-023, -033 and -034,
Southeast Corner of West Avenue K and 55th Street West,
Lancaster, Los Angeles County, California 93536***

INTRODUCTION

The information presented in this report includes the results of our recent field reconnaissance, a review of various federal, state, and local government agency records, and a review of historic aerial photographs and topographic maps for the site vicinity. This report includes a summary of our findings, our opinion as to the current environmental condition of the site, and recommendations for additional work, if needed.

Purpose

This Phase I Environmental Site Assessment was conducted to determine if any recognized environmental conditions exist on the subject site. Recognized environmental conditions are defined by the American Society for Testing and Materials (ASTM) as any hazardous substance or petroleum product under conditions that indicate an existing, past, or material threat of release into the structures, ground, groundwater, or surface water at the subject site.

This assessment is also intended to satisfy the requirement for conducting all appropriate inquiries into the previous ownership and uses of a property for the purposes of meeting the all appropriate inquiries provisions necessary to qualify for certain landowner liability protections under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA).

We have performed this assessment in general conformance with the scope and limitations of the standards set forth in the ASTM Practice E 1527-13 and the EPA's All Appropriate Inquiry (AAI) regulations 40 CFR Part 312.

Involved Parties

This report was prepared by the Environmental Division of Petra Geosciences, Inc. (Petra), at the request of Meridian Land Development, for their exclusive use. Use of this report or reliance thereon by other parties or projects is not authorized. The report may not be suitable for other parties or other purposes.

SCOPE OF ASSESSMENT

The scope of this Phase I Environmental Site Assessment (ESA) included the following:

1. Performing a site reconnaissance to identify the current conditions and land use of the subject site and adjoining properties, during which visual evidence of prior uses of the subject site and adjoining properties were noted. The site reconnaissance included an observation of the site surface and the site perimeter.
2. Researching historical land use of the subject site and vicinity by reviewing available historical aerial photographs, United States Geologic Survey (USGS) topographic maps, fire insurance maps, city directories, and other reasonably ascertainable maps and data.
3. Conducting a search for environmental liens and Activities and Use Limitations (AULs) for the property.
4. Performing a literature study to identify local and regional geological conditions.
5. Obtaining and reviewing a search of pertinent federal, state, and local regulatory agency databases concerning environmental conditions on and in the vicinity of the site. As specified in the ASTM and AAI standards, the following databases were searched using, at a minimum, the recommended search radius:
 - Federal National Priority List (NPL) site list,
 - Federal Delisted NPL site list,
 - Federal Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS) site list,
 - Federal CERCLIS- No Further Remedial Action Planned (CERC-NFRAP) site list,
 - Federal Resource Conservation and Recovery Act Information (RCRA) Corrective Action Report (CORRACTS) facilities list,
 - Federal RCRA non-CORRACTS Treat, Store and Dispose (RCRA-TSD) facilities list,
 - Federal RCRA generators list,
 - Federal institutional control/engineering control registries,
 - Federal Emergency Response Notification System (ERNS) list,
 - State and tribal lists of hazardous waste sites identified for investigation or remediation including: State- and tribal-equivalent NPL, State, and tribal-equivalent CERCLIS lists,
 - State and tribal landfill and/or solid waste disposal site lists,
 - State and tribal leaking storage tank lists,
 - State and tribal registered storage tank lists,
 - State and tribal institutional control/engineering control registries,
 - State and tribal voluntary cleanup sites, and
 - State and tribal Brownfield sites.

In the interest of thoroughness, numerous non-ASTM and non-AAI required databases were also searched. These databases are listed and discussed in the database search included within this report.

6. Contacting and interviewing knowledgeable persons, such as property owners, managers, and representatives of local government agencies regarding historical site use and current site conditions, if possible.

7. Evaluating the presence of recognized environmental conditions at the subject site through visual observation and research of reasonably ascertainable records. Recognized environmental conditions may include the presence of hazardous materials, petroleum products, underground storage tanks, above ground storage tanks, drums, chemical containers, polychlorinated biphenyls, liquid or solid wastes, oil wells, and areas indicative of potential contamination including stained soils and/or pavement, stressed vegetation, drains, sumps, pits, ponds, lagoons, odors, and septic systems.
8. Preparing a report presenting the results of our Phase I ESA.

Unless listed above, this assessment does not include any testing or sampling of materials (such as an assessment for the potential presence of methane or radon, asbestos or lead-based paints, or the sampling and testing of soil, air, surface water, or groundwater). This assessment does not include evaluating the site for the presence of wetlands, regulatory compliance, or other items beyond the scope of ASTM E 1527-13 or 40 CFR Part 312, nor is it an assessment for vapor intrusion as defined by ASTM E 2600-10.

SITE OVERVIEW

According to the Division of Oil, Gas, and Geothermal Resources (DOGGR) Online Mapping System (2015), the site is located within Section 26, of Township 07 North, Range 13 West, within the San Bernardino Base and Meridian. A site location map is included as Figure 1. The property gently slopes in a northerly direction with site elevations of approximately 2,410 to 2,385± feet above mean sea level (amsl).

Based upon information in the General Notes section of a tentative tract map of the property (Penfield & Smith, 2013) provide by the Client, the Assessor's Parcel Numbers (APNs) for the 40± acre subject property were identified as APNs 3204-010-54, -055, -062, -063 and 3204-011-023, -033 and -034. A photographic map showing the overall property conditions in 2014 is included as Figure 2.

PREVIOUS LAND USE

Based on aerial photo and topographic map information obtained during this assessment, the site appears to have been raw desert land until sometime before 1940. In 1928, land directly west of the northern half of the property appeared to be partially developed with a young orchard which was no longer visible in the 1940 aerial photograph. Black and white photographs from 1940 to at least 1953 indicated active cultivation of row crops on the northern half of the site, which included offsite land to the east, fronting on 52 Street West. During this 13 year period, 3 relatively large and up to 3 small buildings were visible directly east-northeast of the basin, and the basin appeared to hold water. Main access to the building compound area was via a dirt road off West Avenue K. Photographs from 1968 - 1983 depicted remnants

of the crop rows. In the 1968 photograph, secondary dirt roads were noted to the compound area from the west via unimproved 55th Street West, and from the south via unimproved Avenue K-8. Residential development in the vicinity was also noted to the east in 1968. Additional dirt road/trail activity was noted onsite from 1968 to 2002. No readily detectable land changes were observed from 2002 to 2012. Historical information reviewed during this assessment includes aerial photographs (dating back to 1953), USGS topographical maps (dating back to 1901), and interviews. It should be noted that EDR reported that there is no Sanborn™ Map coverage for the site vicinity.

PREVIOUS REPORTS

The Client provided a Phase I Environmental Site Assessment (ESA) report for the south half of the subject property (Proterra, 2007). The following is a summary of the Phase I ESA.

“Phase I Environmental Site Assessment Results, Proposed Residential Development, Approximately 20-Acre Property, APN 3204-011-023, -033 & -034, NEC 55th Street West and Avenue K-8, Lancaster, Los Angeles County, California,” by Proterra Consulting, Inc., Project No. PT-1235 07-04-235, dated April 16, 2007.

This report was reported to generally conform with American Society for Testing and Materials (ASTM) Standard E1527-05, Standard Practice for Environmental Site Assessments. The property boundary extended from the south edge of the basin to Avenue K-8. Groundwater depths from wells in the vicinity were reported to range from 50± feet to over 400 feet below the ground surface.

April 2007 site conditions were described in the above report as generally level with a slightly downward slope to the north. Fine sandy soil was present. Native grasses and an occasional Joshua tree was observed. Overhead power lines was described along the western boundary of the property. No transformers were reported onsite. Dumped trash was reported onsite, particularly along Avenue K-8 and at the northwest edge of the property along 55th Street West. The surrounding properties were reported as undeveloped desert and residential developments.

An interview with the owner (of 1 year) indicated that, to the best of his knowledge, the property has never been developed. The owner noted that he is not aware of any significant adverse environmental conditions onsite.

A summary of aerial photographs reportedly indicated that the southern half of the property was undeveloped desert and the north half appears to be farmland in 1953. A farmhouse was noted on or near the northeast corner of the site. A residence and several other buildings are described as being located

near the northwest corner. By 1968, the property has been allowed to go fallow, and the farmhouse appears to have been demolished. From 1968 to 2002, the ESA reported that the property is undeveloped.

The Proterra report (2007) stated that the property was not listed on any of the environmental agency databases reviewed as a part of their Phase I ESA. Findings presented in the report noted that their environmental agency database review did not identify any sites that would have a significant negative environmental impact on the property. It was also noted that a septic tank may be located in the northeast corner of the site. Additionally, it was stated that the property and surrounding properties have in the past been used for agriculture, and that detectable levels of agricultural chemicals (fertilizers and pesticides) may be present in the subsurface. Generally, these chemicals would not be detectable at levels representing an environmental concern unless a specific facility can be identified where these chemicals were used or handled in a manner that would result in accumulations of higher concentrations. There is no direct evidence indicating higher concentrations would exist, accordingly, past farming activities at the property and adjacent land should not pose a significant concern. The report concluded that the assessment has revealed no evidence of Recognized Environmental Conditions in connection with the property.

ENVIRONMENTAL SETTING

The following section provides an overview of the regional and local geologic setting and includes information pertaining to groundwater conditions in the vicinity of the subject site. Geotechnical hazard information (faults, landslides, etc.) is not part of this assessment. This section does not constitute a geotechnical evaluation of the subject site and should not be taken as such.

Geology

Geologically, the site lies within the Antelope Valley in the southwestern portion of the Mojave Desert Geomorphic Province (CGS, 2002b). The Mojave Desert province is a wedge-shaped area that is enclosed on the southwest by the San Andreas fault zone and the Transverse Ranges province, on the north and northeast by the Garlock fault zone, the Tehachapi Mountains and the Basin and Range province, on the east by the Nevada and Arizona state lines, and on the south by the San Bernardino-Riverside county line. The area is dominated by broad alluviated basins that are mostly aggrading surfaces that are receiving nonmarine continental deposits from the adjacent upland areas. Throughout the province, small hills rise above the alluvial sediments of the valleys. These are remnants of the mountainous topography which has been erased by erosion and buried by debris.

The closest major active earthquake fault is the Palmdale section of the San Andreas Fault zone which has been mapped approximately 4½± miles south-southwest of the site (CGS, 2002a). The subject property does not lie within a State of California Special Studies - Alquist Priolo Special Studies Zone (Bryant and Hart, 2007).

Regional geologic maps of the area indicate the subject property is underlain by Holocene to Late Pleistocene age, Young alluvial fan deposits (Hernandez, 2010). These materials are described as unconsolidated to weakly consolidated fine- to medium-grained arkosic sand with fine gravel.

Surface Water

No indication of surface water was observed on the site at the time of this assessment.

Groundwater

The site is located within the Antelope Valley Groundwater Basin (California Department of Water Resources [CDWR], Water Data Library, 2015). Groundwater depth varies within the area and though flow direction beneath the subject site is unknown it is believed to be toward the north. One groundwater well was listed within the subject site on the CDWR Water Data Library (2015). Based on our review of this inactive well, the historic groundwater level (1963) was reported at a depth of 144 feet bgs. Other wells in the vicinity reflect similar depths in the early 1960's. The groundwater level in 2010 near Antelope Valley College was listed at a depth of 239 feet bgs. Printouts from this review are included in Appendix B.

Groundwater pumping in urban areas associated with Lancaster and Edwards Air Force Base has caused ground subsidence on the order of 1 to 6 feet by 1997 (WDR, 2004). In some areas this subsidence has generated fissures.

RESULTS OF ASSESSMENT

The results of our site reconnaissance and observation of adjacent sites, agency database review, and historical land use study are presented in the following sections.

Site Reconnaissance

Petra conducted a reconnaissance of the subject site on March 2, 2015. Site photographs are included in Appendix A. Our site observations are summarized below.

- Overall, the Lancaster 171 Project is situated west of the 138 Freeway, south of West Avenue K, east of 60th Street West, and north of West Avenue K-8 in the city of Lancaster, Los Angeles County, California. The subject property consists of approximately 40 acres of undeveloped land with Assessor Parcel Numbers (APN) 3204-010-054, -055, -062, -063 and 3204-011-023, -033, and -034. Access to the site from the north is via West Avenue K and an unimproved power line road (i.e., 55th Street West). Access from the south is from unimproved West Avenue K-8 and an unimproved power line road (55th Street West). Topographically, the site consists of level ground or gently sloping toward the north.
- Based upon our recent site reconnaissance, there is a basin, concrete slab, foundation remnants, and a capped steel riser pipe in the east central portion of property. Information provided in our review of United States Geological Survey (USGS) topographic map on the subject site area (Lancaster West 7.5 Minute Quad) suggests that the riser pipe is a water well. The groundwater depth in 1963 is reported at 144 feet according to California Department of Water Resources website (CDWR, 2015).
- Numerous piles of carpet, furniture, appliances, clothing and typical household trash have been dumped along the unimproved power line road on the west edge of the property (i.e., 55th Street West). None of these piles appeared to be associated with soil discoloration or hazardous materials; however, Petra's field personnel did not disturb the piles or plastic bags. Minor wind-blown debris was also noted onsite.
- An overhead transmission main line was observed along the unimproved dirt road along the west side of the property (i.e., 55th Street West). One cluster of pole-mounted transformers were observed on a wooden pole with a metal tag suggesting placement in 2005. The transformers appeared in good condition, and no surface discoloration was noted around the base of the pole.
- At the time of our reconnaissance, locally dense, small desert-type bushes and grasses were observed within the areas of the site. A few Joshua trees were noted in the southern half of the site.
- No vicinity sites were identified in our search of various government agency database records, which appear to have impacted the soils or groundwater beneath the subject site.
- There was no evidence of sumps, pits, pools, or lagoons identified during our site reconnaissance, except for the basin located near the onsite well and concrete foundation remnants.

Adjacent Site and Vicinity Observations

The site is situated in an area of mix use consisting of undeveloped land and residential land.

North To the north of the subject site is West Avenue K, and undeveloped land beyond.

East To the east of the subject site is unimproved 52nd Street West, with undeveloped land and residential development beyond.

South To the south of the subject site is West Avenue K-8, and undeveloped land beyond.

West To the west of the subject site is 55th Street West and a main transmission line, and undeveloped land beyond.

Government Agency Database Research

A search of federal, state, and local government listings was performed by Environmental Data Resources, Inc. (EDR) for the purposes of this report. The search radius used for all government databases meets or exceeds the standard search distance adopted by ASTM and AAI.

Results of Agency Records Search

A data search of the various government agency records listed in Appendix B revealed no listings for the subject site. The EDR report mapped one nearby site within the requested search radii. Further evaluation by Petra indicated that this listing is associated with a school investigation at the corner of Avenue K and 45th Street West in 2004. The potential chemicals of concern were pesticides (DDT, DDD, and DDE), arsenic and lead. The status of the case is reported as, “No Further Action.” No orphan sites (sites with inadequate data and/or address information to be mapped by EDR) were identified during the agency database search. Refer to the EDR Report in Appendix C for the search radii completed for this assessment.

Orphan Sites

Orphan sites are unable to be located due to lack of complete data and/or address information. No orphan sites are listed in the EDR report.

Local Agencies

Petra reviewed information held by the agencies listed below during the course of this assessment.

A. Los Angeles County

The Los Angeles County Department of Public Health - Environmental Health Division maintains records related to landfills. The Los Angeles County Department of Public Works provides oversight for underground storage tanks. Records held by these agency were accessed by EDR during the government database search (Appendix C). No listing for the subject site was reported by EDR.

B. Regional Water Quality Control Board

The Lahotan Regional Water Quality Control Board (RWQCB) maintains records of leaking underground storage tank sites and groundwater cleanups for sites in the Antelope Valley Region. Records held by the RWQCB were accessed by EDR during the government database search. No listings for the subject site were reported by EDR (Appendix C).

C. GeoTracker

The GeoTracker website maintains a record of environmental data for regulated facilities in California. No database listings for the subject site were reported on GeoTracker. The memorandum documenting this inquiry is included in Appendix B.

Six sites were mapped within the site vicinity, all of which are at least ¼-mile from the subject site. The status of 3 of the 4 cases are listed as “case closed.” The open case, Los Angeles County Sheriff Lancaster Station (1010 West Avenue J, is in the site assessment phase as of 1993 regarding a gasoline leak. This listing is situated at a down groundwater gradient from the subject property, and not considered an environmental concern at this time. The closest sites listed at an up groundwater gradient from the subject property are mapped on West Avenue L, approximately 1 mile to the south. Both of these sites are listed as “case closed,” and not considered an environmental concern at this time.

D. Department of Toxic Substances Control

The online database EnviroStor (DTSC, 2015), which provides records on LUSTs, SLICs, Priority cleanup sites and states sites, is maintained by the Department of Toxic Substances Control (DTSC). No database listings for the subject site; however, 3 listings in the immediate site vicinity were reported on EnviroStor. All of these listed are reportedly related to school investigations. The status of these listings are reported as “no action required” or “no further action.” Due to the nature of the listings (i.e., former land use as agricultural or residential), all of the sites are not considered an environmental concern at this time. The memorandum documenting this inquiry is included in Appendix B.

E. California Division of Oil, Gas, and Geothermal Resources

According to the California Division of Oil, Gas, and Geothermal Resources (DOGGR), there are no active or abandoned oil, or gas wells located on the subject site. Further, there were no indications of any such wells found during our reconnaissance of the subject site. A copy of this map is included in Appendix B.

The database did map 2 oil and gas wells in the site vicinity. The closest well is approximately 300± feet south-southeast of the property, near the intersection of West Avenue K-10 and 52 Street West. This well, Del Sur 1, was originally drilled in 1946 and deepened in 1948 to a depth of 4,100± feet. Although oil and gas were stated on the well logs (below a depth of 2,500± feet?), no production was recovered in the attempts. Artesian fresh water sands were reported at a depth of 1,700 to 1,800 feet. As a result, the property owner requested DOGGR to convert the oil and gas well to an irrigation well. In 1963 a report on proposed operations (by DOGGR) provided conversion approval provided a cement plug is set at a depth of 2,395 feet and the well is capped at the surface. No additional information was readily found. Based upon the reported “possible” conversion of the oil and gas well to irrigation, this well does not appear to be considered an environmental concern at this time.

F. National Pipeline Mapping System

Petra reviewed the National Pipeline Mapping System (NPMS, 2014) public viewer website for gas transmission pipelines and hazardous liquid trunklines on or close to the subject property. Due to security purposes, close-up map views are not available. According to the information reviewed, no pipelines appear to be located on the subject property or immediately adjacent. Copies of these maps are included in Appendix B.

Evaluation of Records Search Results

In summary, no sites were identified in our search of various government agency database records, which may have impacted the soils or groundwater beneath the subject site.

Results of Aerial Photo Analysis

Although aerial photographs can often be a valuable source of information in the assessment of historical land usage, it should be understood that information extrapolated from photographic images is strictly interpretation and not necessarily fact. For this reason, it may not be appropriate to draw conclusions regarding previous site activities based solely upon aerial photograph analysis.

In order to provide an overall assessment of historical land usage on and in the vicinity of the subject site, aerial photographs with coverage of the subject site and vicinity were obtained from EDR and viewed by a representative of this firm. Photographs from the years 1928, 1940, 1948, 1953, 1968, 1977, 1983, 1989, 1994, 2002, 2005, 2009, 2010, and 2012 were provided by EDR. A summary of the information obtained during the aerial photograph review follows. Copies of the aerial photographs obtained from EDR are included in Appendix C.

1928 Photograph

In this black and white photograph the subject property appeared to be undeveloped desert land. Unimproved West Avenue K was visible along the north site boundary. Land to the west of the subject property appeared to be partially developed as an orchard. Land to the north, across West Avenue K, was developed with row crops. Generally, land to the east and south of the subject site also appeared to be native desert land. No obvious signs of dirt roads/trails was readily observed within the subject property.

1940, 1948 and 1953 Photographs

In these photographs the north half of the subject property appeared developed for agricultural purposes with row crops. The onsite cultivated area extended to the east, to roughly the future alignment of 52 Street West. What appeared to be a farm compound and basin was observed at the southeastern corner of the north half of the site, with a basin directly west. Water was visible in the basin in the 1948 and 1953 photographs. Access to the compound is via a dirt road from West Avenue K. The south half of the property appeared to remain native desert land with 2 dirt roads/trails extending southwest and southeast from the farm compound; however, in 1953 the northern half of the south half of the subject site appeared to be cleared of vegetation. Land to the north (across West Avenue K) remained row crops; however, the orchard to the west is not readily discernable. Land to the south and east remained undeveloped desert.

1968, 1977 and 1983 Photographs

In the 1968, 1977 and 1983 photographs (black and white), the subject site appeared to be fallow farmland. Some of the farm compounds buildings were no longer readily visible. Dirt road/trail activity increased slightly within the south half of the subject property, with an east-west trending road along the south edge of the basin and an east-west trending unimproved road through the idle of the south half. West Avenue K (along the north edge of the property) appeared as improved. 52nd Street West (along the east edge of the property), West Avenue K-8 (along the south edge of the site), and 55th Street West (along the west edge of the site) appeared to be unimproved. Single family residential development was observed in the vicinity, east of 52nd Street West. Land to the north appeared to be fallow. Land to the west and south remained undeveloped. Minor dirt road/trail activity was observed within the subject property.

1989 and 1994 Photographs

Except for removal of the buildings in the area of the former farm compound, no significant changes were readily observed to the subject property or immediate site vicinity.

2002, 2005, 2009, 2010, and 2012 Photographs

In these color photographs, the site remains as undeveloped land. Increased residential tract development is visible to the west, east, and northeast.

Historical USGS Topographic Maps

Petra reviewed the historical USGS topographic maps of the site and vicinity provided by EDR (1917, 1936, 1951, 1958 and 1974). The large scale of the 1917 maps do not allow for a detailed evaluation of the subject property. The 1951 map depicted a small structure and basin near the east central edge of the site and an oil well offsite to the south-southeast. The 1958 map depicted the onsite dirt road, providing access to the farm compound, intersection Avenue K-8. No well is shown onsite in the 1958 and 1974 maps. No land use is shown for the subject site on the maps. Overall, improvements to the vicinity shown on the maps were similar to that described in the aerial photographs. Copies of the maps reviewed are provided in Appendix C.

Environmental Liens & Activity and Use Limitations; Property Tax Map Report

Environmental Liens and Activity and Use Limitations (AUL) indicate restrictions on a property, which may represent a recognized environmental condition for the subject site. A search for Environmental Liens and AULs was conducted by EDR as part of this assessment using only APN 3204-010-055. The

results from this search indicated that there were no recorded Environmental Liens or AULs listed for the subject site. The deed provided with this lien search shows the title for the property is vested in Social Portfolio 1 LP (a Delaware Limited Partnership), conveyed from MTC Financial Inc., Trustee in 2010. The Trustee's Deed Upon Sale document provided in the search referenced the subject properties 7 APN's, and included 2 additional (APN 3204-004-025 and -026). A copy of the lien and AUL search and APN (tax map) report are provided in Appendix C.

Fire Insurance Maps

Fire Insurance Maps provide information on structure locations and operations, which were present at the time of the survey. These maps were completed for most major cities and metropolitan areas, dating from 1867, and provide information into past usage of buildings and how commercial and industrial zoning has changed over time. Sanborn™ Fire Insurance maps were requested for this study. EDR reports that no Sanborn™ Fire Insurance map coverage is available for the site. The memorandum documenting this inquiry is included in Appendix C.

City Directories

City Directories provide information for a specific address at a specific time. A search of city directories, on a five year interval, dating from 1972 to 2010 was conducted by EDR for this assessment. The search was conducted for the target streets West Avenue K and 55th Street West. Both streets were not listed in the source databases in 1972. Since the subject property is undeveloped and has no current address, it was difficult to provide comments on the results of the City Directories search. Our review of the data provided, however, reported typically residential addresses, a park site, Antelope Valley College, a boy's ranch, and a church site.

No listings, which would indicate a potential concern for the subject site based on the name of the listing, was included in the EDR city directory abstract. A copy of this search is presented in Appendix C.

Building Permits

Building Permit data provides information to identify current and/or former operations and structures/features which may represent a recognized environmental condition for the subject site. A search of building permits, dating back to 2001 at the City of Lancaster Building and Safety Department, and back to 1994 at the Los Angeles County Building and Safety Department was conducted by EDR for this assessment. There were no building permit records for the subject property or adjoining properties found. A copy of this search is presented in Appendix C.

Interviews

Petra provided Mr. Jonathan Weldy with Meridian Land Development a copy of the Phase I Interview Questionnaire regarding his knowledge of the subject site. Mr. Weldy returned the Client Questionnaire on March 10, 2015. A summary of the question responses is provided below.

1. According to the client, he does not have any specialized knowledge or experience related to the property or nearby properties.
2. According to the client, he is not aware of commonly known or reasonably ascertainable information about the property that would help identify conditions indicative of hazardous materials/chemical releases or threatened releases.
3. According to the client, based on his knowledge and experience related to the property, there are no indicators that point to the presence of likely presence of contamination at the property.

A copy of the complete client questionnaire is provided in Appendix D.

Owner Knowledge

Petra provided Mr. Jonathan Weldy with Meridian Land Development a copy of the Phase I Interview Questionnaire, to forward to the property owner, regarding his/her knowledge of the subject site. According to Mr. Weldy, Meridian Land Development is processing re-entitlement for the current property owner, Social Portfolio 1 LP. As a result, Mr. Weldy, acting on behalf of Social Portfolio 1 LP, returned the Client Questionnaire on March 10, 2015. A summary of the question responses is provided below.

- According to Mr. Weldy, he did not indicate any hazardous substances or petroleum products presently on the property.
- According to Mr. Weldy, he did not indicate any commonly known or reasonably ascertainable information about the property that would help identify conditions indicative of hazardous materials/chemical releases or threatened releases.
- According to Mr. Weldy, he did not indicate any obvious indicators that point to the presence of likely presence of contamination at the property.

A copy of the complete client questionnaire is provided in Appendix D.

Data Failures and Data Gaps

In the event that data gaps are identified, the Environmental Professional (EP) will endeavor to comment on the significance of those data gaps. However, the EP cannot, and does not warrant or guarantee that no significant events, releases, or conditions arose, during periods such as data gaps.

Petra reviewed several sources for historical information regarding the subject site. These sources included a government agency database search, a city directory search, a review of historical aerial photographs and historical USGS topographic maps, and interviews with people knowledgeable about the site. No fire insurance maps are reported to be available for the site. The previous owner/owners of the subject property were not available to interview regarding the long-term history of the property.

Data gaps exist in the historic information reviewed. These gaps are due to the limited resources available, which are reasonably ascertainable and practically reviewable in the local area. However, it is our opinion that if additional historic information were to become available, it is not likely to change the conclusions or recommendations of this assessment.

DISCUSSION OF POTENTIAL ENVIRONMENTAL CONCERNS

The following discussions of potential environmental concerns are presented to inform the client as to the existence, or lack thereof, of recognized environmental conditions present on the subject site.

Regulatory Actions

Based upon a reasonably thorough search of readily available federal, state, and local records, no known current regulatory action is pending with respect to the subject site.

Adjacent and Nearby Properties

No information has been obtained during this Phase I Environmental Site Assessment which would indicate the presence of recognized environmental conditions adjacent to the subject site that are considered likely to pose a significant impact to soils or groundwater beneath the subject site. A detailed reconnaissance of offsite adjacent and nearby properties, however, was not completed as part of this assessment.

Polychlorinated Biphenyls (PCB's)

Polychlorinated biphenyls (PCB's) are historically linked to electrical equipment, such as capacitors and transformers, due to their physical and chemical characteristics. PCB's, persistent in the environment, are known to accumulate in organisms and the food chain.

Any electrical equipment PCB's (i.e., transformers, capacitors, and fluorescent light fittings) containing dielectric insulating fluids or coolants, manufactured prior to 1976, should be considered to potentially contain PCB's. PCB's may also be found in older lubricating oils, cutting oils, hydraulic fluids, paints, sealants, and flame retardants (UNEP, 2002).

A cluster of electrical transformers was observed during our site walk on 1 transmission line along the northwest edge of the subject property. Based upon the date of a metal tag on the pole (2005), it is highly unlikely that transformers onsite contain PCB's. No information has been obtained during this assessment which would indicate the presence of recognized environmental conditions adjacent to the subject site that are considered likely to pose a significant impact to soils or groundwater beneath the subject site. A PCB survey, however, was not conducted at the subject property as part of this assessment.

Underground Storage Tanks

No information has been obtained during this assessment, which would indicate fuel underground storage tanks (USTs) to be located on the subject site currently nor are USTs reported to have been located on the site in the past. Further, no surface indications of USTs were observed on the subject site during the site reconnaissance.

Above Ground Storage Tanks (AST)

No information from agency reviews, or the previous Phase I ESA (Proterra, 2007), or provided by EDR has been obtained during this assessment, which would indicate additional above ground fuel storage tanks (ASTs) to be located on the subject site currently, nor are ASTs reported within agency reviews or provided by EDR to have been located on the site in the past.

Storm Water/Waste Water Discharge

At this time, storm water discharge from the site appears to be limited to surface water runoff, ultimately channeled to the existing streets or adjacent undeveloped land. No waste water discharge was observed.

Pesticide and Herbicide Residues

Based on information obtained during this assessment, the site does not appear to have been used for agricultural purposes within the last 50 years; therefore, pesticide and herbicide residues do not appear to represent a recognized environmental condition with regards to the subject site. An agricultural soil residue survey, however, was not completed as a part of this assessment.

Asbestos-Containing Materials

No potential asbestos-containing materials were observed on the site and no information was found which indicated the use, storage, or disposal of asbestos-containing materials on the site. There were, however, buildings associated with an active farm compound observed near the southeast corner of the north half of

the subject property in 1940, 1948 and 1953, and concrete foundations and slabs remain onsite today. No readily visible signs of roofing, flooring and/or building materials were present during our recent site walk that may potentially represent a source of asbestos-containing materials.

Additionally, a couple of concrete irrigation valve protection risers were observed either directly on the east boundary of the north half of the site, or directly offsite. Based upon the historic farming activities conducted onsite in at least the 1940's and 1950's, there is a potential (albeit small) for buried concrete or insulated metal irrigation lines onsite to have some sort of asbestos-containing materials. Petra recommends, therefore, that care should be taken during removal of buried concrete and/or metal irrigation lines onsite. In the event asbestos-containing material is encountered during removal, the lines should not be disturbed until they are evaluated by a licensed asbestos consultant.

Lead-Based Paints

No potential lead-based materials were observed on the site and no information was found which indicated the use, storage, or disposal of lead-based materials on the site. There were, however, buildings associated with an active farm compound observed near the southeast corner of the north half of the subject property in 1940, 1948 and 1953, and concrete foundations and slabs remain onsite today. No readily visible signs of building material remnants were present during our recent site walk that may potentially represent a source of lead-based paint.

Landfills

The EDR report does not list any known landfills within the search radius conducted for this investigation. Therefore, landfills do not appear to represent a recognized environmental condition with regards to the subject site.

Water Supplies

One water well was observed near the southeast corner of the north half of the subject site, and this well is also mapped onsite in the California Department of Water resources (DWR) website. Except for a hydrant at or near the northeast corner of the subject site, there were no other sources of water observed onsite during our recent site reconnaissance.

Unless planned for use, the water well along the east central edge of the site should be properly abandoned. In accordance with California Department of Water Resources Bulletin 74-90, the upper surface of the sealing materials shall end at a depth of 5 feet below the ground surface (in urban areas). If the well casing was not extracted during destruction and sealing operations, a hole shall be excavated

around the well casing to a depth of 5 feet below the ground surface (i.e., proposed finish pad grade) after sealing operations have been completed and the sealing material has adequately set and cured. The exposed casing shall then be removed by cutting the casing at the bottom of the excavation. The excavation shall be backfilled with clean, native soil or other suitable material (California Department of Water Resources, 1991). The procedure shall be conducted by a licensed water well contractor.

Waste Generation and Storage

No signs of waste generation was observed during our recent site reconnaissance. Locally abundant debris was observed locally along the power line easement road on the west edge of the subject property. Overall, this debris consisted of dumped televisions, furniture, lumber, clothing, and typical household trash. A few piles of dumped concrete rubble was also noted. Other trash observed locally included very minor wind-blown trash. It is recommended that the debris be removed and disposed, in accordance with current regulations.

CONCLUSIONS

General Site Information

- Overall, the Lancaster 171 Project is situated west of the 138 Freeway, south of West Avenue K, east of 60th Street West, and north of West Avenue K-8 in the city of Lancaster, Los Angeles County, California. The subject property consists of approximately 40 acres of undeveloped land with Assessor Parcel Numbers (APN) 3204-010-054, -055, -062, -063 and 3204-011-023, -033, and -034. Access to the site from the north is via West Avenue K and an unimproved power line road (i.e., 55th Street West). Access from the south is from unimproved West Avenue K-8 and an unimproved power line road (55th Street West). Topographically, the site consists of level ground or gently sloping toward the north.
- Based upon our recent site reconnaissance, there is a basin, concrete slab, foundation remnants, and a capped steel riser pipe in the east central portion of property. Information provided in our review of United States Geological Survey (USGS) topographic map on the subject site area (Lancaster West 7.5 Minute Quad) suggests that the riser pipe is a water well. The groundwater depth in 1963 is reported at 144 feet according to California Department of Water Resources website (CDWR, 2015).
- Based on aerial photo information obtained during this assessment, the site appears to have been undeveloped desert land in 1928. By 1940, what appeared to be a small cluster of buildings (farm compound?) was visible near the east central edge of the site. A basin was depicted directly west-southwest. Access to the area was via a dirt road from West Avenue K. Row crops were visible on the northern half of the site, extending offsite to the east. The south half of the property appeared as native desert land. These same property conditions were noted in 1948 and 1953; however, vegetation clearing was visible in the northern portion of the south half of the site in 1953. Additionally, in 1948 what appears to be an oil derrick is visible offsite to the south approximately 600± feet. In 1968, the farming buildings appeared to be abandoned. Dirt roads crossing the property in an east-west direction were visible in the central and southern half of the

property. Residential development was visible to the east along 50th Street West in 1968. Dirt roads increased onsite in 1977 and 1983. Minimal changes to readily detectable site conditions were noted from 1994 to the present. Topographic maps reviewed during this assessment depicted a well onsite and a dirt road along the eastern property boundary, with occasional depiction of a basin and small structure.

- Numerous piles of carpet, furniture, appliances, clothing and typical household trash have been dumped along the unimproved power line road on the west edge of the property (i.e., 55th Street West). None of these piles appeared to be associated with soil discoloration or hazardous materials; however, Petra's field personnel did not disturb the piles or plastic bags. Minor wind-blown debris was also noted onsite.
- An overhead transmission main line was observed along the unimproved dirt road along the west side of the property (i.e., 55th Street West). One cluster of pole-mounted transformers were observed on a wooden pole with a metal tag suggesting placement in 2005. The transformers appeared in good condition, and no surface discoloration was noted around the base of the pole.
- At the time of our reconnaissance, locally dense, small desert-type bushes and grasses were observed within the areas of the site. A few Joshua trees were noted in the southern half of the site.
- No vicinity sites were identified in our search of various government agency database records, which appear to have impacted the soils or groundwater beneath the subject site.
- There was no evidence of sumps, pits, pools, or lagoons identified during our site reconnaissance, except for the basin located near the onsite well and concrete foundation remnants.

RECOGNIZED ENVIRONMENTAL CONDITIONS

Recognized environmental conditions are defined by the American Society of Testing and Materials (ASTM) as any hazardous substance or petroleum product under conditions that indicate an existing, past, or material threat of release into the structures, ground, groundwater, or surface water at the subject site. If the presences of recognized environmental conditions are identified on a subject site, it may warrant additional research, site evaluation, and/or action.

We have performed this Phase I Environmental Site Assessment in general conformance with the scope and limitations of ASTM Practice E 1527 for Proposed *Tentative Tract 71210*, APNs 3204-010-54, -55, -62, -63 and 3204-011-023, -033 and -034, Southeast Corner of West Avenue K and 55th Street West, in the City of Lancaster, Los Angeles County, California. Any exceptions to, or deletions from, this practice are described in section titled data gaps of this report. This assessment has revealed no evidence of recognized environmental conditions in connection with the property.

SITE CONSIDERATIONS

The following items are not considered recognized environmental conditions in accordance with ASTM 1527-13. However, these items may warrant considerations in conjunction with any planned development activities. The information regarding possible actions relative to these items has been provided as guidance.

- It is recommended that all dumped trash and household debris dumped along the western edge of the site be removed and disposed in accordance with current regulations.
- Unless planned for use, the water well near the east central edge of the site should be properly abandoned pursuant to California Department of Water Resources (CDWR) standards. In accordance with CDWR Bulletin 74-90, the upper surface of the sealing materials shall end at a depth of 5 feet below the ground surface (in urban areas). If the well casing was not extracted during destruction and sealing operations, a hole shall be excavated around the well casing to a depth of 5 feet below the ground surface (i.e., proposed finish pad grade) after sealing operations have been completed and the sealing material has adequately set and cured. The exposed casing shall then be removed by cutting the casing at the bottom of the excavation. The excavation shall be backfilled with clean, native soil or other suitable material (California Department of Water Resources, 1991). The procedure shall be conducted by a licensed water well contractor.
- It is unknown if the onsite buildings utilized an onsite sewage disposal system. It is recommended that if a system is encountered during earthwork the septic system should be removed in accordance with current regulations.
- As with any historic agricultural property, there is a potential for buried debris to be encountered during development of the site. As such, we recommend that any unanticipated buried containers/structures/debris encountered during clearing and grubbing or grading be evaluated in-place by Petra prior to removal from the subsurface.
- Our review of historical information indicates that the northern half of the property was utilized for agricultural development. Considering the water well and adjacent basin, there is some potential for buried irrigation lines to consist of asbestos containing materials. In the event asbestos-containing material is encountered during removal, the lines should not be disturbed until they are evaluated by a licensed asbestos consultant.

LIMITATIONS

This Phase I ESA is based upon the project as described and the environmental data obtained from the field reconnaissance and research performed as outlined in this report. This report has not been prepared for use by parties or projects other than those named or described in this report, additional studies may be required.

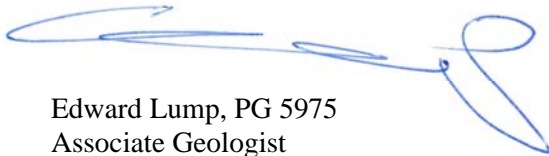
Since our assessment is based upon a review of available data and visual inspection of the site, without any invasive evaluation, the conclusions presented herein are professional opinions. These opinions have been derived in accordance with current standards of practice, and no warranty is expressed or implied.

This firm's evaluation of previous reports and/or subconsultant reports, if provided, focuses on the completeness of the information presented in the document, in accordance with applicable rules and regulations, and does not include the establishment of data sufficiency or accuracy.

QUALIFICATIONS

Resumes for the staff who contributed to this report are presented in Appendix E.

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



Edward Lump, PG 5975
Associate Geologist



Siamak Jafroudi, PhD, GE 2024
President, Senior Principal Engineer

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