

Appendix F.
Hazardous Materials Assessment

MEMORANDUM

To: Peter Vanek, Integral Communities
From: Jamie Schnieders, Audrey Herschberger, Dudek
Subject: Hazardous Materials Assessment for Riverview Development Project
Date: March 6, 2024
Attachments: A – Site Map
B – Historical Aerial Photographs
C – Historical Topographic Maps

This hazardous materials assessment was conducted for the Riverview Development project (project), which includes construction and operation of mixed-use development in the City of Santa Clarita. The proposed project is located on approximately 35.4 acres on Assessor's Parcel Number 2836-011-018 (project site), with approximately 4.22 acres of "offsite improvements" along the southwestern and western edges of the project site. Formerly the Saugus Speedway, the project site is currently used for the Santa Clarita Swap Meet. The project site is located along Soledad Canyon Road with the Santa Clara River to the north and a Metrolink rail line to the south (Attachment A, Site Map). The project site can be accessed to the north via Soledad Canyon Road, an existing public roadway, oriented southeast to northwest.

The proposed project includes the following:

- Construction of 318 single-family units and 121,790 square feet of light industrial space
- Grading of approximately 800,000 cubic yards of soil, balanced on the project site through 500,000 cubic yards of cut and 420,000 cubic yards of fill
- Construction of 819 residential and 143 light industrial parking spaces
- Construction of community recreation facilities, including a pool, spa, barbeque counter, open space, and trails
- Four drainage basins, three along the southern project site border and one along Soledad Canyon Road between the commercial site and the residential development

Overall, the project activities will include site preparation, grading, paving, trenching for utilities, building construction, and application of architectural coatings.

The purpose of this hazardous materials assessment is to determine if there are any potential environmental concerns on the project site related to current or historical handling and storage of hazardous materials and/or wastes. This hazardous materials assessment consists of a review and summary of regulatory agency records,

historical aerial photographs, historical topographic maps, and potential site hazards due to hazardous material pipelines and/or oil and gas wells.

Physical Setting

The project site is located on the former Saugus Speedway in the City of Santa Clarita, which is bordered by Soledad Canyon Road and the Santa Clara River to the north-northeast and the Metrolink rail line to the south-southwest. The average elevation of the project site ranges approximately between 1,185 to 1,296 feet above mean sea level (Google Earth 2022). Surrounding land uses include the Santa Clara River and floodplain followed by residential to the north and northeast, commercial to the southeast and northwest, Metrolink rail line and undeveloped hillsides to the south, and a family counseling center to the northwest (Attachment A, Site Map). The depth to groundwater on the project site, according to 2020 groundwater monitoring, ranges between approximately 20 to 30 feet below ground surface, and groundwater flow direction is towards the west-northwest (AECOM 2020). Yearly variation in depth to groundwater is common in the area of the project site and is highly dependent on precipitation and recharge from the nearby Santa Clara River (Avocet 2007).

Dudek consulted the online California Water Board Groundwater Information System for information about public supply wells in the project site area (GAMA 2024). The closest water supply well was identified approximately 330 feet east of the project site. A decommissioned municipal well, with no available water level data, was identified along the northern boundary of the project site. Six groundwater monitoring wells are located on the project site: two north of the racetrack, two near the center, and two on the hill in the west of the project site (GSI 2022b). These wells and a large number of additional monitoring wells located southeast of the project site are related to the Whittaker/Bermite cleanup site, which is discussed in the Cortese List Sites Section below.

Dudek conducted a search for oil and gas wells within 1 mile of the project site (CalGEM 2024). No active oil and gas wells were identified within 1 mile of the project site. One idle well was identified approximately 900 feet southeast of the project site, and four plugged wells were identified within 1 mile of the project site, to the west, south, southeast, and northeast. Dudek searched the National Pipeline Mapping System and did not identify any pipelines crossing on or adjoining the project site; a natural gas pipeline is located approximately 0.6 miles southwest of the project site along Springbrook Avenue (NPMS 2024).

Online Regulatory Databases

Cortese List Sites

Government Code Section 65962.5 requires the California Environmental Protection Agency (CalEPA) to compile a list of hazardous waste and substances sites (Cortese List). While the Cortese List is no longer maintained as a single list, the following databases provide information that meet the Cortese List requirements:

1. List of hazardous waste and substances sites from Department of Toxic Substances Control (DTSC) EnviroStor database (Health and Safety Codes 25220, 25242, 25356, and 116395)
2. List of leaking underground storage tank sites by county and fiscal year from the State Water Resources Control Board GeoTracker database (Health and Safety Code 25295)

3. List of solid waste disposal sites identified by the State Water Resources Control Board with waste constituents above hazardous waste levels outside the waste management unit (Water Code Section 13273[e] and 14 CCR Section 18051)
4. List of “active” Cease and Desist Orders and Cleanup and Abatement Orders from the State Water Resources Control Board (Water Code Sections 13301 and 13304)
5. List of hazardous waste facilities subject to corrective action pursuant to Section 25187.5 of the Health and Safety Code, identified by DTSC

Dudek conducted a search of the above-described databases that provide information on Cortese List sites. One site was identified on the EnviroStor database (State Response; DTSC 2024), and 17 leaking underground storage tank sites were identified on the GeoTracker database within 1 mile of the project site (SWRCB 2024). Based on the environmental conditions, distance from the project site, and regulatory status of each of the Cortese List sites, it was determined that the following site has potentially impacted the environmental conditions of the project site:

The Former Whittaker/Bermite Facility, 22116 Soledad Canyon Road, is located on 996 acres east-southeast of and adjacent to the project site. The site was used as a manufacturer, storage facility, and testing site for explosives from 1934 to 1987. Soil, perched groundwater, and a drinking water aquifer at the site have been contaminated with trichloroethylene, tetrachloroethylene (PCE), 1,1,1-trichloroethane, and perchlorate. Remediation activities, including soil vapor extraction, bioremediation, and pump and treat, have taken place since closure of the facilities and continue to be implemented across the site. Ongoing monthly summary reports detailing the work completed across the site are provided to DTSC, pursuant to the “Imminent and Substantial Endangerment Determination and Order and Remedial Action Order” issued to the site in 2002 (GSI 2022a). Munitions and explosives of concern (unexploded ordnance) (MEC/UXO) were suspected on the site in 2016; by February 2020 the areas of concern were excavated and capped to eliminate the danger (Amec 2016; GSI 2020). According to information provided in the most recent quarterly monitoring report, the groundwater flow direction is to the southwest, toward the project site (GSI 2024). As such, groundwater and soil vapor at the project site were impacted. Six permanent groundwater monitoring wells were installed throughout the project site in 2004 to monitor the extent of the Whittaker/Bermite Facility contamination. Groundwater and soil vapor remediation began on the Former Whittaker/Bermite Facility in 2017. Remediation activities are ongoing under the oversight of DTSC.

A per- and poly-fluoroalkyl substances (PFAS) investigation was conducted at the Former Whittaker/Bermite Facility in 2023, utilizing existing monitoring wells, including those on the project site (GSI 2023). Results of the study identified PFOA, PFOS, and PFHxS¹ in groundwater beneath the Former Whittaker/Bermite Facility and the project site. These concentrations were compared to regional groundwater data collected by Santa Clarita Valley Water Agency, and it was determined the PFOA, PFOS, and PFHxS concentrations were attributed to offsite and upgradient sources. All detections on the project site were at or below 10 nanograms per liter (ng/L).

As it pertains to the project site, groundwater remediation activities have successfully reduced the extent of groundwater contamination in the area, including that which impacted the project site,

¹ PFOA = perfluorooctanoic acid; PFOS = perfluorooctane sulfonate; PFHxS = perfluorohexane sulfonate

with the exception of recently identified PFAS contamination. As of May 2020, groundwater monitoring wells on the project site do not have detectable concentrations of PCE and trichloroethylene (AECOM 2020). Further investigations have been conducted on the project site under a Voluntary Cleanup Agreement with DTSC, which are discussed in the following section, Non-Cortese List Hazardous Materials Sites.

Non-Cortese List Hazardous Materials Sites

Dudek reviewed other online databases that provide environmental information on release and cleanup cases in the State of California. While these databases are not included in the Cortese List, they may provide additional information regarding potential environmental contamination on the project site. These sites may include military cleanups and voluntary cleanups. Table 1 provides a summary of the databases searched.

Table 1. Online Database Listings

Database	Details
California Environmental Protection Agency (CalEPA) https://siteportal.calepa.ca.gov/nsite/	The CalEPA Regulated Site Portal is a website that combines data about environmentally regulated sites and facilities in California into a single, searchable database and interactive map. Data sources include California Environmental Reporting System (CERS), EnviroStor, GeoTracker, California Integrated Water Quality System (CIWQS), and Toxics Release Inventory (TRI).
Department of Toxic Substance Control (DTSC) EnviroStor https://www.envirostor.dtsc.ca.gov/	DTSC’s data management system for tracking cleanup, permitting, enforcement, and investigation efforts at hazardous waste facilities and sites with known contamination or sites where there may be reasons for further investigation.
Regional Water Quality Control Board (RWQCB) GeoTracker http://geotracker.waterboards.ca.gov/	The California RWQCB’s data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater. GeoTracker contains records for sites that require cleanup, various unregulated projects, and permitted facilities. Sites include leaking underground storage tanks (LUSTs), Department of Defense, Cleanup Program, Irrigated Lands, Oil and Gas Production, Permitted underground storage tanks (USTs), and Land Disposal Sites.

The project site was identified in the EnviroStor Database as a voluntary cleanup site (DTSC 2024). In 2007, a preliminary endangerment assessment (PEA) was completed for the project site (Avocet 2007). The PEA evaluated site conditions and the potential for environmental contamination related to historical site use and adjoining contaminated sites. This included historical agricultural use (pesticides/herbicides), automotive use (petroleum hydrocarbons, metals, polyaromatic hydrocarbons, polychlorinated biphenyls, and volatile organic compounds [VOCs]), the adjoining Whittaker/Bermite Facility (VOCs) and buildings with lead-based paint (lead). The PEA identified VOCs and perchlorate in the groundwater on the project site that originated from the Whittaker/Bermite site (Avocet 2007). The PEA also identified lead concentrations in soil above regulatory screening levels applicable at that time, which were believed to be attributed to lead-based paint on existing site structures (Avocet 2007). The 2007 PEA references five underground storage tanks (USTs) containing fuel and potentially heating oil. While all five former tanks were believed to have been removed, evidence of removal for only three was identified (Avocet 2007).

Additional investigations were completed between 2007 and 2021, and in that time groundwater remediation was conducted at the Former Whittaker/Bermite Facility. Many of the structures believed to have lead-based paints were also removed. A 2021 Phase II subsurface investigation was completed on the project site, which included collection of 21 soil samples and installation and sampling of 12 dual-depth soil vapor probes on the project site. VOCs were not identified in soil vapor above applicable risk-based levels (with the exception of one sample, discussed below), and elevated concentrations of lead above applicable screening levels were not observed in soil (GSI 2021; DTSC 2021). DTSC agreed that no further risk to human health was present and issued a no further action (NFA) determination for the project site with approved unrestricted land use (DTSC 2021).

The project site was also identified on the GeoTracker and CalEPA databases (SWRCB 2024). The GeoTracker listing is for waste discharge requirements related to car wash activities beginning in 1975. This case was last inspected in August 2002 and is now closed and considered “historical.” The project site is listed on the CalEPA database as a hazardous waste generator and a chemical storage facility, containing propane and diesel fuel.

Based on the available information discussed above, the following potential project site impacts were identified:

- It is noted that PCE was observed in soil vapor at 580 micrograms per meter cubed ($\mu\text{g}/\text{m}^3$) at 15 feet below ground surface at one location on the project site during the 2021 investigation (GSI 2021). The shallower soil vapor sample, at 5 feet below ground surface, had a lower concentration of 420 $\mu\text{g}/\text{m}^3$. It was concluded that this elevated concentration was localized, and additional off-gassing was expected to continue to decrease concentrations. The shallower PCE concentration, when evaluated using a future residential attenuation factor of 0.001,² was below the applicable residential screening criteria (GSI 2021). DTSC has reviewed this information and provided an NFA with unrestricted land use for the project site.
- It is noted that soils with elevated lead concentrations observed during the 2007 investigation may still be present on the project site, as the exact locations were not sampled again in the subsequent investigations. However, these concentrations are likely localized and are expected to be commingled with clean soils and removed during site grading. As such, they are likely de minimis to the proposed project.
- While previous investigations and historical documentation have not identified any existing USTs, USTs were historically present on the project site. Documentation of removal was only found for three of the five USTs (Avocet 2007). Geophysical surveys completed in the areas of the two undocumented USTs did not reveal evidence of subsurface features, and it is believed all USTs have been removed (Avocet 2007). However, as full documentation of the removal or type of decommissioning is not available, there is the potential for a UST or associated UST features (such as piping) to be present on the project site
- Hazardous materials may still be present on the project site, such as propane and fuels. These materials would require proper removal and disposal before development of the project site.
- PFAS were recently identified in groundwater at concentrations at or below 10 ng/L. These concentrations appear to be related to regional groundwater impacts, and are likely related to offsite and upgradient releases (GSI 2023).

² This attenuation factor is provided in the 2011 DTSC/CalEPA Vapor Intrusion Guidance Document, published October 2011.

Site History

Based on a review of the historical aerial photographs, historical topographic maps, and other available reports, the subject property was used for agriculture as early as the 1920s. Pesticide use is common for agricultural operations and has potential to impact the environmental conditions of the project site. However, soil samples collected during the 2007 PEA did not identify concentrations of pesticide- or herbicide-related contamination in soils on the project site (Avocet 2007). In 1929, the project site featured a residence and a racetrack. The racing activities on the project site likely included the use of lubricants, oils, fuel, and paint. Currently, the project site is listed as a hazardous waste generator and a chemical storage facility, containing propane and diesel fuel (CalEPA 2024). The racetrack briefly originated as a rodeo space, transitioned to the Saugus Speedway motor racetrack from approximately 1937 to 1995, and is presently used for the Santa Clarita Swap Meet.

The project site contains several outbuildings scheduled for demolition or removal (GSI 2021; Google Earth 2022). Paint manufacturers frequently used lead as a primary paint ingredient through the 1940s and gradually decreased its use in the 1950s and 1960s. Other hazardous building materials may be present in the buildings on the project site due to their age. Materials of concern on the project site include asbestos, commonly used in building materials in the 1970s and 1980s; polychlorinated biphenyls, used in fluorescent lighting fixtures; and mercury from thermostat switches. Two lead surveys were conducted on the project site, one for the bleacher stands (Atkins 2012) and one for two small buildings associated with the former residence located in the northwest corner of the project site (Decker 2019; Bonelli 2022). Both surveys identified lead in the surface paints of these structures above the Los Angeles County action level of 0.7 mg/cm² in building paints. As of the date of this report, the bleachers have been removed, but no remediation was conducted on the two small buildings (Bonelli 2022). No other lead surveys have been conducted; as such, remaining buildings have not been evaluated. A limited asbestos survey was completed in 2002 on the residential structure scheduled for demolition (Glenfos 2002). The survey identified asbestos in the roofing materials above the Environmental Protection Agency (EPA) threshold of 1% by weight. This building was removed in 2002 (Bonelli 2022).

As discussed in the 2007 PEA, buildings and other structures on the project site, built prior to the 1970s, were assumed to contain lead-based paint due to elevated lead concentrations (up to 180 milligrams per kilogram [mg/kg]) identified in the soil (Avocet 2007). Detections of lead in the soil on the project site were concentrated around the racetrack bleachers, and other elevated concentrations were observed near the former machine shop (southeastern portion of the project site) and the former garage (northwest portion of the project site). The bleachers, and soils containing lead surrounding the bleachers, were removed (Avocet 2017). As discussed in the Non-Cortese List Hazardous Materials Sites Section of this memo, soil samples collected in 2021 did not contain concentrations of lead above residential screening levels provided by DTSC³ and the U.S. Environmental Protection Agency⁴ (GSI 2021; DTSC 2021). While lead concentrations are below the residential screening levels in the soil samples from 2021, the sampling locations do not exactly match with previous subsurface investigations, and isolated concentrations may be present on the project site. However, these isolated contaminated soils are likely to mix with clean soil during the large-scale grading activities related to future construction of the project site, thereby making any remaining lead a de minimis condition.

The properties to the north, west, and south of the project site remained undeveloped until the introduction of a Forestry Camp, north of the Santa Clara River in 1943. The Former Whittaker/Bermite Facility, an explosives

³ DTSC HERO Human Health Risk Assessment (HHRA) Note 3, DTSC-modified Screening Levels (DTSC-SLs), June 2020.

⁴ U.S. Environmental Protection Agency Regional Screening Levels (RSLs), November 2020.

manufacturer, began operations in 1934 and was closed by 1987. A family counseling center was built adjoining the project site to the northwest in 1977. The Santa Clarita Metro Link Station was built southeast of and adjacent to the project site between 1992 and 1996. North of the Santa Clara River, a residential community and park were built by 2010. The Southern Pacific Railroad borders the south–southwestern boundary of the project site, but the hills south of the railroad remain widely undeveloped throughout the historical record.

The Southern Pacific Railroad has bounded the project site to the southwest since as early as 1903. Contaminants common in railway corridors include wood preservatives (e.g., creosote, arsenic), heavy metals, and asbestos in ballast rock/shallow soils. In addition, soils in and adjacent to these corridors might contain herbicide residues as a result of historic and ongoing weed abatement practices. Soil samples taken in 2021 along the southwestern border of the project site, near the railroad easement, did not detect any contaminants related to the railroad (GSI 2021). Due to the results of recent sampling near the railroad and the presence of a large easement separating the project site from the railroad, it is unlikely the railroad has impacted the environmental conditions on the project site.

Historical Aerial Photographs

Dudek reviewed historical aerial photographs obtained from Nationwide Environmental Title Research for 1947, 1952, 1959, 1969, 1974, 1977, 1985, 1992, 1996, 2000, 2005, 2010, 2014, and 2018 (Attachment B). Dudek also reviewed aerial photographs from Google Earth for 2022 (Google Earth 2022). The photographs provided background information to assess the possibility of past activities that could present environmental concerns. The aerial photographs are described in Table 2.

Table 2. Summary of Aerial Photographs

Date	Project Site	Adjoining and Surrounding Areas
1947	The project site appears to have a racetrack in the eastern portion with bleachers surrounding the track. A building is observed in the northeast corner of the project site, surrounded by trees. Two identical buildings are located at the center of the project site with an auxiliary structure and a small orchard to the west. At the base of the hill in the western portion of the project site, another building is observed surrounded by several trees. In the western portion of the project site, a trail extends up the hill to a square structure at the hill’s peak.	The areas surrounding the subject property to the north, west, and south appear undeveloped. The lot adjoining the project site to the east is cleared, with two rectangular buildings to the southeast. Several buildings and other structures appear to the southeast of the project site. The Santa Clara River is observed to the north of the project site on the other side of present-day Soledad Canyon Road. A rail line borders the southern boundary of the project site.
1952	The project site appears similar to the 1947 aerial photograph.	The adjoining and surrounding properties appear similar to the 1947 aerial photographs.
1959	The majority of the project site appears similar to the 1952 aerial photograph. The orchard to the west of the buildings in the center of the project site is no longer observed.	The adjoining properties appear similar to the 1952 aerial photographs. Development (land grading) is observed across the Santa Clara River to the north of the project site.
1969	The racetrack now appears to have added routes crisscrossing through the center in a figure eight. The bleachers for the eastern segment of the racetrack appear to have been	A new structure is observed in the previously vacant lot adjoining the project site to the southeast. Light-use dirt roads appear to lead to a water tower in the hills to the south of the project site.

Table 2. Summary of Aerial Photographs

Date	Project Site	Adjoining and Surrounding Areas
	removed. The undeveloped space in front of the buildings in the center of the project site appears to have grown grass. The trail in the western portion of the project site appears to be getting overgrown with vegetation.	
1974	The project site appears similar to the 1969 aerial photograph.	Another building is observed in the lot adjoining the project site to the southeast. Several other features, possibly storage containers, are observed north of the buildings southeast adjoining the project site. Present-day Soledad Canyon Road appears to have been widened, and a median is now observed in the center of the road.
1977	The project site appears mostly similar to the 1974 aerial photograph. The trail in the western portion of the project site appears to have been cleared of vegetation.	Previously observed exterior storage is no longer observed on the southeastern adjoining site. A small building appears in the hills south of the project site, west of the water tower. A building is observed on the west-adjoining lot to the project site. Another, larger building appears in the lot further west on Soledad Canyon Road. More structures are observed in the area of development north of the Santa Clara River.
1985	Several trees appear to have been removed from around the racetrack to the north. The rest of the project site appears similar to the 1977 aerial photograph.	A large clearing is observed in the hills south of the project site, to the north of the water tower. Two more commercial buildings are observed west of the project site on Soledad Canyon Road. Some grading is observed northeast of the project site, east of the development north of the Santa Clara River.
1992	The building in the western portion of the project site is no longer observed. The trail in the western portion of the project site appears to be overgrown.	The eastern-most building in the southeastern adjoining lot appears to be under construction. A space to the west of the development north of the Santa Clara River has been cleared of vegetation.
1996	One of the two buildings in the center of the project site appears to have been demolished. Half of the vacant lot to the north of the center buildings appears paved. The figure eight in the center of the racetrack appears to have faded.	A wide, unpaved road leading to a small white structure is observed in the hills to the south of the project site. The water tower is no longer observed in the hills. Additional grading is observed north of the Santa Clara River. The lot adjoining the project site to the southeast is now observed to be a parking lot with a paved road along its borders.
2000	The remaining building at the center of the project site is no longer observed. A new route within the racetrack is observed.	A dirt road is observed parallel to the Santa Clara River to the north, connecting the cleared grading area and the other developed lot and extending east. A white building is observed in the southern portion of the lot adjoining the project site to the southeast.
2005	The racetrack is now observed in the original oval shape. One building in the center of the project site is observed on the footprint of the previously demolished building.	The adjoining and surrounding properties appear similar to the 2000 aerial photograph.

Table 2. Summary of Aerial Photographs

Date	Project Site	Adjoining and Surrounding Areas
2010	The project site appears similar to the 2005 aerial photograph.	The development north of the Santa Clara River appears to have been cleared. Directly west of it, residential track homes are observed with paved roads throughout the community. Pre-construction and paved roads are observed to the east of the new community.
2014	The paved parking area appears to have been extended to the west on the project site. The remaining areas of the project site appear similar to the 2010 aerial photograph.	An area to the southeast of the project site appears to be cleared of vegetation and graded for more residential units. More track homes appear to have been built in the graded areas north of the Santa Clarita River.
2018	Many vehicles and canopies are spaced out throughout the project site. The image was likely taken during the Santa Clarita Swap Meet. The features of the project site appear similar to the 2014 aerial photograph.	A park with walking paths is observed between the two residential communities north of the Santa Clara River. Homes are now observed within the graded area to the east of the project site. A bridge crosses Soledad Canyon Road from the homes east of the project site.
2022	A Google Maps image of the project area from May 2022 appears similar to the 2018 aerial photograph. The image clearly shows several auxiliary structures throughout the project area. A fenced-off dirt area appears in the northeast corner of the project area. Two other fenced-off areas are observed along the southern border of the project site.	A gravel area with shipping containers is observed in the hills southwest of the project site. The southeast-adjointing lot to the project site is labeled as the Santa Clarita Metrolink Station.

Note: See Attachment B for corresponding photographs for 1947 through 2018. The 2022 Google Earth photo is available online and therefore is not included in Attachment B.

Historical Topographic Maps

Dudek reviewed historical topographic maps from 1903, 1908, 1916, 1924, 1929, 1933, 1939, 1943, 1953, 1958, 1970, 1988, 1999, 2012, 2015, and 2018 (Attachment C). The topographic maps are a historical source that can be used to document the prior use of the subject property and surrounding area. The topographic maps are described in Table 3.

Table 3. Summary of Topographic Maps

Date	Project Site	Adjoining and Surrounding Properties
1903	The project site is depicted on the floodplain of an intermittent river. The river flows southeast to northwest along the northeastern portion of the project site. A road runs along the southern border of the project site, parallel to a single-track railroad.	A dirt road is observed on the north side of the intermittent river. The road comes from northwest of the project site and terminates approximately 500 feet northeast of the project site. South of the project site, elevation increases indicate the presence of hills.
1908	The project site is similar to its appearance on the 1905 topographic map.	The adjoining and surrounding properties are similar to their appearance on the 1905 topographic map.

Table 3. Summary of Topographic Maps

Date	Project Site	Adjoining and Surrounding Properties
1916	The project site is similar to its appearance on the 1908 topographic map.	The adjoining and surrounding properties are similar to their appearance on the 1908 topographic map.
1924	The project site is similar to its appearance on the 1916 topographic map.	The adjoining and surrounding properties are similar to their appearance on the 1916 topographic map.
1929	A racetrack and bleachers are depicted on the project site. A dirt road is depicted through the center of the project site from east to west. The dirt road circles in front of a building and exits the project site onto another road, which bounds the project site to the northeast. Two buildings are depicted along the dirt road in the eastern portion of the project site.	The dirt road to the north of the project site, across the intermittent river, is no longer depicted on the map. The railroad adjoining the project site to the south is labeled as "Southern Pacific." The area north of the project site is labeled "Baker Ranch." A depression is depicted to the west of the project site and across the railroad to the south of the project site. A dirt road is depicted east of the project site, with two buildings on either side. The road running parallel to the railroad is no longer depicted on the map. Two intermittent drainages appear in the hills south of the project site.
1933	A water body is depicted on the hill in the western portion of the project site. The remaining areas of the project site appear similar to the 1929 topographic map.	The road bordering the northeastern portion of the project site appears to be depicted as Sierra Highway. Two buildings are observed at the end of the dirt road to the east of the project site.
1939	The project site appears similar to its appearance in the 1933 topographic map.	The adjoining and surrounding properties are similar to their appearance on the 1933 topographic map.
1943	The project site is similar to the 1939 topographic map, although less features are represented.	Baker Ranch is now depicted as Bonelli Ranch. The dirt road north of the Santa Clara River is again depicted with six buildings at the terminus. A second road is depicted from the Sierra Highway toward the two buildings at the end of the dirt road east of the project site. The area south of the project site is labeled as Saugus.
1953	Seven new buildings are observed on the project site. The previously dirt road is again depicted without the circle in front of the building in the western portion of the project site. The water body on the hill in the west of the project site no longer depicted.	Two water tanks are depicted in the hills south of the project site. Many buildings are depicted in the area southeast of the project site. Shrubland is depicted south and north of the project site. Eight buildings are depicted north of the Santa Clara River and are identified as a Forestry Camp.
1958	The project site is similar to its appearance on the 1953 topographic map.	The adjoining and surrounding properties are similar to their appearance on the 1953 topographic map.
1970	The project site is similar to its appearance on the 1958 topographic map.	A large building is depicted in the southeastern adjoining lot to the project site. A tank is depicted in the hills south of the project site, west of the previously noted water tank.
1988	More bleachers are depicted in the northwestern corner of the racetrack. The remaining area of the project site appears similar to the 1970 topographic map.	Five more buildings are depicted in the southeastern adjoining lot. Several dirt roads are depicted in the hills south of the project site. One L-shaped building is depicted on the lot west-adjacent to the project site. Five buildings are depicted west of the project site, along Soledad Canyon Road. The Forestry Camp is now depicted as LACO Camp and has three more buildings. A dirt road extends east from LACO Camp.

Table 3. Summary of Topographic Maps

Date	Project Site	Adjoining and Surrounding Properties
1999	Three buildings are no longer depicted on the project site: two in the southeast corner and one in the center of the project site.	One, large cross-shaped building is depicted to the northeast of the project site, across the Santa Clara River. The remaining adjoining and surrounding properties appear similar to the 1988 topographic map.
2012	The project site appears to be identified as Saugus Speedway, next to Bonelli Ranch. All structures previously depicted are no longer observed on the project site.	Bonelli Ranch is depicted southwest of the project site. The road to the southeast is now labeled as a Commuter Way. Many new roads are depicted surrounding Los Angeles County Camp 10, formerly labeled LACO Camp, north of the Santa Clara River.
2015	The project site appears similar to the 2012 topographic map, apart from the Saugus Speedway label.	Commuter Way, southeast of the project site, no longer extends south into the hills but is horseshoe-shaped with both ends connecting with Soledad Canyon Road. Floodplain sand deposits are depicted northwest of the project site, north adjacent to the Santa Clara River.
2018	A road extends into the project site from the east and curves to the northeast to connect back to Soledad Canyon Road.	The road in the project site originates from crossing through Commuter Way to the southeast of the project site. The Santa Clara River floodplain is mapped to the north of the project site with marshes flanking both sides of the valley.

Note: See Attachment C for corresponding photographs for 1905 through 2018.

Summary and Conclusions

The proposed project site, approximately 35.4 acres with 4.22 acres of off-site improvements, is located in the Saugus Community of the City of Santa Clarita. The project site is currently being used for the Santa Clarita Swap Meet and is primarily graded and paved, particularly throughout the eastern portion of the project site. A hill in the western portion of the project site separates it from the northwest adjoining property. The project site is bounded by undeveloped hills and a MetroLink rail line to the south and southwest, a family counseling center to the northwest, Soledad Canyon Road and the Santa Clara River to the north and northeast, and the Santa Clarita MetroLink Station to the east-southeast. The proposed project involves mixed-use development of the project site, including 318 single-family units, 120,790 square feet of light industrial space, parking, and a community space with several recreational features.

The project site was used for agriculture through 1929, when the Saugus Speedway racetrack was built. The racetrack operated from approximately 1937 to 1995. The Santa Clarita Swap Meet began using the project site in the 1960s until present. The Former Whittaker/Bermite Facility is a former manufacturer of explosives, which operated to the east of the project site from 1934 through 1987. The MetroLink Station, southeast of the project site, was constructed between 1992 and 1996 on the pre-existing Southern Pacific Railroad. The Southern Pacific Railroad runs adjacent to the southwest boundary of the project site. Concerns related to nearby railroads would include wood preservatives (e.g., creosote, arsenic), heavy metals, asbestos, and herbicides. Recent soil sampling, the paved nature of the project site, and the wide railroad easement indicate it is unlikely the railroad has impacted the project site.

The project site is not listed on the Cortese List databases, although the nearby Whittaker/Bermite Facility to the southeast of the project site is listed and remediation efforts are ongoing. Contamination of groundwater and soil

vapor from the Whittaker/Bermite Facility had historically impacted the project site. However, remediation efforts that have occurred on the Former Whittaker/Bermite facility have reduced groundwater impacts such that they no longer impact the project site. Groundwater sampling conducted as part of that ongoing remediation show no detected concentrations of VOCs in groundwater beneath the project site, nor concentrations that are below applicable regulatory screening levels. Residual soil vapor contamination, mainly elevated concentrations of PCE, were identified in a 2021 subsurface investigation (GSI 2021). However, it was concluded that this elevated concentration was localized, and additional off-gassing was expected to continue to decrease concentrations. Shallower PCE concentrations in the same area, when evaluated using a future residential attenuation factor of 0.001, were below the applicable residential screening criteria (GSI 2021). A recent PFAS investigation identified PFOA, PFOS, and PFHxS in groundwater at concentrations at or below 10 ng/L, which were similar to regional concentrations observed throughout the Santa Clarita Valley (GSI 2023).

The project site had a Voluntary Cleanup agreement with DTSC, which received NFA designation in March 2022. This cleanup was initiated with a PEA completed in 2007 (Avocet 2007), which identified lead contamination in soil associated with lead-based paints on the on-site buildings and VOC contamination in soil vapor and groundwater associated with the adjoining Former Whittaker/Bermite facility. Multiple investigations; removal of the bleachers, contaminated soils, and many other buildings; and remediation on the Whittaker/Bermite site have reduced identified contamination to levels below applicable screening levels. As such, DTSC has issued an NFA with unrestricted land use for the project site.

Potential Impacts and Recommendations

Based on the information reviewed for this hazardous materials assessment, Dudek identified the following potential impacts on the project site:

- PCE was observed in soil vapor at 580 $\mu\text{g}/\text{m}^3$ at 15 feet below ground surface at one location on the project site during the 2021 investigation (GSI 2021). This concentration is above residential screening levels established by DTSC.⁵ The shallower soil vapor sample in the same location, at 5 feet below ground surface, had a lower concentration of 420 $\mu\text{g}/\text{m}^3$, which is below the residential screening level. It was concluded that this elevated concentration was localized, and additional off-gassing was expected to continue to decrease concentrations. DTSC has reviewed this information and provided an NFA with unrestricted land use for the project site. There is a potential that this elevated soil gas concentration could impact breathing zone during excavation activities, and health and safety measures may be warranted.
- It is noted that soils with elevated lead concentrations observed during the 2007 investigation may still be present on the project site, as the exact locations were not sampled again in the subsequent investigations. However, these concentrations are likely localized and are expected to be commingled with clean soils and removed during site grading. As such, they are likely de minimis to the proposed project. Should isolated excavations occur in areas where elevated lead concentrations were previously identified, these soils could require sampling or special handling procedures for lead prior to disposal.
- While previous investigations and historical documentation have not identified any existing USTs, USTs were historically present on the project site. Documentation of removal was only found for three of the five former USTs (Avocet 2007). Geophysical surveys completed in the areas of the two undocumented USTs did not

⁵ DTSC HERO Human Health Risk Assessment (HHRA) Note 3, DTSC-modified Screening Levels (DTSC-SLs), June 2020 with an attenuation factor of 0.001 as published in the 2011 DTSC/CalEPA Vapor Intrusion Guidance Document (October 2011).

reveal evidence of subsurface features, and it is believed all USTs have been removed (Avocet 2007). However, as full documentation of the removal or type of decommissioning is not available, there is the potential for a UST or associated UST features (such as piping) to be present on the project site. A contingency may be warranted, with procedures for identification, documentation, and appropriate removal of USTs, should they be found during construction activities.

- Hazardous materials may still be present on the project site, such as propane and automotive fuels. These materials require proper removal and disposal before development of the project site.
- Remaining structures may contain hazardous building materials, such as lead-based paint, asbestos-containing materials, polychlorinated biphenyls, or other metals. Two small buildings near the northwest corner of the project site are known to contain lead-based paint that has not been remediated (Decker 2019; Bonelli 2022). A hazardous materials survey may be required prior to building demolition to identify hazardous building materials in other buildings that have not been surveyed. Known hazardous materials and those identified in future surveys should be properly abated prior to or during demolition activities.

PFAS were recently identified in groundwater at concentrations at or below 10 ng/L. These concentrations appear to be related to regional groundwater impacts, and are likely related to offsite and upgradient releases (GSI 2023). References

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Atkins (Atkins Environmental Help, Inc.). *Specific Environmental Assessment, Limited Lead Based Paint Survey of the Bleacher Stands, Santa Clarita Swap Meet.* April 27, 2012.

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Attachment A

Site Map



Project Site

- ▭ APN 2836011018
- ▭ Impact Area

SOURCE: (c) 2009 Microsoft Corporation and its data suppliers

DUDEK



ATTACHMENT A
Site Map

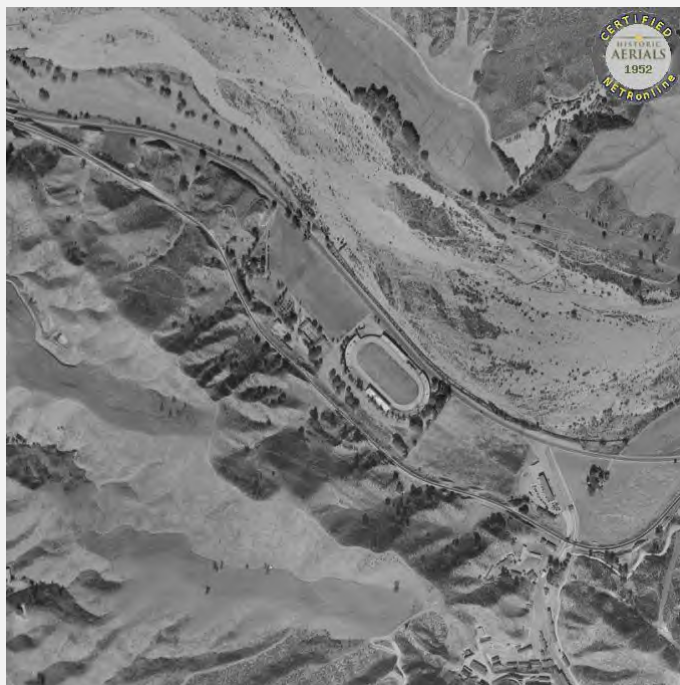
Riverview Development Project

Attachment B

Historical Aerial Photographs



Aerial 1. Aerial photograph of the project site from 1947.



Aerial 2. Aerial photograph of the project site from 1952.



Aerial 3. Aerial photograph of the project site from 1959.



Aerial 4. Aerial photograph of the project site from 1969.



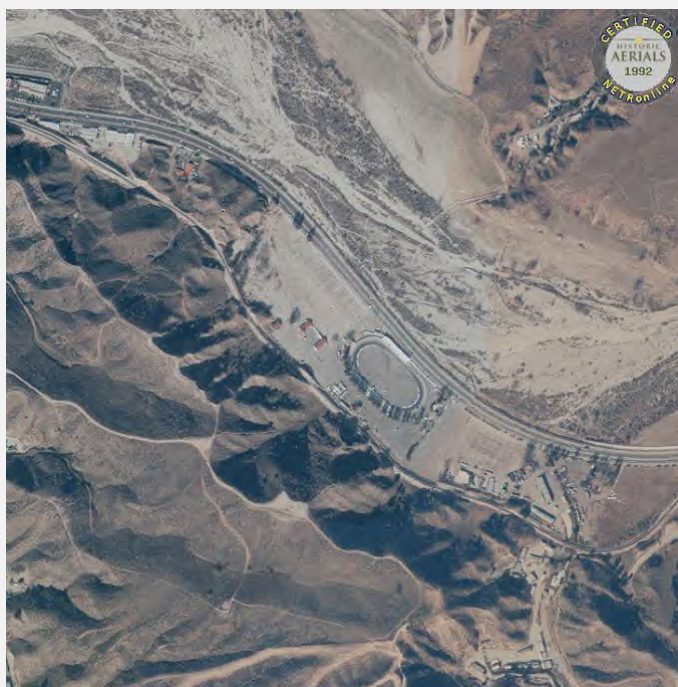
Aerial 5. Aerial photograph of the project site from 1974.



Aerial 6. Aerial photograph of the project site from 1977.



Aerial 7. Aerial photograph of the project site from 1985.



Aerial 8. Aerial photograph of the project site from 1992.



Aerial 9. Aerial photograph of the project site from 1996.



Aerial 10. Aerial photograph of the project site from 2000.



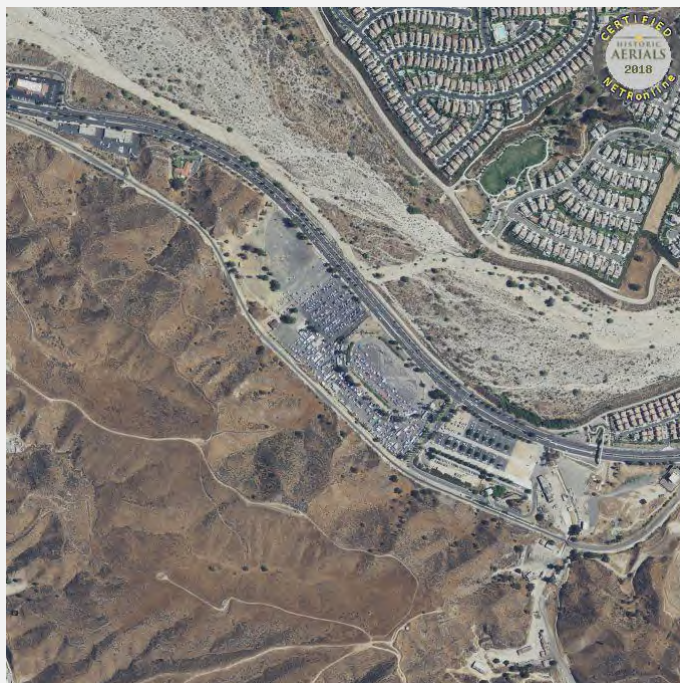
Aerial 11. Aerial photograph of the project site from 2005.



Aerial 12. Aerial photograph of the project site from 2010.



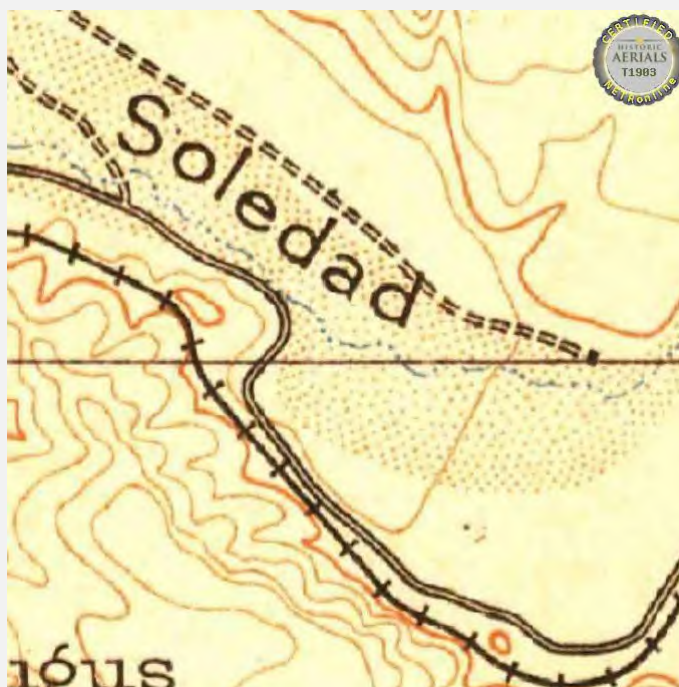
Aerial 13. Aerial photograph of the project site from 2014.



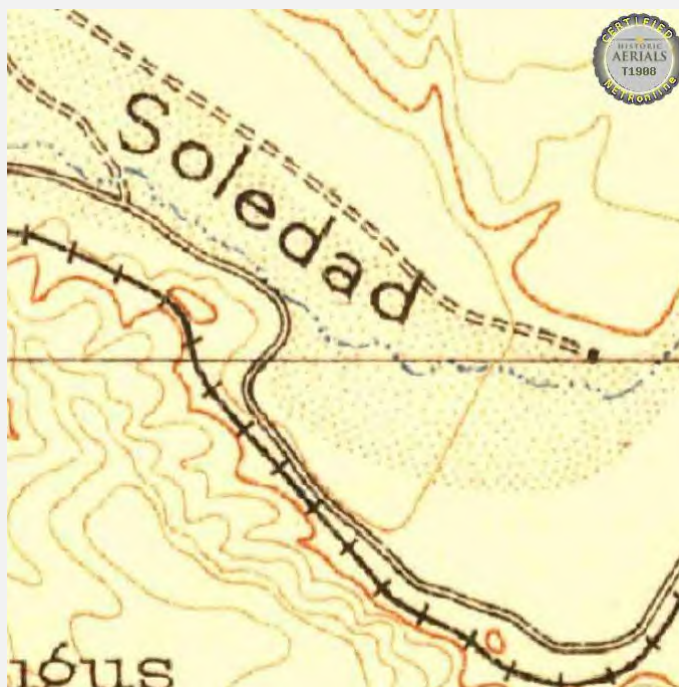
Aerial 14. Aerial photograph of the project site from 2018.

Attachment C

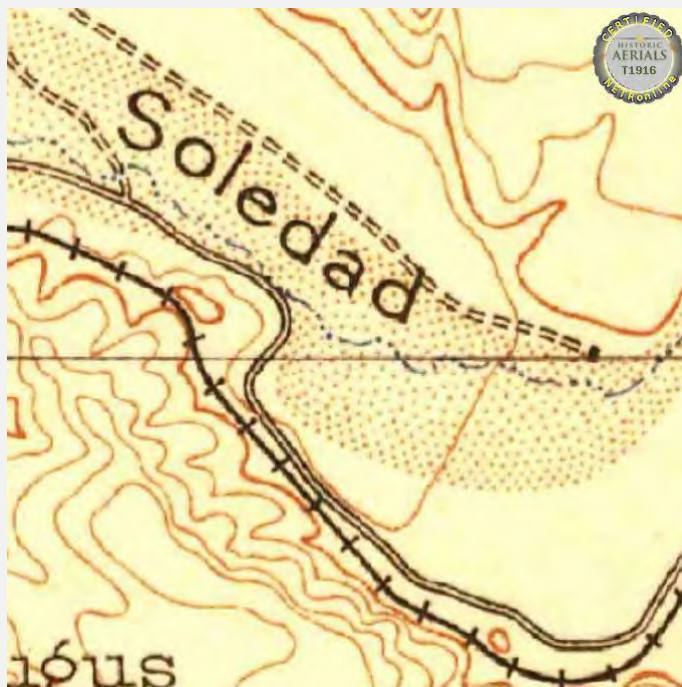
Historical Topographic Maps



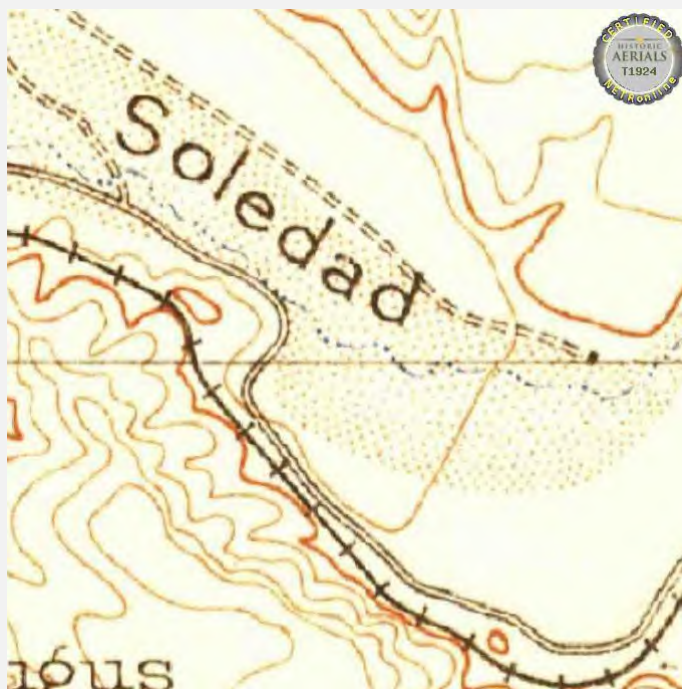
Topographic Map 1. Topographic map of the project site in 1903.



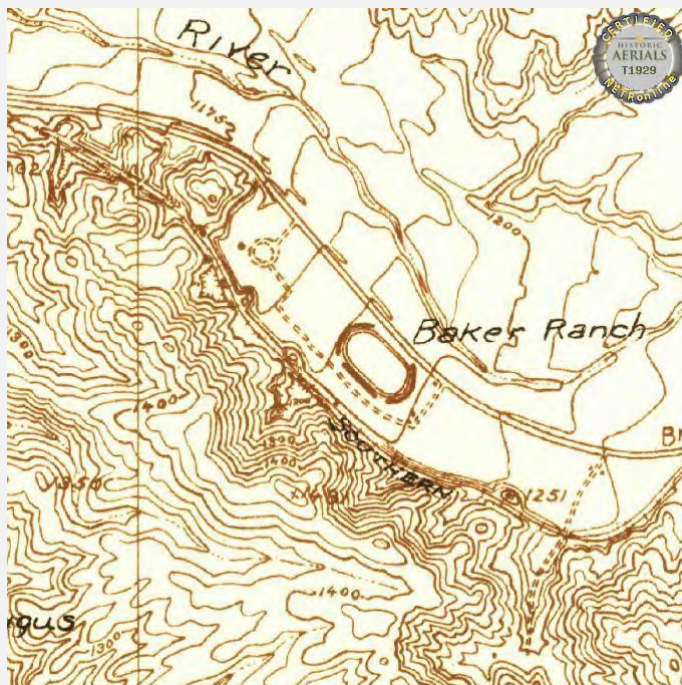
Topographic Map 2. Topographic map of the project site in 1908.



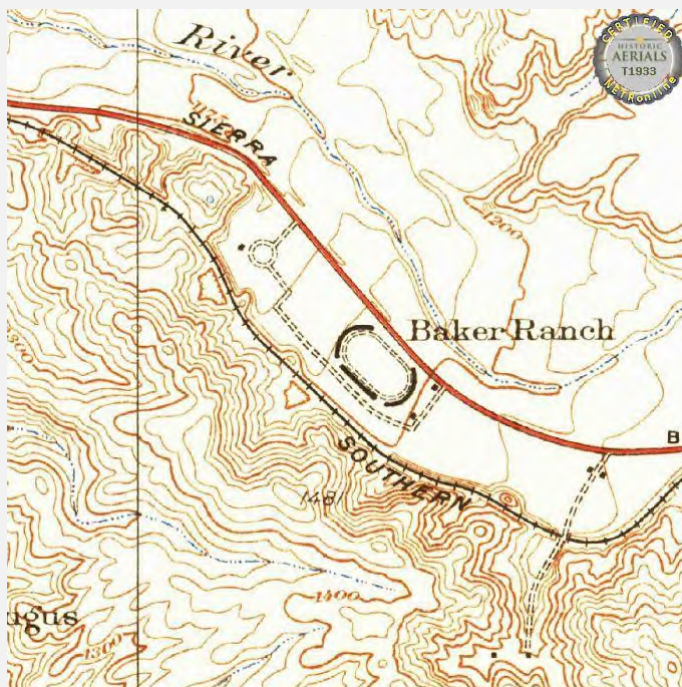
Topographic Map 3. Topographic map of the project site in 1916.



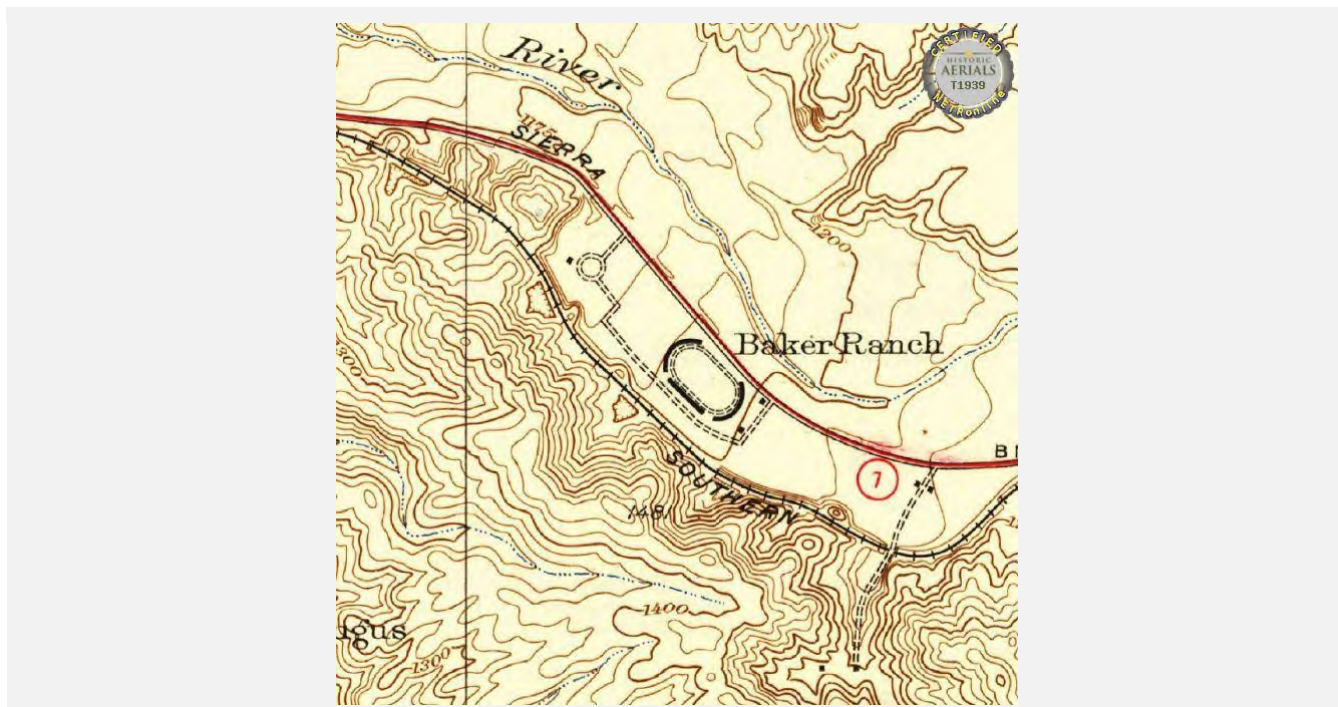
Topographic Map 4. Topographic map of the project site in 1924.



Topographic Map 5. Topographic map of the project site in 1929.



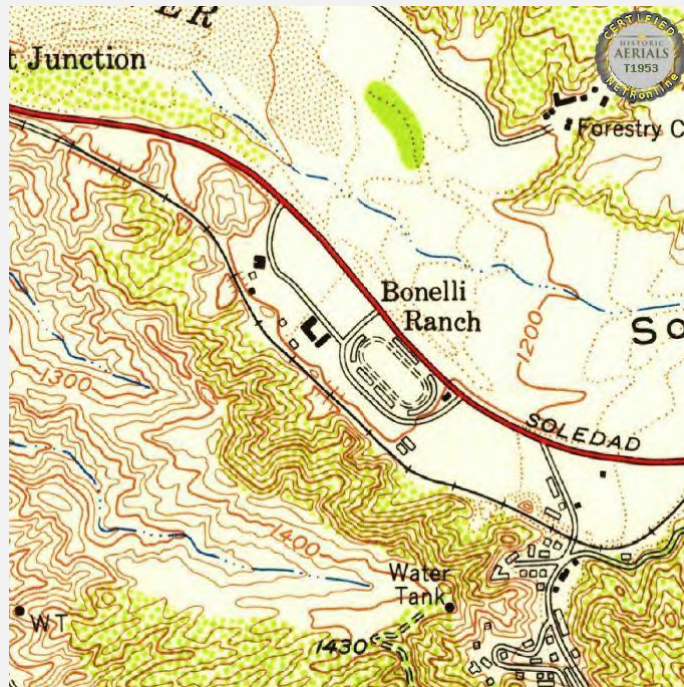
Topographic Map 6. Topographic map of the project site in 1933.



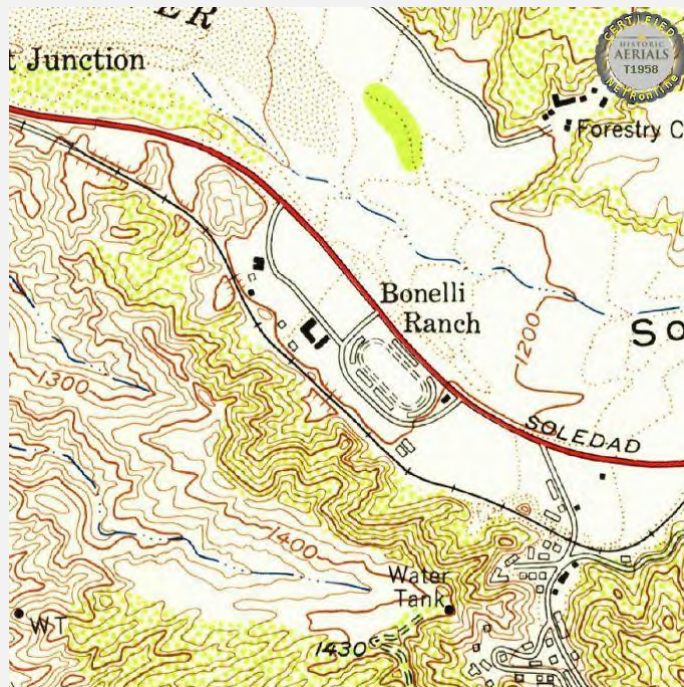
Topographic Map 7. Topographic map of the project site in 1939.



Topographic Map 8. Topographic map of the project site in 1943.



Topographic Map 9. Topographic map of the project site in 1953.



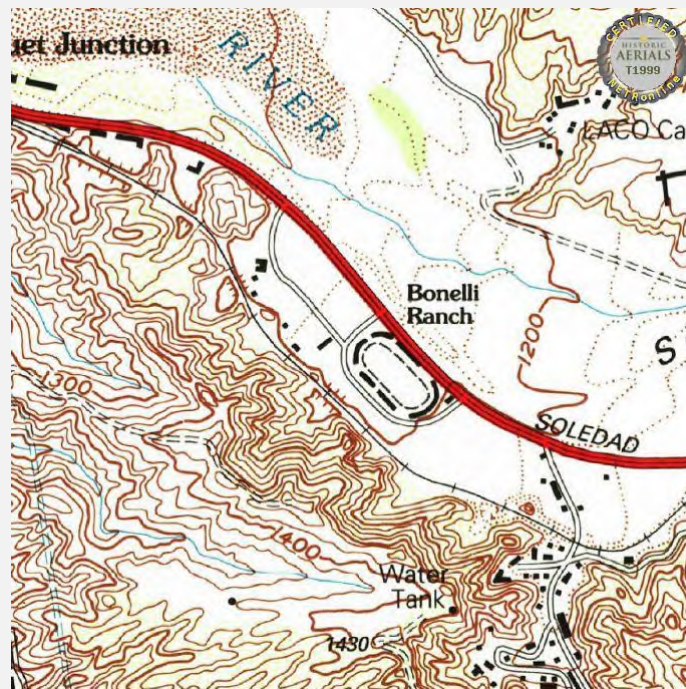
Topographic Map 10. Topographic map of the project site in 1958.



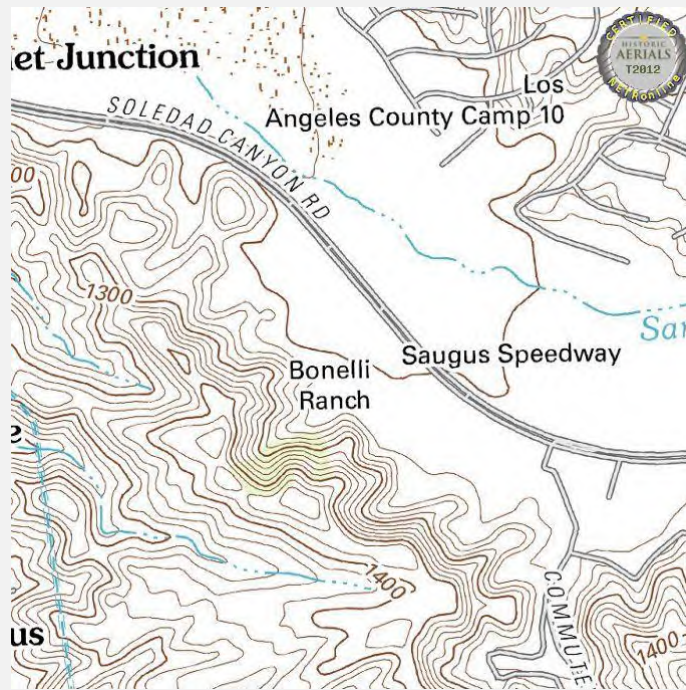
Topographic Map 11. Topographic map of the project site in 1970.



Topographic Map 12. Topographic map of the project site in 1988.



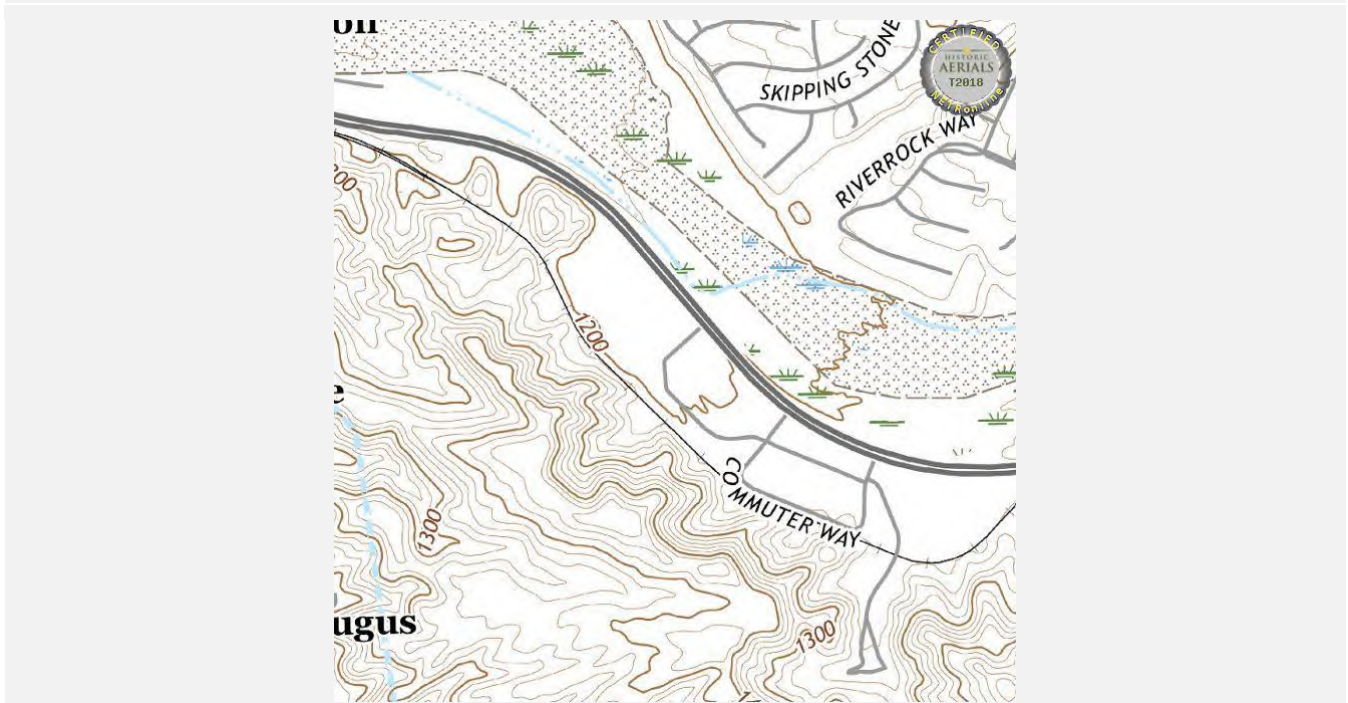
Topographic Map 13. Topographic map of the project site in 1999.



Topographic Map 14. Topographic map of the project site in 2012.



Topographic Map 15. Topographic map of the project site in 2015.



Topographic Map 16. Topographic map of the project site in 2018.