INITIAL STUDY AND MITIGATED NEGATIVE DECLARATION

FOR THE

INEZ ESTATES SUBDIVISION

June 2020

Prepared for:

City of Brentwood
150 City Park Way
Brentwood, CA 94513
(925) 516-5400

Prepared by:

De Novo Planning Group
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De Novo Planning Group

A Land Use Planning, Design, and Environmental Firm

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Proposed Mitigated Negative Declaration for the Inez Estates Subdivision

Lead Agency:
City of Brentwood
150 City Park Way
Brentwood, CA 94513

Project Title: Inez Estates Subdivision

Project Location: The Inez Estates Subdivision (project site) includes approximately 4.08 located in the northern portion of the City of Brentwood. The site is identified by Assessor's Parcel Numbers (APN) 018-080-022 and 018-080-025. The project site is bounded by Lone Tree Way to the north, Valley Oak Nursery to the west, ranch style residential to the south, and Gann Street to the east.

Project Description: Cyrus Land Investment, LLC, proposes to develop the Inez Estates Subdivision, (project, proposed project, proposal, or Inez Subdivision). The proposed project includes a Rezone and a Tentative Subdivision Map that would facilitate the development of 11 single-family residential parcels, three onsite bioretention areas, and dedication of land and construction of a new trail to the City's Trail System, and other related site improvements on approximately 4.08 acres. The average lot sizes would be approximately 10,067 square feet.

Access to the site would be via a proposed cul-de-sac road off of Gann Street, south of Lone Tree Way. Street lighting and sidewalks are proposed along the proposed interior street within the project site.

Findings:

In accordance with the California Environmental Quality Act, the City of Brentwood has prepared an Initial Study to determine whether the proposed project may have a significant adverse effect on the environment. The Initial Study and Proposed Mitigated Negative Declaration reflect the independent judgment of City of Brentwood staff. On the basis of the Initial Study, the City of Brentwood hereby finds:

> *Although the proposed project could have a significant adverse effect on the environment, there will not be a significant adverse effect in this case because the project has incorporated specific provisions to reduce impacts to a less than significant level and/or the mitigation measures described herein have been added to the project. A Mitigated Negative Declaration has thus been prepared.*

The Initial Study, which provides the basis and reasons for this determination, is attached and/or referenced herein and is hereby made a part of this document.

_____ _____

Signature Date

Proposed Mitigation Measures:

The following Mitigation Measures are extracted from the Initial Study. These measures are designed to avoid or minimize potentially significant impacts, and thereby reduce them to an insignificant level. A Mitigation Monitoring and Reporting Program (MMRP) is an integral part of project implementation to ensure that mitigation is properly implemented by the City and the implementing agencies. The MMRP will describe actions required to implement the appropriate mitigation for each CEQA category including identifying the responsible agency, program timing, and program monitoring requirements. Based on the analysis and conclusions of the Initial Study, the impacts of proposed project would be mitigated to less-than-significant levels with the implementation of the mitigation measures presented below.

AESTHETICS

Mitigation Measure AES-1*: In conjunction with development of the proposed project, the developer shall shield all on-site lighting so that nighttime lighting is directed within the project site and does not illuminate adjacent properties. A detailed lighting plan shall be submitted for the review and approval by the Community Development Department and the Public Works Department in conjunction with the project improvement plans. The lighting plan shall indicate the locations and design of the shielded light fixtures.*

AGRICULTURAL RESOURCES

Mitigation Measure AG-1: *The Project applicant must preserve agricultural lands by paying an in-lieu fee established by City Council resolution. The fee may be adjusted annually but may not be increased by more than ten percent during any twelve-month period.*

AIR QUALITY

Mitigation Measure AIR-1: *Prior to the issuance of a grading permit, the Applicant/Developer shall prepare an Erosion Prevention and Dust Control Plan. The plan shall be followed by the project's grading contractor and submitted to the City of Brentwood's Public Works Department, which will be responsible for field verification of the plan during construction.*

The plan shall comply with the City's grading ordinance and shall include the following control measures and other measures as determined by the Public Works Department to be necessary in order to achieve full compliance with the City's grading ordinance:

- *Cover all trucks hauling construction and demolition debris from the site;*
- *Water all exposed or disturbed soil surfaces at least twice daily;*
- *Use watering to control dust generation during demolition of structures or break-up of pavement;*
- *Pave, apply water three time daily, or apply (non-toxic) soil stabilizers on all unpaved parking areas and staging areas;*
- *Sweep daily (with water sweepers) all paved parking areas and staging areas;*
- *Provide daily clean-up of mud and dirt carried onto paved streets from the site;*
- *Enclose, cover, water twice daily or apply non-toxic soil binders to exposed stockpiles (dirt, sand, etc.);*
- *Limit traffic speeds on unpaved roads to 15 mph;*
- *Install sandbags or other erosion control measures to prevent silt runoff to public roadways;*
- *Replant vegetation in disturbed areas as quickly as possible;*
- *Install wheel washers for all exiting trucks, or wash off the tires or tracks of all trucks and equipment leaving the site;*
- *Install wind breaks, or plant trees/vegetative wind breaks at windward side(s) or construction areas;*
- *Suspend excavation and grading activity when winds (instantaneous gusts) exceed 25 mph;*
- *Limit the area subject to excavation, grading, and other construction activity at any one time;*
- *Unnecessary idling of construction equipment shall be avoided;*
- *Equipment engines shall be maintained in proper working condition per manufacturers' specifications;*
- *During periods of heavier air pollution (May to October), the construction period shall be lengthened to minimize the amount of equipment operating at one time within hours allowed by the City of Brentwood Municipal Code and General Plan;*

- *Where feasible, the construction equipment shall use cleaner fuels, add-on control devices and conversion to cleaner engines.*

Mitigation Measure AIR-2: *To the extent feasible, construction employees shall be hired from local populations, since it is more likely that they have been previously exposed to the fungus which causes Valley Fever and are therefore immune.*

Mitigation Measure AIR-3: *During periods of high dust in the grading phase, crews must use National Institute for Occupational Safety and Health (NIOSH) approved N95 masks or better or other more stringent measures in accordance with the California Division of Occupational Safety and Health regulations.*

Mitigation Measure AIR-4: *The operator cab of grading and construction equipment must be enclosed and air-conditioned.*

BIOLOGICAL RESOURCES

Mitigation Measure BIO-1*: Prior to any ground disturbance, a qualified biologist shall conduct a preconstruction survey for San Joaquin kit fox. Preconstruction surveys will be conducted within 30 days of ground disturbance. Preconstruction survey requirements include but are not limited to mapping of all dens within the project site footprint and within a 250-foot radius of the project site, and the provision of written survey results to the USFWS within five working days after surveying. If San Joaquin kit foxes and/or suitable dens are identified in the survey area, the applicant shall consult with the USFWS and CDFW to establish a mitigation plan that meets the requirements established within the USFWS Standardized Recommendations for Protection of the endangered San Joaquin Kit Fox Pior to or During Ground Disturbance. Ground disturbing activities shall not commence until the USFWS and CDFW verify that all required mitigation and avoidance measures have been properly implemented.*

Mitigation Measure BIO-2A*: Prior to any ground disturbance related to activities covered under the ECCCHCP, a preconstruction survey of the 4.08-acre development plan area shall be completed. The surveys shall establish the presence or absence of western burrowing owl and/or habitat features, and evaluate use by owls in accordance with CDFW survey guidelines.*

An approved biologist will conduct a preconstruction survey in areas identified in the planning surveys as having potential burrowing owl habitat. The surveys will establish the presence or absence of western burrowing owl and/or habitat features and evaluate use by owls in accordance with CDFW survey guidelines (California Department of Fish and Game 1995). On the parcel where the activity is proposed, the biologist will survey the proposed disturbance footprint and a 500- foot radius from the perimeter of the proposed footprint to identify burrows and owls. Adjacent parcels under different land ownership will not be surveyed. Surveys should take place near sunrise or sunset in accordance with CDFW guidelines. All burrows or burrowing owls will be identified and mapped. Surveys will take place no more than 30 days prior to construction. During the breeding season (February 1—August 31), surveys will document whether burrowing owls are nesting in or directly adjacent to disturbance areas. During the nonbreeding season (September 1—January 31), surveys will document whether burrowing owls are using habitat in or directly adjacent to any disturbance area. Survey results will be valid only for the season (breeding or nonbreeding) during which the survey is conducted. If burrowing owls and/or burrows are identified in the survey area, Mitigation Measure 3B shall be implemented. If burrowing owls and/or suitable burrows are not discovered, then further mitigation is not necessary.

Mitigation Measure BIO-2B*: If burrowing owls are found during the breeding season (February 1—August 31), the project proponent will avoid all nest sites that could be disturbed by project construction during the remainder of the breeding season or while the nest is occupied by adults or young. Avoidance will include establishment of a non-disturbance buffer zone (described below). Construction may occur during the breeding season if a qualified biologist monitors the nest and determines that the birds have not begun egg-laying and incubation or that the juveniles from the occupied burrows have fledged. During the nonbreeding season (September 1 —January 31), the project proponent should avoid the owls and the burrows they are using, if possible. Avoidance will include the establishment of a buffer zone (described below). During the breeding season, buffer zones of at least 250 feet in which no construction activities can occur will be established around each occupied burrow (nest site). Buffer zones of 160 feet will be established around each burrow being used during the nonbreeding season. The buffers will be delineated by highly visible, temporary construction fencing, if occupied burrows for burrowing owls are not avoided, passive relocation will be*

implemented. Owls should be excluded from burrows in the immediate impact zone and within a 160-foot buffer zone by installing one-way doors in burrow entrances. These doors should be in place for 48 hours prior to excavation. The project area should be monitored daily for 1 week to confirm that the owl has abandoned the burrow. Whenever possible, burrows should be excavated using hand tools and refilled to prevent reoccupation (California Department of Fish and Game 1995). Plastic tubing or a similar structure should be inserted in the tunnels during excavation to maintain an escape route for any owls inside the burrow.

Mitigation Measure BIO-3*: Prior to any ground disturbance a pre-construction survey for covered migratory birds shall be completed. This survey shall be conducted in the morning or evening hours within 30 days prior to any construction activities. The entire site, including the alder tree and surrounding vegetation, will be surveyed for birds, nests and nesting behavior. Common nesting behavior by birds includes; collecting nesting materials, bringing food items to a nest and vocalizations from young or from adults to attract a mate and to establish or defend a nesting territory. A construction-free buffer of suitable dimensions must be established around any active migratory bird nests (up to 250 feet, depending on the location and species) for the duration of the project or until it has been determined that the chicks have fledged and are independent of their parents.*

CULTURAL RESOURCES

Mitigation Measure CUL-1: *Prior to grading permit issuance, the developer shall submit plans to the Community Development Department for review and approval which indicate (via notation on the improvement plans) that if historic and/or cultural resources are encountered during site grading or other site work, all such work shall be halted immediately within the area of discovery and the developer shall immediately notify the Community Development Department of the discovery. In such case, the developer shall be required, at their own expense, to retain the services of a qualified archaeologist for the purpose of recording, protecting, or curating the discovery as appropriate. The archaeologist shall be required to submit to the Community Development Department for review and approval a report of the findings and method of curation or protection of the resources. Further grading or site work within the area of discovery would not be allowed until the preceding work has occurred.*

Mitigation Measure CUL-2: *Pursuant to California Health and Safety Code §7050.5(c), if human bone or bone of unknown origin is found during construction, all work shall stop with 100 feet of the find and the Contra Costa County Coroner shall be contacted immediately. If the remains are determined to be Native American, then per California Public Resources Code §5097.98, the coroner shall notify the Native American Heritage Commission, who shall notify the person believed to be the most likely descendant. The most likely descendant shall work with the contractor to develop a program for reinternment of the human remains and any associated artifacts. Additional work is not to take place within 100 feet of the find until the identified appropriate actions have been implemented.*

GEOLOGY AND SOILS

Mitigation Measure GEO-1*: All project buildings shall be designed in conformance with the current edition of the California Building Code (CBC).*

Mitigation Measure GEO-2*: Prior to grading permit issuance, the applicant shall submit a final geotechnical evaluation of the project site that analyzes soil stability including soil expansion, and the potential for lateral spreading, subsidence, liquefaction or collapse. The report shall identify any on site soil and seismic hazards and provide design recommendations for onsite soil and seismic conditions. The geotechnical evaluation shall be reviewed and approved by the Director of Public Works/City Engineer, Chief Building Official, and a qualified Geotechnical Engineer to ensure that all geotechnical recommendations specified in the geotechnical report are properly incorporated and utilized in the project design in order to adhere to all geotechnical requirements contained in the California Building Code.*

Mitigation Measure GEO-3*: All grading and foundation plans for the development shall be designed by a Civil and Structural Engineer and reviewed and approved by the Director of Public Works/City Engineer, Chief Building Official, and a qualified Geotechnical Engineer prior to issuance of grading and building permits to ensure that all geotechnical recommendations specified in the geotechnical report are properly incorporated and utilized in the project design in order to adhere to all geotechnical requirements contained in the California Building Code.*

Mitigation Measure GEO-4*: Prior to grading permit issuance, the applicant shall submit a final grading plan to the Director of Public Works/City Engineer for review and approval. If the grading plan differs significantly from the proposed grading illustrated on the approved project plans, plans that are consistent with the new revised grading plan shall be provided for review and approval by the Director of Public Works/City Engineer.*

Mitigation Measure GEO-5*: Any applicant for a grading permit shall submit an erosion control plan to the Director of Public Works/City Engineer for review and approval. The plan shall identify protective measures to be taken during construction, supplemental measures to be taken during the rainy season, the sequenced timing of grading and construction, and subsequent revegetation and landscaping work to ensure water quality in creeks and tributaries in the General Plan Area is not degraded from its present level. All protective measures shall be shown on the grading plans and specify the entity responsible for completing and/or monitoring the measure and include the circumstances and/or timing for implementation.*

Mitigation Measure GEO-6*: Grading, soil disturbance, or compaction shall not occur during periods of rain or on ground that contains freestanding water. Soil that has been soaked and wetted by rain or any other cause shall not be compacted until completely drained and until the moisture content is within the limit approved by a Soils Engineer. Approval by a Soils Engineer shall be obtained prior to the continuance of grading operations. Confirmation of this approval shall be provided to the Public Works Department prior to commencement of grading.*

HAZARDS AND HAZARDOUS MATERIALS

Mitigation Measure HAZ-1: *The project proponent shall implement soil excavation and disposal in accordance with section 4.3.3 Alternative 3 Soil Excavation/Off-site Disposal and section 5.0 Removal Action Implementation, as detailed in the Removal Work Action Plan included in Appendix H of this IS/MND. Prior to implementation of ground disturbing activities, a grading permit shall be obtained with the City of Brentwood for approval. Excavation work shall be conducted by a licensed grading contractor with current hazardous material certifications. Work activities will be conducted Monday – Friday between 7:00 AM and 6:00 PM.*

Mitigation Measure HAZ-2: *Prior to the transportation and disposal of contaminated soils, a hauling plan/permit shall be submitted to the City of Brentwood for approval. Transportation and disposal of soils shall be conducted in accordance with the Transportation Plan identified in Appendix B of the Removal Action Work Plan.*

Mitigation Measure HAZ-3: *Upon completion of soil excavation, disposal, and confirmation sampling, the project proponent shall prepare a Removal Action Completion Report documenting Site activities. The report shall provide all compiled laboratory data and disposal manifests for the project. The report shall be signed by a California Professional Engineer and/or Professional Geologist. The report shall be submitted to DTSC for review and approval. The City of Brentwood shall not permit any additional site grading or earthwork on the subject parcel until the City has received confirmation from DTSC that the remediation efforts have been satisfactorily completed, as required by the conditions established in both the RAW and VCA.*

HYDROLOGY AND WATER QUALITY

Mitigation Measure HYD-1*: Prior to issuance of grading permits, the contractor shall prepare a Storm Water Pollution Prevention Plan (SWPPP). The Developer shall file the Notice of Intent (NOI) and associated fee to the SWRCB. The SWPPP shall serve as the framework for identification, assignment, and implementation of BMPs. The contractor shall implement BMPs to reduce pollutants in stormwater discharges consistent with the requirements established in 15.52.60(F): Erosion and Sediment Control of the City's municipal code. The SWPPP shall be submitted to the Director of Public Works/City Engineer for review and approval and shall remain on the project site during all phases of construction. Following implementation of the SWPPP, the contractor shall subsequently demonstrate the SWPPP's effectiveness and provide for necessary and appropriate revisions, modifications, and improvements to reduce pollutants in stormwater discharges to the maximum extent practicable.*

Mitigation Measure HYD-2*: Prior to the completion of construction the applicant shall prepare and submit, for the City's review, an acceptable Stormwater Control Operation and Maintenance Plan. In addition, prior to the sale, transfer, or permanent occupancy of the site the applicant shall be responsible for paying for the long-term maintenance of treatment facilities, and executing a Stormwater Management Facilities Operation and Maintenance Agreement and Right of Entry in the form provided by the City of Brentwood. The applicant shall accept the responsibility for maintenance of stormwater management facilities until such responsibility is transferred to another entity.*

The applicant shall submit, with the application of building permits, a draft Stormwater Facilities and Maintenance Plan, including detailed maintenance requirements and a maintenance schedule for the review and approval by the Director of Public Works/City Engineer. Typical routine maintenance consists of the following:

- *Limit the use of fertilizers and/or pesticides. Mosquito larvicides shall be applied only when absolutely necessary.*
- *Replace and amend plants and soils as necessary to insure the planters are effective and attractive. Plants must remain healthy and trimmed if overgrown. Soils must be maintained to efficiently filter the storm water.*
- *Visually inspect for ponding water to ensure that filtration is occurring.*
- *After all major storm events, remove bubble-up risers for obstructions and remove if necessary.*
- *Continue general landscape maintenance, including pruning and cleanup throughout the year.*
- *Irrigate throughout the dry season. Irrigation shall be provided with sufficient quantity and frequency to allow plants to thrive.*
- *Excavate, clean and or replace filter media (sand, gravel, topsoil) to insure adequate infiltration rate (annually or as needed).*

Mitigation Measure HYD-3*: Design of both the on-site drainage facilities shall meet with the approval of both the Director of Public Works/City Engineer and the Contra Costa County Flood Control and Water Conservation District prior to the issuance of grading permits.*

Mitigation Measure HYD-4*: Contra Costa County Flood Control and Water Conservation District drainage fees for the Drainage Area shall be paid prior to issuance of grading permits to the satisfaction of the Director of Public Works/City Engineer.*

Mitigation Measure HYD-5*: The Applicant/Developer shall ensure that the project site shall drain into a street, public drain, or approved private drain, in such a manner that un-drained depressions shall not occur. Satisfaction of this measure shall be subject to the approval of the Director of Public Works/City Engineer.*

Mitigation Measure HYD-6*: The construction plans shall indicate roof drains emptying into a pipe leading to the project bioswale areas for the review and approval of the Director of Public Works/City Engineer prior to the issuance of building permits.*

Mitigation Measure HYD-7*: The improvement plans shall indicate concentrated drainage flows not crossing sidewalks or driveways for the review and approval of the Director of Public Works/City Engineer prior to the issuance of grading permits.*

NOISE

Mitigation Measure NOI-1: *Prior to approval of project improvement plans, the improvement plans for the proposed project shall show that the first-row lots shall be shielded from the Lone Tree Way through the use of eight-foot tall masonry sound walls, constructed of materials that will achieve exterior noise levels of 65 dB Ldn, per the approval of the City Engineer. The approximate locations of these barriers are shown on Figure 7. Other types of barrier may be employed but shall be reviewed by an acoustical engineer prior to being constructed.*

Mitigation Measure NOI-2: *Construction activities shall be limited to the hours set forth below:*

Monday-Friday 7:00 AM to 3:30 PM or until 5:30 PM with written approval from the City Engineer
Saturday 8:00 AM to 5:00 PM with written approval from the City Engineer

Construction shall be prohibited on Sundays and City holidays. These criteria shall be included in the grading plan submitted by the applicant/developer for review and approval of the Community Development Director prior to issuance of grading permits. Exceptions to allow expanded construction activities shall be reviewed on a case-by-case basis as determined by the Chief Building Official and/or City Engineer.

Mitigation Measure NOI-3: *The project contractor shall ensure that the following construction noise BMPs are met on-site during all phases of construction:*

- *All equipment driven by internal combustion engines shall be equipped with mufflers, air-inlet silencers where appropriate, and any other shrouds, shields, or other noise-reducing features in good operating condition that*

meet or exceed original factory specifications. Mobile or fixed "package" equipment (e.g., arc welders, air compressors) shall be equipped with shrouds and noise- control features that are readily available for that type of equipment.

- *All mobile or fixed noise-producing equipment used on the project site that are regulated for noise output by a federal, state, or local agency shall comply with such regulations while in the course of project activity.*
- *The construction contractor shall utilize "quiet" models of air compressors and other stationary noise sources where technology exists.*
- *At all times during project grading and construction, stationary noise-generating equipment shall be located as far as practicable from sensitive receptors and placed so that emitted noise is directed away from residences.*
- *Unnecessary idling of internal combustion engines shall be prohibited.*
- *Construction staging areas shall be established at locations that would create the greatest distance between the construction-related noise sources and noise-sensitive receptors nearest the project site during all project construction activities, to the extent feasible.*
- *Construction site and access road speed limits shall be established and enforced during the construction period.*
- *The use of noise-producing signals, including horns, whistles, alarms, and bells, shall be for safety warning purposes only.*
- *Project-related public address or music systems shall not be audible at any adjacent receptor.*
- *Neighbors located adjacent to the construction site shall be notified of the construction schedule in writing.*
- *The construction contractor shall designate a "noise disturbance coordinator" who would be responsible for responding to any local complaints about construction noise. The disturbance coordinator shall be responsible for determining the cause of the noise complaint (e.g., starting too early, poor muffler, etc.) and instituting reasonable measures as warranted to correct the problem. A telephone number for the disturbance coordinator shall be conspicuously posted at the construction site.*

Construction noise BMPs shall be included in the grading plan submitted by the developer for review and approval by the Community Development Director prior to grading permit issuance.

PUBLIC SERVICES

Mitigation Measure PUB-1: *Prior to building permit issuance for any residential development, the developer shall submit to the Community Development Department written proof from the Liberty Union High School District and the Brentwood Union School District that appropriate school mitigation fees have been paid.*

Mitigation Measure PUB-2: *Prior to the recordation of final map(s), the project applicant shall pay the required park in-lieu fees as determined by the Parks and Recreation Department and the Community Development Department.*

TRIBAL CULTURAL RESOURCES

Mitigation Measure TRI-1: *If cultural resources are discovered during project-related construction activities, all ground disturbances within a minimum of 50 feet of the find shall be halted until a qualified professional archaeologist can evaluate the discovery. The archaeologist shall examine the resources, assess their significance, and recommend appropriate procedures to the lead agency to either further investigate or mitigate adverse impacts. If the find is determined by the lead agency in consultation with the Native American tribe traditionally and culturally affiliated with the geographic area of the project site to be a tribal cultural resource and the discovered archaeological resource cannot be avoided, then applicable mitigation measures for the resource shall be discussed with the geographically affiliated tribe. Applicable mitigation measures that also take into account the cultural values and meaning of the discovered tribal cultural resource, including confidentiality if requested by the tribe, shall be completed (e.g., preservation in place, data recovery program pursuant to PRC §21083.2[i]). During evaluation or mitigative treatment, ground disturbance and construction work could continue on other parts of the project site.*

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INITIAL STUDY

PROJECT TITLE

Inez Estates Subdivision Project

LEAD AGENCY NAME AND ADDRESS

City of Brentwood
150 City Park Way
Brentwood, CA 94513

CONTACT PERSON AND PHONE NUMBER

Crystal De Castro, Associate Planner
City of Brentwood
Community Development Department
(925) 516-5405

PROJECT SPONSOR'S NAME AND ADDRESS

Cyrus Land Investments, LLC
c/o Brian Kesler
4021 Port Chicago HWY
Concord, CA 94520
(925) 671-7711

PURPOSE OF THE INITIAL STUDY

An Initial Study (IS) is a preliminary analysis, which is prepared to determine the relative environmental impacts associated with a proposed project. It is designed as a measuring mechanism to determine if a project will have a significant adverse effect on the environment, thereby triggering the need to prepare an Environmental Impact Report (EIR). It also functions as an evidentiary document containing information, which supports conclusions that the project will not have a significant environmental impact or that the impacts can be mitigated to a "Less Than Significant" or "No Impact" level. If there is no substantial evidence, in light of the whole record before the agency, that the project may have a significant effect on the environment, the lead agency shall prepare a Negative Declaration (ND). If the IS identifies potentially significant effects, but: (1) revisions in the project plans or proposals would avoid the effects or mitigate the effects to a point where clearly no significant effects would occur, and (2) there is no substantial evidence, in light of the whole record before the agency, that the project as revised may have a significant effect on the environment, then a Mitigated Negative Declaration (MND) shall be prepared.

This Initial Study has been prepared consistent with CEQA Guidelines Section 15063, to determine if the proposed Inez Subdivision (project) may have a significant effect upon the environment. Based upon the findings and mitigation measures contained within this report, a Mitigated Negative Declaration (MND) will be prepared.

BACKGROUND

On July 22, 2014, the City of Brentwood City Council adopted a comprehensive General Plan Update, which was last updated in 1993 (a partial update involving the Growth Management, Land Use, and Circulation Elements was completed in 2001). An Environmental Impact Report (EIR) prepared for the General Plan Update, addressed the potential impacts associated with full build-out of the General Plan Land Use Diagram. The 2014 Brentwood General Plan Update EIR was certified by the Brentwood City Council on July 22, 2014. The General Plan Update Land Use Map designates the project site as Residential Very Low Density (R-VLD). Residential Very Low Density land uses are required to have a density of between 1.1 and 3.0 dwelling units per gross acre, with a mid-range of 2.0 units per gross acre. In accordance with Section 15150 of the CEQA Guidelines (Section 21083.3 of the Public Resources Code), this Initial Study will tier from the previously certified Environmental Impact Report (EIR) (SCH# 2014022058) prepared for the Brentwood General Plan Update.

PROJECT LOCATION AND SETTING

PROJECT LOCATION

The project site consists of approximately 4.08 acres located in the northern portion of the City of Brentwood. The project site is bounded by Lone Tree Way to the north, Valley Oak Nursery to the west, ranch style residential to the south, and Gann Street to the east. The project site can be identified by its Assessor's Parcel Numbers (APN) 018-080-022 and 018-080-025. The project's location is shown in Figure 1.

EXISTING SITE USES

The project site is currently vacant, undeveloped land that contained past agricultural uses. The project site contains a 20-foot sewer easement along the eastern boundary of the project site. A 30-foot ECCID (East Contra Costa Irrigation District) easement for agricultural and landscape irrigation water adjoins the southwestern boundary of the project site. There are a total of 13 trees on or just outside the project site According to the arborist report for the project site, 9 of the onsite trees are not worthy of retention, even if they are not to be impacted by the development; the remaining 4 onsite trees could be improved through pruning but are not considered to be highly desirable specimens. Figure 2 displays aerial views of the project site and surrounding area.

SURROUNDING LAND USES

The Brentwood General Plan designates lands adjacent to the project site as: Residential Very Low Density (R-VLD) and Park (P) to the east, Residential Very Low Density (R-VLD) to the south and west, Residential Low Density (R-LD) to the north of the project site. The existing General Plan Land Use Designation and Zoning Designation for the site, and the surrounding area, are shown on Figure 3.

Current uses within these areas include the Valley Oak Nursery to the west and single family residential to the north, east and south.

GENERAL PLAN DESIGNATIONS

The project site is currently designated Residential Very Low Density (R-VLD) by the City of Brentwood General Plan Land Use Map. The R-VLD designation accommodates fairly large lots for single family residences in an identifiable, suburban residential neighborhood, or cluster-style development designed with open space and other amenities. Neighborhoods with either development type will be part of the Brentwood urban area to be provided with urban public facilities and services. The permitted density range is 1.1 to 3.0 units per gross acre, with a midrange of 2.0 units per gross acre.

ZONING DESIGNATIONS

The project site is currently zoned (R-1-12) Single-Family Residential. As stated in Chapter 17.130 of the City's Municipal Code, the R-1-12 zone allows for single family residential type uses with a minimum lot area of twelve thousand square feet.

PROJECT DESCRIPTION

The proposed project consists of the subdivision of a 4.08-acre site into 11 single-family residential parcels (Figure 4). The resulting density would be 2.7 units per gross acre. The range of parcel sizes are 8,378 square feet to 15,567 square feet with an average lot size of approximately 10,067 square feet. The proposal also includes the dedication of land and construction of a new trail to the City's Trail System (Parcel A, as shown on Figure 4). All of the trees within the center of the project site and at the southwestern corner would be removed as part of the project. The trees along the perimeter at the northeastern corner would remain, with the exception of two trees to be removed. The project site would be re-landscaped with trees, shrubbery, grass and other common landscaping vegetation.

Additionally, an 8-foot sound wall is proposed to be located along Lone Tree Way along the northern portion of the project site. Additional proposed sound walls include an 8-foot sound wall along slightly over half of the western boundary of the project site. New fencing is proposed on the southeastern, southern, and southwestern boundaries of the project site at a height of 6 feet. The existing 3-foot wall at the northeastern corner and the 8 -foot wall along the eastern boundary of the project site will remain.

Access to the site would be via a proposed cul-de-sac road off of Gann Street, south of Lone Tree Way. Street lighting and sidewalks are proposed along the proposed interior street within the project site. A 5-foot public utility easement is proposed along the edge of the proposed internal street right-of-ways (ROWs). The proposed site plan layout is shown in Figure 4.

The proposed project would involve the construction of the necessary infrastructure to serve the proposed neighborhood and would include plans to connect to existing City infrastructure to provide water, sewer, and storm drainage to the site. The project includes installation of 8-inch water and sanitary sewer lines and 18-inch storm drain lines within the internal street ROWs. The project site also includes three onsite bioretention areas ranging from approximately 854 square feet to 1,424 square feet at separate locations throughout the project site. Storm drainage would be conveyed to the bioretention areas and discharged to the City's

storm drainage system. Various storm drainage supporting structures would be located throughout the project site directing the direction of flow into the bioretention areas and storm drain inlets.

REZONE

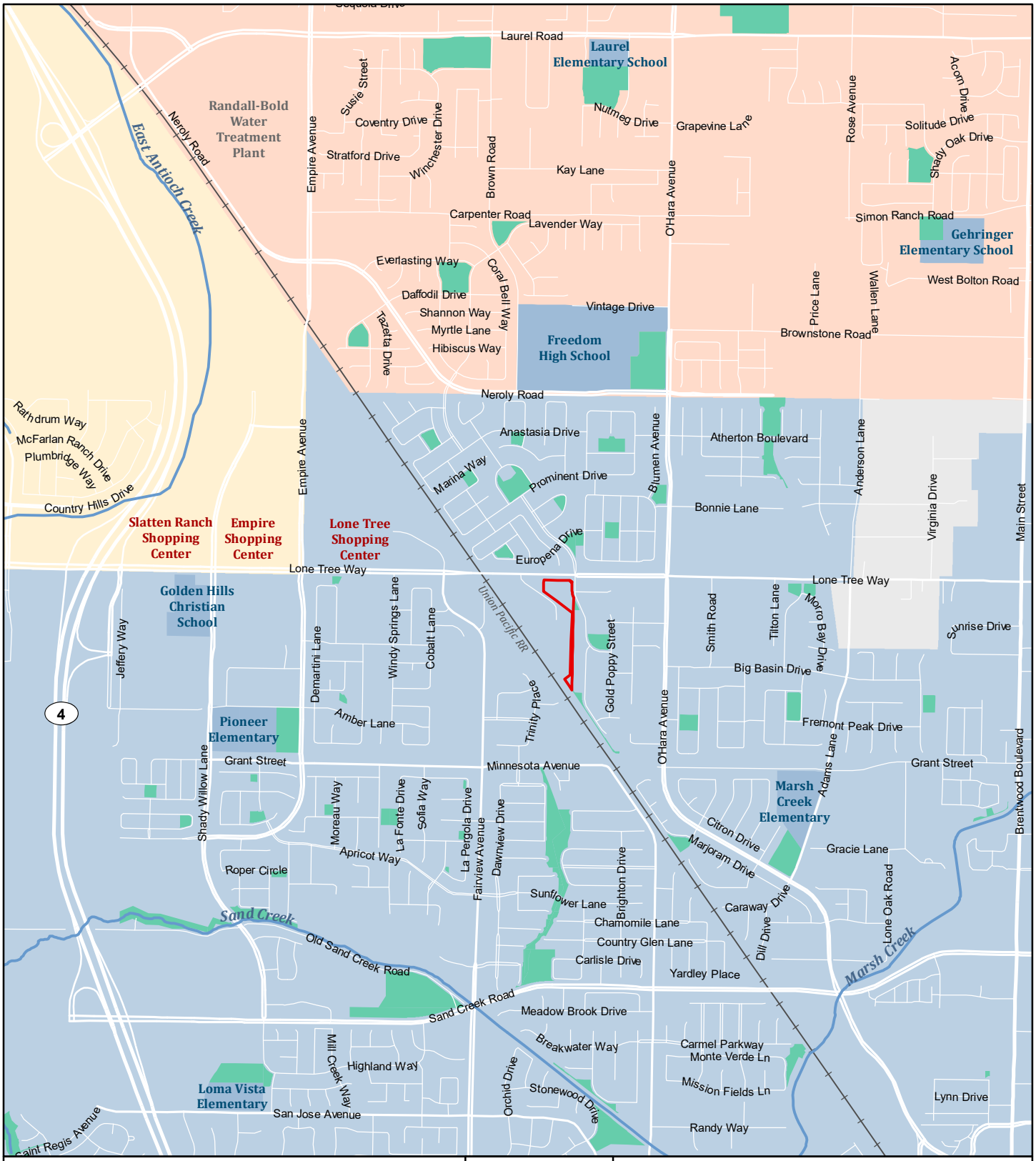
The proposed project requests a rezone from R-1-12 to Planned Development (PD). One of the purposes of the PD zone is to allow variations in the development standards to accommodate site-specific conditions and objectives. The proposal results in a density of 2.70 units per gross acre, which would be above the defined density mid-range of 2.0 units per gross acre. The rezoning to PD would allow the density to be increased, while remaining well within the boundaries established by the General Plan. Additionally, the dedication of land and construction of a new trail to the City's Trail System is proposed as a density transition in order to protect the integrity of existing land use patterns and minimize the impacts to the existing uses and residents, in accordance to General Plan Density Transition Policy (Action LU 2a).

REQUESTED ENTITLEMENTS AND OTHER APPROVALS

The City of Brentwood is the Lead Agency for the proposed project, pursuant to the State Guidelines for Implementation of the California Environmental Quality Act (CEQA), Section 15050.

This document will be used by the City of Brentwood to take the following actions:

- Adoption of the Mitigated Negative Declaration (MND) and adoption of the Mitigation Monitoring and Reporting Program (MMRP)
- Approval of a Rezone to amend the Single-Family Residential (R-1-12) designation to a Planned Development (PD) with applicable development standards
- Approval of Tentative Subdivision Map 9435 to subdivide approximately 4.08 acres into 11 single-family detached residential parcels, as well as an approximately 47,329 square foot parcel (Parcel A) to be dedicated to the City of Brentwood in fee title for public park and trail purposes.



Legend

- Project Boundary
- City of
- City of Brentwood
- City of Oakley
- Unincorporated Contra Costa County
- Park
- School

Sources: Contra Costa County GIS; Brentwood General Plan; Oakley General Plan; Open Street Map. Map date: February 25, 2020.

N

0 500 1,000
Feet

1:24,000

BRENTWOOD INEZ SUBDIVISION

Figure 1. Vicinity Map

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Legend

Project Boundary

N

0 100 200
Feet

1:4,000

BRENTWOOD INEZ SUBDIVISION

Figure 2. Aerial View of Project Site

Sources: Contra Costa County GIS; Open Street Map; ArcGIS Online World Imagery Map Service.
Map date: November 25, 2019.

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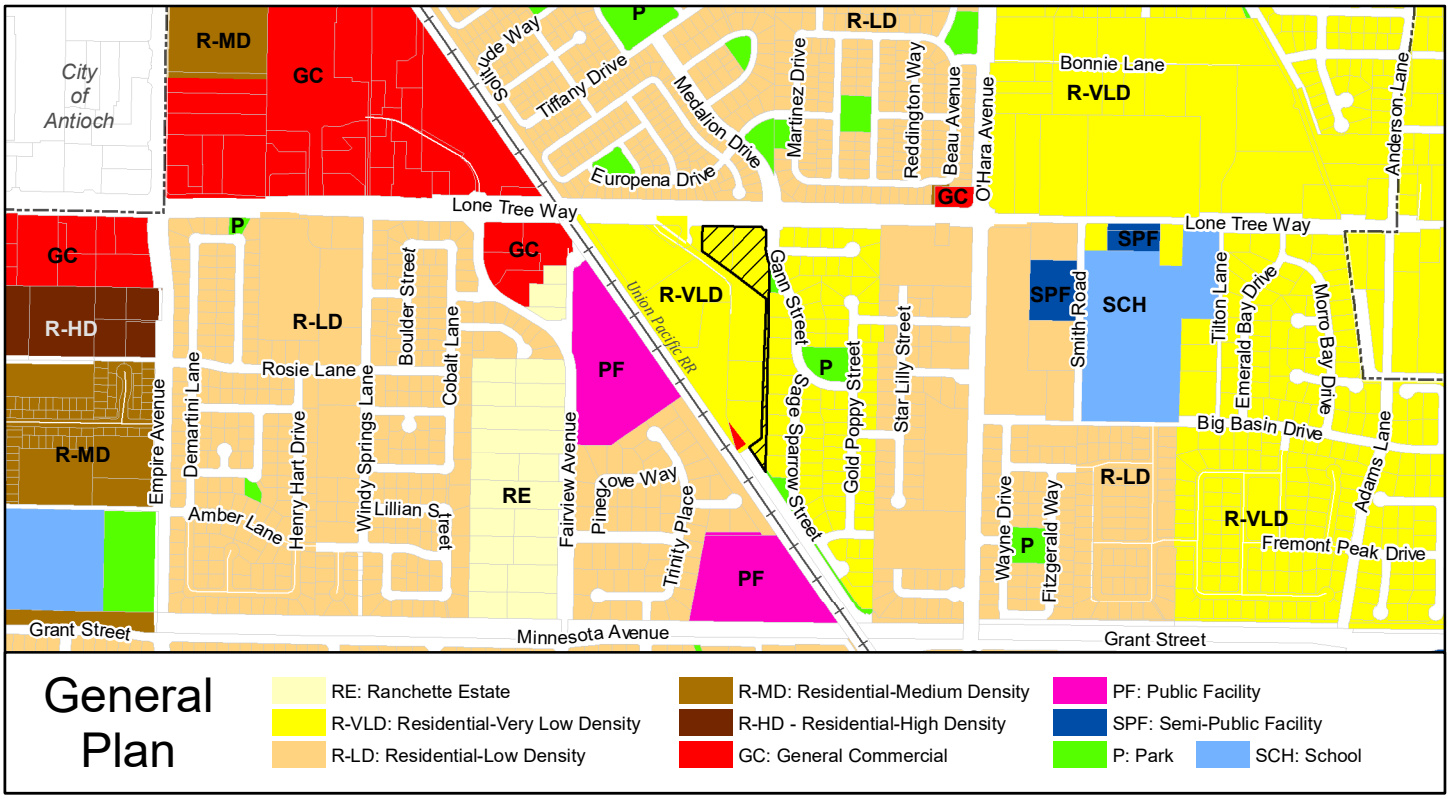
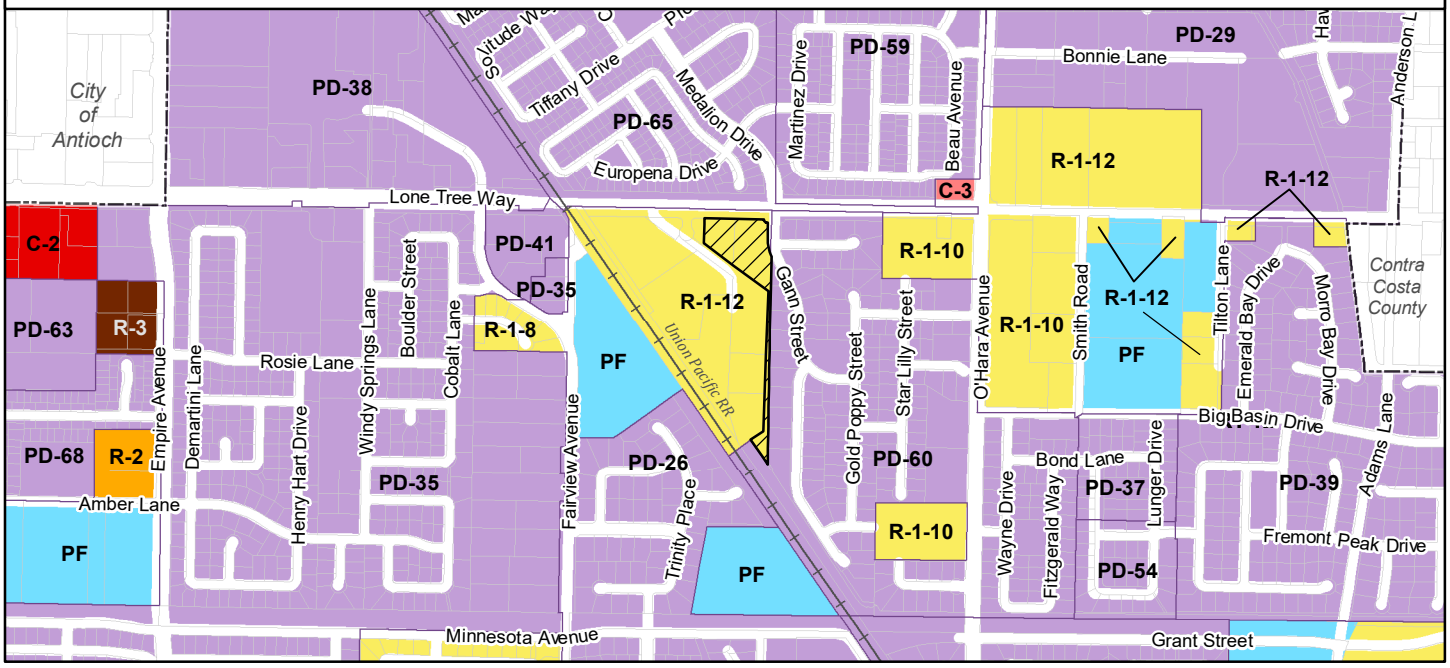


General Plan

- RE: Ranchette Estate
- R-VLD: Residential-Very Low Density
- R-LD: Residential-Low Density
- R-MD: Residential-Medium Density
- R-HD - Residential-High Density
- GC: General Commercial
- PF: Public Facility
- SPF: Semi-Public Facility
- P: Park
- SCH: School

Zoning

- R-1-X: Single Family Residential
- R-2-Moderate Density Multi-Residential
- R-3: High Density Multi-Residential
- PD-X: Planned Development Zone
- C-2: General Commercial
- C-3: Thoroughfares Commercial
- PF: Public Facility



Legend

- Project Location
- Brentwood City Boundary
- Assessor Parcel Boundary

N

0 500 1,000
Feet

1:15,000

Sources: Contra Costa County GIS; City of Brentwood; Open Street Map. Map date: January 2, 2020.

BRENTWOOD INEZ SUBDIVISION

Figure 3. Existing General Plan and Zoning

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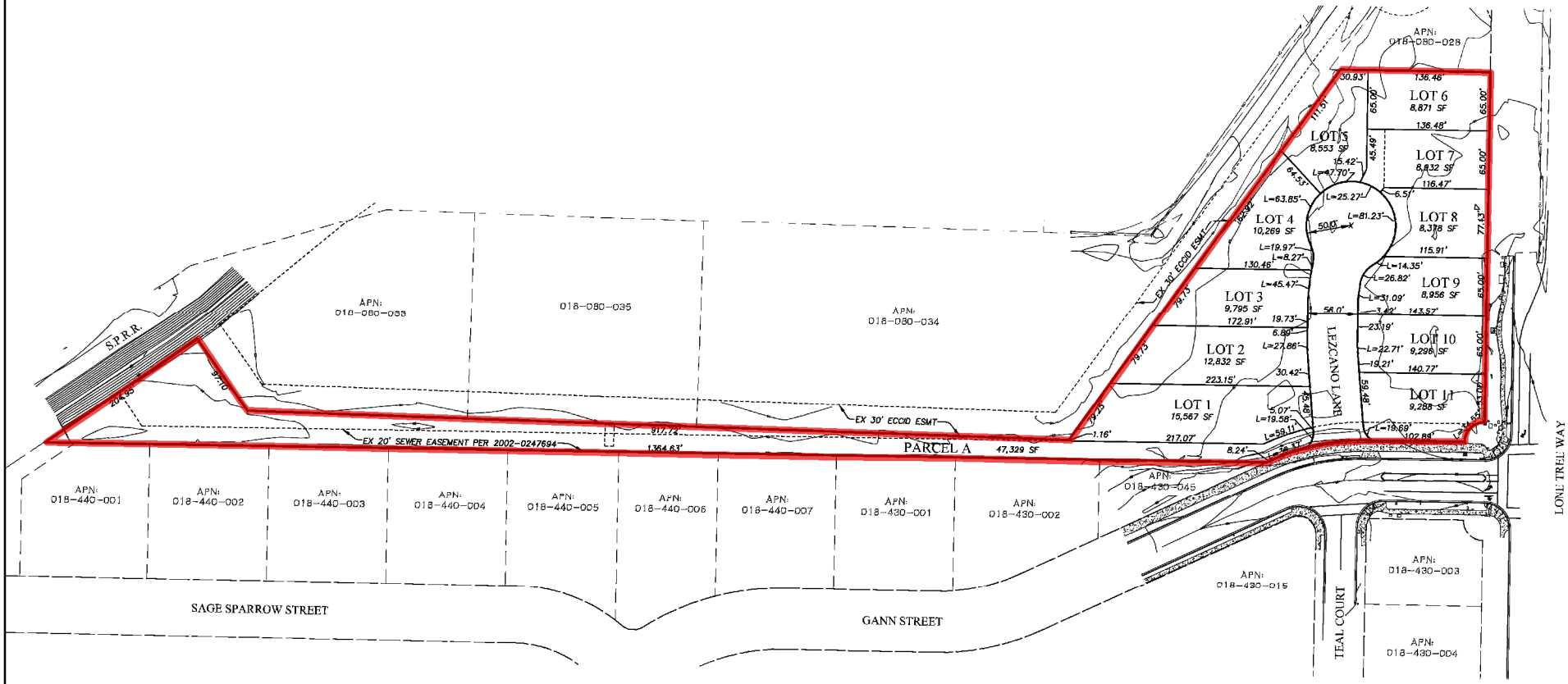

Legend

Project Boundary

N

0 50 100

Feet

1:2,100

Sources: Contra Costa County GIS; APEX Civil Engineering and Land Surveying . Map date: November 25, 2019.

BRENTWOOD INEZ SUBDIVISION

Figure 4. Site Plan

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ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

	Aesthetics		Agriculture and Forest Resources		Air Quality
	Biological Resources		Cultural Resources		Geology/Soils
	Greenhouse Gasses		Hazards and Hazardous Materials		Hydrology/Water Quality
	Land Use/Planning		Mineral Resources		Noise
	Population/Housing		Public Services		Recreation
	Transportation/Traffic		Utilities/Service Systems		Mandatory Findings of Significance

DETERMINATION:

On the basis of this initial evaluation:

	I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
X	I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
	I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
	I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
	I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Signature Date

EVALUATION INSTRUCTIONS:

1) A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).
2) All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.
3) Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.
4) "Negative Declaration: Less Than Significant With Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from Section XVII, "Earlier Analyses," may be cross-referenced).
5) Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. Section 15063(c)(3)(D). In this case, a brief discussion should identify the following:
    a) Earlier Analysis Used. Identify and state where they are available for review.
    b) Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.
    c) Mitigation Measures. For effects that are "Less than Significant with Mitigation Measures Incorporated," describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.
6) Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances).

Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.

7) Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.

8) This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whatever format is selected.

9) The explanation of each issue should identify:
   a) The significance criteria or threshold, if any, used to evaluate each question; and
   b) The mitigation measure identified, if any, to reduce the impact to less than significance

EVALUATION OF ENVIRONMENTAL IMPACTS:

In each area of potential impact listed in this section, there are one or more questions which assess the degree of potential environmental effect. A response is provided to each question using one of the four impact evaluation criteria described below. A discussion of the response is also included.

- Potentially Significant Impact. This response is appropriate when there is substantial evidence that an effect is significant. If there are one or more "Potentially Significant Impact" entries, upon completion of the Initial Study, an EIR is required.
- Less than Significant With Mitigation Incorporated. This response applies when the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact". The Lead Agency must describe the mitigation measures and briefly explain how they reduce the effect to a less than significant level.
- Less than Significant Impact. A less than significant impact is one which is deemed to have little or no adverse effect on the environment. Mitigation measures are, therefore, not necessary, although they may be recommended to further reduce a minor impact.
- No Impact. These issues were either identified as having no impact on the environment, or they are not relevant to the Project.

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ENVIRONMENTAL CHECKLIST

This section of the Initial Study incorporates the most current Appendix "G" Environmental Checklist Form, contained in the CEQA Guidelines. Impact questions and responses are included in both tabular and narrative formats for each of the 18 environmental topic areas.

I. AESTHETICS -- WOULD THE PROJECT:

	Potentially Significant Impact	***Less Than Significant with Mitigation Incorporation***	***Less Than Significant Impact***	***No Impact***
a) Have a substantial adverse effect on a scenic vista?			X	
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?			X	
c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?			X	
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?		X		

RESPONSES TO CHECKLIST QUESTIONS

Responses a), b): Less than Significant. The City of Brentwood is located in the eastern valley area of Contra Costa County, immediately east of the Diablo Range, which includes Mount Diablo. The City of Brentwood has recognized views of Mount Diablo as an important visual resource to be preserved (see Policy COS 7-3 of the Conservation and Open Space Element of the Brentwood General Plan).

According to the 2014 Brentwood General Plan Update EIR and the California Scenic Highway Mapping System, administered by Caltrans, the City of Brentwood does not contain officially designated State Scenic Highways[1]. However, it should be noted that the segment of State Route 4 (SR 4) located approximately 1.3 miles to the west of the project site is listed as an Eligible State Scenic Highway, but has not yet been officially designated. The project would not damage any scenic resources, such as trees, rock outcroppings, or historic buildings, within a State Scenic Highway, and is not a visible feature from the SR 4 corridor. Additionally, the project site is not designated as a scenic vista. The 2014 Brentwood General Plan Update EIR identifies SR 4 as a local scenic route due to the distant panoramic vistas of the Diablo Range and Mount Diablo in particular. Mount Diablo is located to the west of SR 4 and the proposed

[1] City of Brentwood. *2014 Brentwood General Plan Update EIR* [pg. 3.1-5]. July 22, 2014.

project is located to the east of SR 4, and close to the northern edge of the city. As a result, the project structures would not impede views of Mount Diablo currently afforded to travelers along SR 4, or impede views of Mount Diablo from residents residing in the City of Brentwood.

The proposed project would not remove trees, rock outcroppings, and historic buildings within a state scenic highway, and is not designated as a scenic vista. Therefore, this is considered a **less than significant** impact.

Response c): Less than Significant. While the project site is current vacant, it is located within an urbanized area. The development of the site would change the existing visual setting from vacant land, to a suburban-scale residential setting consisting of 11 single family residential units. The proposed development would be considered compatible with other residential and commercial uses designated for the immediate vicinity of the project site, and existing commercial and residential development located near the project site. In addition, the proposed project is consistent with (R-VLD) land uses identified in the City's General Plan and General Plan Land Use Map. Implementation of the proposed project would alter the visual appearance on the project site through the removal of a limited number of trees and subsequent housing development. The proposed project is identified for urban land uses in the Brentwood General Plan. The proposed project is consistent with the overriding considerations that were adopted for the General Plan. As such, implementation of the proposed project would not create new impacts over and above those identified in the General Plan Final EIR nor significantly change previously identified impacts.

The final project design would be approved by the City through its design review process. Through this process the Planning Commission would ensure the design meets the criteria set forth in Municipal Code Section 17.820.007. As a result, development of the project site would result in a **less than significant** impact with respect to substantially degrading the existing visual character or quality of the site and its surroundings.

Response d): Less than Significant with Mitigation. The project site is void of structures and permanent light sources. As a result, no light or glare is currently emitted from the project site other than during active agricultural operations. The change from a vacant property to a residential development including 11 single family residences and associated street lighting would generate new permanent sources of light and glare. The project site is adjacent to single family residences to the north, east and south, and a nursery to the west. The structures located in the immediate vicinity of the site would be considered sensitive receptors, which could be adversely affected by additional sources of light and glare. However, the project would not include reflective building materials, and vehicle headlight glare would not be exacerbated given the existing level of traffic on Lone Tree Way, and landscaping and fencing that would contain project vehicle light sources. However, street and safety lighting located along the project streets may be visible from surrounding locations. Therefore, the increase in light produced by the proposed project would be considered potentially significant.

Implementation of Mitigation Measure AES-1 would reduce the potential impacts related to light and glare to **less than significant**.

Mitigation Measure(s)

Mitigation Measure AES-1*: In conjunction with development of the proposed project, the developer shall shield all on-site lighting so that nighttime lighting is directed within the project site and does not illuminate adjacent properties. A detailed lighting plan shall be submitted for the review and approval by the Community Development Department and the Public Works Department in conjunction with the project improvement plans. The lighting plan shall indicate the locations and design of the shielded light fixtures.*

II. AGRICULTURE AND FOREST RESOURCES: WOULD THE PROJECT:

	Potentially Significant Impact	***Less Than Significant with Mitigation Incorporation***	***Less Than Significant Impact***	***No Impact***
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?		X		
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?				X
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), or timberland (as defined in Public Resources Code section 4526), or timberland zoned Timberland Production as defined by Government Code section 51104(g)?				X
d) Result in the loss of forest land or conversion of forest land to non-forest use?				X
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?			X	

RESPONSES TO CHECKLIST QUESTIONS

Responses a): Less than Significant with Mitigation. The 4.08-acre development plan area contained past agricultural operations that have since ceased. Figure 3.2-1 of the City of Brentwood General Plan EIR identifies the project site, as mapped by the USDA, as "other land." Other land is defined by the California Department of Conservation Farmland Mapping and Monitoring Program as: *"land that is not included in any other mapping category. Common examples include low density rural developments; brush, timber, wetland, and riparian areas not suitable for livestock grazing; confined livestock, poultry or aquaculture facilities; strip mines, borrow pits; and water bodies smaller than forty acres. Vacant and nonagricultural land surrounded on all sides by urban development and greater than 40 acres is mapped as Other Land."*

Additionally, the soils within the project site are Capay Clay (0 to 3 percent slopes), and a small amount of Rincon Clay (0 to 2 percent Slopes) located in the far eastern portion of the project site. According to the "Summary by Map Unit" included in the Contra Costa County Soil Survey, and Capay Clay and Rincon Clay soils are both Class II soils and considered prime farmland if irrigated as defined by the United States Department of Agriculture Natural Resource Conservation Service.

Development of the site for urban uses and the subsequent removal of prime farmland soil for agricultural use was taken into consideration in the City of Brentwood General Plan and General Plan EIR. Buildout of the General Plan would result in the conversion of Prime Farmland, Unique Farmland, and Farmland of Statewide Importance to urban uses. The General Plan Draft EIR found this to be a significant and unavoidable impact. In June, 2014 the Brentwood City Council adopted a Statement of Overriding Considerations for the loss of prime agricultural land resulting from adoption of the Plan and EIR, and provided mitigation measures for the agricultural land lost to development in the City of Brentwood's urbanized areas.

Additionally, Section 17.730.020 of the City of Brentwood's Agricultural Preservation Program states that, "agricultural land" requiring mitigation, includes: "*those land areas of Contra Costa County specifically designated as agricultural core (AC) or agricultural lands (AL) as defined in the Contra Costa County general plan; those land areas near the city designated as agricultural conservation (AC) as defined in the Brentwood general plan; and/or other lands upon which agricultural activities, uses, operations or facilities exist or could exist that contain Class I, II, III or IV soils as defined by the United States Department of Agriculture Natural Resource Conservation Service*."

The proposed project is identified for urban land uses in the Brentwood General Plan. The proposed project is consistent with the overriding considerations that were adopted for the General Plan. As such, implementation of the proposed project would not create new impacts over and above those identified in the General Plan Final EIR, nor significantly change previously identified impacts, therefore, in this regard, there is no impact. However, the site contains Class II and Prime Agricultural soils. The proposed project is therefore subject to compliance with Chapter 17.730, Agricultural Preservation Program, of the Brentwood Municipal Code. Implementation of the following mitigation measure would bring the proposed project in compliance with Chapter 17.730 of the Brentwood Municipal Code. Thus, through implementation of Mitigation Measure AG-1, impacts related to this environmental topic are considered **less than significant**.

Mitigation Measure(s)

Mitigation Measure AG-1*: The Project applicant must preserve agricultural lands by paying an in-lieu fee established by City Council resolution. The fee may be adjusted annually but may not be increased by more than ten percent during any twelve-month period.*

Response b): No Impact. The project site is not under Williamson Act contract, nor is the site zoned for agricultural use. The current land use designation for the project site is Residential Very Low Density. Therefore, the project would have no impact with respect to conflicting with agricultural zoning or Williamson Act contracts**.** There is **no impact.**

Responses c) and d): No Impact. The project site is not considered forest land (as defined in Public Resources Code section 12220[g]), timberland (as defined by Public Resources Code section 4526), and is not zoned Timberland Production (as defined by Government Code section 51104[g]). Therefore, the proposed project would have no impact with regard to

conversion of forest land or any potential conflict with forest land, timberland, or Timberland Production zoning. Therefore, there is **no impact**.

Responses e): Less than Significant. Individual project impacts to the loss of prime farmland are addressed through the proposed mitigation in item **a)** above. The proposed project would not be anticipated to promote off-site development of existing agricultural land because the proposed infrastructure is sized to serve only the project area. As stated previously, the project site is also surrounded by urban residential development on all sides, with the exception of the nursery to the west. Overall, the proposed project and urban land uses identified for the surrounding area are consistent with the overriding considerations that were adopted for the General Plan. As such, implementation of the proposed project would not create new impacts over and above those identified in the General Plan Final EIR, nor significantly change previously identified impacts related to agricultural resources. In addition, the project site is consistent with the type and intensity of land uses anticipated by the General Plan. Finally, the project site is not considered to be forest land. Therefore, the proposed project would result in a **less than significant** impact to the existing environment that could individually or cumulatively result in loss of farmland to non-agricultural uses or conversion of forest land to non-forest uses.

III. AIR QUALITY -- WOULD THE PROJECT:

	Potentially Significant Impact	*Less Than Significant with Mitigation Incorporation*	*Less Than Significant Impact*	*No Impact*
a) Conflict with or obstruct implementation of the applicable air quality plan?			X	
b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?			X	
c) Expose sensitive receptors to substantial pollutant concentrations?		X		
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?			X	

EXISTING SETTING

The project site is located within the boundaries of the Bay Area Air Quality Management District (BAAQMD). This agency is responsible for monitoring air pollution levels and ensuring compliance with federal and state air quality regulations within the San Francisco Bay Area Air Basin (SFBAAB) and has jurisdiction over most air quality matters within its borders.

RESPONSES TO CHECKLIST QUESTIONS

Response a): Less than Significant.

The SFBAAB is currently designated as a nonattainment area for State and federal ozone, State and federal particulate matter 2.5 microns in diameter ($PM_{2.5}$), and State particulate matter 10 microns in diameter (PM_{10}) standards. The BAAQMD, in cooperation with the Metropolitan Transportation Commission (MTC) and the Association of Bay Area Governments (ABAG), prepared the 2005 Ozone Strategy, which is a roadmap depicting how the Bay Area will achieve compliance with the State one-hour air quality standard for ozone as expeditiously as practicable and how the region will reduce transport of ozone and ozone precursors to neighboring air basins. Although the California Clean Air Act does not require the region to submit a plan for achieving the State PM_{10} standard, the 2005 Ozone Strategy is expected to also reduce PM_{10} emissions. In addition, to fulfill federal air quality planning requirements, the BAAQMD adopted a $PM_{2.5}$ emissions inventory for year 2010, which was submitted to the U.S. Environmental Protection Agency (USEPA) on January 14, 2013, for inclusion in the State Implementation Plan (SIP).

The current plan in place to achieve progress toward attainment of the federal ozone standards is the *Revised San Francisco Bay Area Ozone Attainment Plan for the 1-Hour National Ozone Standard*. The USEPA recently revoked the 1-hour federal ozone standard; however, the region

is designated nonattainment for the new 8-hour standard that replaced the older one-hour standard. Until the region either adopts an approved attainment plan or attains the standard and adopts a maintenance plan, the *Revised San Francisco Bay Area Ozone Attainment Plan for the 1-Hour National Ozone Standard* remains the currently applicable federally-approved plan.

The aforementioned applicable air quality plans contain mobile source controls, stationary source controls, and transportation control measures (TCMs) to be implemented in the region to attain the State and federal ozone standards within the SFBAAB. The plans are based on population and employment projections provided by local governments, usually developed as part of the General Plan update process. The proposed project would be considered to conflict with, or obstruct implementation of, an applicable air quality plan if the project would be inconsistent with the Ozone Attainment Plan's growth assumptions, in terms of population, employment, or regional growth in Vehicle Miles Traveled (VMT). The growth assumptions are based on ABAG projections that are, in turn, based on the City's General Plan. The proposed project site was designated for Residential Very Low Density uses in the Brentwood General Plan in effect at the time ABAG projections were forecast. The proposed project is consistent with the General Plan land use designation; therefore, the project would be considered consistent with the growth assumptions of the applicable air quality plans. As a result, the proposed project would not conflict with or obstruct implementation of the applicable air quality plans. This is a **less than significant** impact.

Responses b): Less than Significant. Air pollutant emissions related to the proposed project would include both construction phase emissions and, upon project buildout, operational emissions (such as from vehicle trips generated by the proposed project). Construction phase emissions would originate from mobile and stationary construction equipment exhaust, employee vehicle exhaust, dust from clearing and grading activities, wind-borne dust generated from exposed soils, and off-gassing from asphalt paving and painting. Construction-related emissions can vary substantially depending on the level of activity, length of the construction period, specific construction operations, types of equipment, number of personnel, wind and precipitation conditions, and soil moisture content. Operational air pollutant emissions of the proposed project would be generated by electricity use for the night lighting at the project site, and visitor vehicle exhaust. Both construction and operation of the proposed project would result in the generation of emissions of carbon monoxide (CO), reactive organic gases (ROG), nitrogen oxide (NOx), and particulate matter (PM_{10}). Emissions of ROG and NOx are referred to as "precursors" to ozone formation. These two pollutants, when released into the atmosphere, undergo photochemical reactions in the presence of sunlight to form ozone. These ozone-forming photochemical reactions do not occur as readily in the cooler months of the year, and therefore, emissions of ROG and NOx are of greatest concern during the warmer months of summer.

According to the CEQA Guidelines, an air quality impact may be considered significant if the proposed project's implementation would result in, or potentially result in, conditions, which violate any existing local, State or federal air quality regulations. In order to evaluate ozone and other criteria air pollutant emissions and support attainment goals for those pollutants

designated as nonattainment in the area, the BAAQMD has established significance thresholds associated with development projects for emissions of reactive organic gases (ROG), nitrogen oxide (NOx), PM_{10}, and $PM_{2.5}$. The BAAQMD's significance thresholds, expressed in pounds per day (lbs/day) for project-level and tons per year (tons/yr) for cumulative, listed in Table 1, are recommended for use in the evaluation of air quality impacts associated with proposed development projects.

Table 1: BAAQMD Thresholds of Significance

Pollutant	Construction (lbs/day)	Operational (lbs/day)	Cumulative (tons/year)
ROG	54	54	10
NOx	54	54	10
PM_{10}	82	82	15
$PM_{2.5}$	54	54	10

Source: BAAQMD, CEQA Guidelines, May 2011.

In addition, the BAAQMD identifies screening criteria for development projects, which provide a conservative indication of whether a development could result in potentially significant air quality impacts. If the screening criteria are exceeded by a project, a detailed air quality assessment of that project's air pollutant emissions would be required. The project is made up of single-family residences. The screening criteria for a single-family residential development are if the development is less than or equal to the following screening level sizes:

- 325 dwelling units for operational criteria pollutants;
- 56 dwelling units for operational greenhouse gas (GHG) (addressed in Section VIII); or
- 114 dwelling units for construction criteria pollutants.

Accordingly, if a single-family development is less than or equal to the screening size for operational or construction criteria pollutants, or for operational GHG, the development would not be expected to result in potentially significant air quality impacts, and a detailed air quality assessment would not be required.

It should be noted that the BAAQMD was challenged in Superior Court, on the basis that the BAAQMD failed to comply with CEQA when it adopted its CEQA guidelines, including thresholds of significance. The BAAQMD was ordered to set aside the thresholds and conduct CEQA review of the proposed thresholds. On August 13, 2013, the First District Court of Appeal reversed the trial court's decision striking down BAAQMD's CEQA thresholds of significance for GHG emissions. The Court of Appeal held that CEQA does not require BAAQMD to prepare an EIR before adopting thresholds of significance to assist in the determination of whether air emissions of proposed projects might be deemed "significant." The Court of Appeal's decision provides the means by which BAAQMD may ultimately reinstate the GHG emissions thresholds, though the court's decision did not become immediately effective. A petition for review was filed in the matter; however, the California Supreme Court limited its review to a separate issue: Under what circumstances, if any, does CEQA require an analysis of how existing environmental conditions will impact future residents or users (receptors) of a proposed project? Ultimately, the thresholds of significance used to evaluate proposed developments are determined by the CEQA lead agency. Per CEQA Guidelines Section 15064.7, the City has elected to use the

BAAQMD's thresholds and methodology for this project, as they are based on substantial evidence and remain the most up-to-date, scientifically-based method available to evaluate air quality impacts. Thus, the BAAQMD's thresholds of significance presented in Table 1, and the screening criteria, are utilized for this analysis.

Implementation of the proposed project would contribute local emissions in the area during both the construction and operation of the proposed project. As the proposed project involves the development of 11 dwelling units, the project does not exceed the screening criteria for operational or construction-related criteria pollutants resulting from a single-family residential development. As such, the proposed project would not be expected to result in potentially significant operational or construction-related air quality impacts.

As discussed previously, the proposed projects falls under the screening criteria for operational and construction criteria air pollutants and precursors. BAAQMD has determined that if the project meets the screening criteria, the project would not result in the generation of operational-related criteria air pollutants and/or precursors that exceed the Thresholds of Significance. Therefore, implementation of the proposed project would result in a **less-than-significant** impact to air quality from criteria air pollutant and precursor emissions.

It should be noted that the project is required to comply with all BAAQMD rules and regulations for construction, including implementation of the BAAQMD's recommended Basic Construction Mitigation Measures. The Basic Construction Mitigation Measures include, but are not limited to, watering exposed surfaces, covering all haul truck loads, removing all visible mud or dirt track-out, limiting vehicle speeds on unpaved roads, and minimizing idling time.

Response c): Less than Significant with Mitigation. Emissions of carbon monoxide (CO) are of potential concern, as the pollutant is a toxic gas that results from the incomplete combustion of carbon-containing fuels such as gasoline or wood. CO emissions are particularly related to traffic levels.

In addition to screening criteria for criteria pollutants and GHG, BAAQMD has established screening criteria for localized CO emissions, including the following:

- Consistency with applicable congestion management programs;
- Project traffic increase traffic volumes at intersections to more than 44,000 vehicles per hour; or
- Project traffic increase traffic volumes at intersections to more than 24,000 vehicles per hour where vertical and/or horizontal mixing is substantially limited (e.g., tunnel, parking garage, underpass, etc.).

As the City has elected to use the BAAQMD's thresholds and methodology for this project, the BAAQMD's screening criteria for localized CO emissions presented above are utilized for this analysis.

A General Plan amendment is not required for the proposed project. The proposed density is consistent with the General Plan designation for the site, provided the Council approves the

request to develop above the mid-range. As such, the project would be considered consistent with the growth assumptions of the General Plan. Subsequently, the project would result in similar mobile source emissions as currently anticipated for the site. In addition, none of the affected intersections currently involve traffic volumes of 44,000 vehicles per hour (or 24,000 vehicles per hour where vertical and/or horizontal mixing is substantially limited), and would not increase traffic volumes greater than 44,000 vehicles per hour as a result of the proposed project. Therefore, according to the BAAQMD screening criteria above, the proposed project would not be expected to result in substantial increase in levels of CO at surrounding intersections, and the project would not generate or be subjected to localized concentrations of CO in excess of applicable standards.

Toxic Air Contaminants (TACs) are also a category of environmental concern. The California Air Resources Board's (CARB) *Air Quality and Land Use Handbook: A Community Health Perspective* (Handbook) provides recommendations for siting new sensitive land uses near sources typically associated with significant levels of TAC emissions, including, but not limited to, freeways and high traffic roads, distribution centers, and rail yards. It should be noted that the project site is approximately one eighth-mile from the nearest railroad tracks; however, due to the lack of idling trains,[2] the CARB does not consider tracks to be a significant source of TAC emissions, and the project site is not located in the vicinity of a rail yard. The CARB has identified diesel particulate matter (DPM) from diesel-fueled engines as a TAC; thus, high volume freeways, stationary diesel engines, and facilities attracting heavy and constant diesel vehicle traffic are identified as having the highest associated health risks from DPM. Health risks from TACs are a function of both the concentration of emissions and the duration of exposure. Health-related risks associated with DPM in particular are primarily associated with long-term exposure and associated risk of contracting cancer.

Children, pregnant women, the elderly, and those with existing health problems are considered more sensitive to air pollution than others. Accordingly, land uses that are typically considered to be sensitive receptors include residences, schools, day care centers, playgrounds, and medical facilities. The proposed project includes the development of single-family residences, the occupants of which would be considered sensitive receptors. Additionally, surrounding single family residences located just north, east and south of the project site would also be considered sensitive receptors. The CARB, per its Handbook, considers that any project placing sensitive receptors within 500 feet of a major roadway or freeway may have the potential to expose those receptors to DPM. Similarly, the BAAQMD recommends placement of overlay zones at least 500 feet from all freeways and high volume roadways. The nearest freeway, SR 4, is located over 6,700 feet to the west of the project site. Therefore, the project site is not located

[2] The Union Pacific Railroad (UPRR) line bisects the City of Brentwood from the northwest corner of the City to the southeast corner of the City. This portion of the railroad line has not been in use since sometime prior to the year 2000. The line is maintained by UPRR as a standby route with no planned use for freight movement. Train idling does not occur in the vicinity of the project site.

within 500 feet of any freeway or high volume roadway, and would not be subjected to substantial concentrations of DPM associated with roadways.

The project does not involve long-term operation of any stationary diesel engine or other major on-site stationary source of TACs. Relatively few vehicle trips associated with operations of the proposed use would be expected to be composed of diesel-fueled vehicles. Therefore, the project would not generate any substantial concentrations of TACs during operations. Construction activities have the potential to generate DPM emissions related to the number and types of equipment typically associated with construction. Off-road heavy-duty diesel equipment used for site grading, paving, and other construction activities result in the generation of DPM. The residences located north and east of the project site would be considered the nearest existing sensitive receptors to the project site and could become exposed to DPM emissions from the site during construction activities. However, construction is temporary and occurs over a relatively short duration in comparison to the operational lifetime of the proposed project. In addition, only portions of the site would be disturbed at a time during buildout of the proposed project, with operation of construction equipment regulated and occurring intermittently throughout the course of a day. Thus, the likelihood that any one sensitive receptor would be exposed to high concentrations of DPM for any extended period of time would be very low. Because health risks associated with exposure to DPM or any TAC are correlated with high concentrations over a long period of exposure (e.g., over a 70-year lifetime), the temporary, intermittent construction-related DPM emissions would not be expected to cause any health risks to nearby sensitive receptors. Thus, construction of the proposed project would not expose any nearby existing sensitive receptors to any short-term substantial concentrations of TACs.

The City of Brentwood was previously advised of two serious cases of Valley Fever contracted during an archeological excavation near the southern City limit boundary. Valley Fever is an infection caused by inhalation of the spores of the *Coccidioides immitis fungus*, which grows in soils and are released during earthmoving. The fungus is very prevalent in the soils of California's San Joaquin Valley. The ecological factors that appear to be most conducive to survival and replication of the spores are high summer temperature, mild winters, sparse rainfall, and alkaline, sandy soils. Earth moving during development of the project site could put nearby residents at a greater risk of exposure to Valley Fever; however, because fungus spores need to become airborne in order to enter the respiratory tract of humans, and landscaping, building pads, and streets associated with the development would eliminate most fugitive dust, the threat is more serious for construction workers than for nearby residents. Residents living in close proximity to the project site during construction may be at risk of being exposed to the disease due to proximity and a relatively lower immunity. As a result, measures should be taken to reduce the potential for exposure of the disease during construction to both construction workers and nearby receptors. These include measures to control dust through construction site irrigation, soil stabilizers and landscaping. Paving roads, planting grass, and other measures that reduce dust where people live, work, or engage in recreation have been shown to reduce the incidence of infection. Sufficient wetting of the soil prior to grading activities can reduce exposure to airborne spores of the fungus.

Development of the project site could potentially expose construction workers and nearby residents to fungus spores that cause Valley Fever. Grading activities associated with development have the potential to release the fungus into the air, increasing the risk of infection to the surrounding population. Implementation of the project may result in human health impacts due to exposure to fungus spores which cause Valley Fever.

In conclusion, with the implementation of the following mitigations measures the proposed project would not expose sensitive receptors to substantial concentrations of any TACs after mitigation. Therefore, impacts related to exposure of sensitive receptors to substantial pollutant concentrations would be considered **less than significant with mitigation**.

Mitigation Measure(s)

Mitigation Measure AIR-1*: Prior to the issuance of a grading permit, the Applicant/Developer shall prepare an Erosion Prevention and Dust Control Plan. The plan shall be followed by the project's grading contractor and submitted to the City of Brentwood's Public Works Department, which will be responsible for field verification of the plan during construction.*

The plan shall comply with the City's grading ordinance and shall include the following control measures and other measures as determined by the Public Works Department to be necessary in order to achieve full compliance with the City's grading ordinance:

- *Cover all trucks hauling construction and demolition debris from the site;*
- *Water all exposed or disturbed soil surfaces at least twice daily;*
- *Use watering to control dust generation during demolition of structures or break-up of pavement;*
- *Pave, apply water three time daily, or apply (non-toxic) soil stabilizers on all unpaved parking areas and staging areas;*
- *Sweep daily (with water sweepers) all paved parking areas and staging areas;*
- *Provide daily clean-up of mud and dirt carried onto paved streets from the site;*
- *Enclose, cover, water twice daily or apply non-toxic soil binders to exposed stockpiles (dirt, sand, etc.);*
- *Limit traffic speeds on unpaved roads to 15 mph;*
- *Install sandbags or other erosion control measures to prevent silt runoff to public roadways;*
- *Replant vegetation in disturbed areas as quickly as possible;*
- *Install wheel washers for all exiting trucks, or wash off the tires or tracks of all trucks and equipment leaving the site;*
- *Install wind breaks, or plant trees/vegetative wind breaks at windward side(s) or construction areas;*
- *Suspend excavation and grading activity when winds (instantaneous gusts) exceed 25 mph;*
- *Limit the area subject to excavation, grading, and other construction activity at any one time;*
- *Unnecessary idling of construction equipment shall be avoided;*

- *Equipment engines shall be maintained in proper working condition per manufacturers' specifications;*
- *During periods of heavier air pollution (May to October), the construction period shall be lengthened to minimize the amount of equipment operating at one time, provided construction occurs within the hours allowed by the City of Brentwood Municipal Code and General Plan;*
- *Where feasible, the construction equipment shall use cleaner fuels, add-on control devices and conversion to cleaner engines.*

Mitigation Measure AIR-2*: To the extent feasible, construction employees shall be hired from local populations, since it is more likely that they have been previously exposed to the fungus which causes Valley Fever and are therefore immune.*

Mitigation Measure AIR-3*: During periods of high dust in the grading phase, crews must use National Institute for Occupational Safety and Health (NIOSH) approved N95 masks or better or other more stringent measures in accordance with the California Division of Occupational Safety and Health regulations.*

Mitigation Measure AIR-4*: The operator cab of grading and construction equipment must be enclosed and air-conditioned.*

Response d): Less than Significant. According to the CARB's Handbook, some of the most common sources of odor complaints received by local air districts are sewage treatment plants, landfills, recycling facilities, waste transfer stations, petroleum refineries, biomass operations, autobody shops, coating operations, fiberglass manufacturing, foundries, rendering plants, and livestock operations. The proposed project site is located around developed areas and is surrounded by residential land uses that are generally not associated with objectionable odors; with the exception of the nursery located west of the project site which may occasionally produce minimal odors. However, these odors are not expected to be substantial objectionable odors or induce significant odor impacts as those mentioned above. Accordingly, the proposed project is not located in the vicinity of any substantial objectionable odor sources such as those mentioned above.

Operation of the proposed project would not generate notable odors. The proposed project is a residential development, which is compatible with the surrounding land uses. Residential land uses are not typically associated with the creation of substantial objectionable odors. Occasional mild odors may be generated during landscaping maintenance (equipment exhaust), but the project would not otherwise generate odors.

The proposed project is not anticipated to produce any objectionable odors (or other emissions) at buildout that would affect a substantial number of people. Construction activities associated with the proposed project, such as paving and painting, are likely to temporarily generate objectionable odors. Since odor-generating construction activities would be temporary, and are only likely to be detected by residents closest to the project site, impacts

from temporary project-related odors are expected to be **less than significant** and no mitigation is required.

IV. BIOLOGICAL RESOURCES -- WOULD THE PROJECT:

	Potentially Significant Impact	*Less Than Significant with Mitigation Incorporation*	*Less Than Significant Impact*	*No Impact*
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?		X		
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?			X	
c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?			X	
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?			X	
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?			X	
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?			X	

RESPONSES TO CHECKLIST QUESTIONS

Response a): Less than Significant with Mitigation. A biological field survey to assess site conditions was undertaken by De Novo Planning Group's Principal Biologist, Steve McMurtry, on December 17, 2019. The site was systematically searched by walking throughout the project site.

The property consists primarily of ruderal grasslands. The project site has been previously used for agricultural production. Due to cultivation practices, the site contains no high-quality habitat for covered and no take plant species. In addition, none of the covered or no-take plant species were observed during the site survey on December 17, 2019, and none are expected to occur on the site due to the site's history of heavy disturbance. According to Google Earth imagery, the project site is routinely mowed, which would preclude the establishment of special status plant species.

An Arborist Report and Tree Inventory Summary was completed for the project site by Traverso Tree Service in June 2018 (see Appendix A). According to the Report, there are a total of 13 trees that are on or just outside the property. The tree inventory consists of 3 young valley oaks and 1 mature blue oak in fair to good condition, and 8 mature Siberian elms and 1 mulberry all in poor condition. None of the trees identified on this site are desirable candidates for retention.

Special Status Plant Species

The planning survey revealed that the ruderal vegetation is dominated by non-native species. None of the covered or no-take species were found during the survey, and due to its disturbed state, the site is highly unlikely to contain any of these species. Potentially occurring special-status plant species listed in the East Contra Costa County Habitat Conservation Plan (ECCCHCP) for the grassland habitat type are not expected to occur on-site because of the heavy disturbance the site has received being under past intensive agricultural uses. Therefore, the project is not expected to impact any covered or no-take plants.

Special Status Wildlife Species

Based upon the on-site habitats, three covered wildlife species may occur on the project site. Each of these species is discussed below.

San Joaquin Kit Fox: The project site consists of annual grassland that is just within range of the San Joaquin kit fox (Vulpes macrotis mutica). There were no burrows or dens with evidence of kit fox occupancy (i.e. scat, tracks) or burrows or dens that meet the dimensional criteria for kit fox. The California Natural Diversity Database (CNDDB) does not identify any occurrences of the San Joaquin kit fox within one mile of the project site. Comprehensive inspection of potential den habitat was accomplished by walking meandering transects throughout the property. San Joaquin kit fox was not observed and they are presumed to be absent. Mitigation Measure BIO-1 will ensure that any potential impact is reduced to a **less than significant level**.

Western Burrowing Owl: The project site is within the range of western burrowing owl (Athene cunnicularia). The California Department of Fish and Wildlife's (CDFW's) CNDDB contains six occurrences of western burrowing owl within a mile of the site. The site was inspected for burrowing owls and ground squirrel burrows with evidence of burrowing owl occupancy (i.e., white wash, pellets, feathers). Comprehensive inspection of potential western burrowing owl habitat was accomplished by walking meandering transects throughout the property. No western burrowing owls or potential burrows with evidence of burrowing owl occupancy were observed. Measures BIO-2A and 2B would ensure that any potential impact to western burrowing owls is reduced to a **less than significant level.**

Swainson's Hawk: The project site is along the extreme western edge of the range of Swainson's hawk (Bueto swainsoni). CNDDB contains one occurrence of Swainson's hawk within a mile of the site (located approximately 0.9 miles southeast of the site). The only potential nest trees in the site are some of the large trees at the center or along the project perimeter. There are only a few potential nest trees near and visible from the site. All of the trees in and visible from the site

were inspected for raptor stick nests. No raptor stick nests were observed in the onsite trees or offsite trees visible from the project site. Due to the location of the site along the extreme west edge of the Swainson's hawk nesting range, it is considered unlikely this species will nest in trees in or near the project site in the future. Mitigation Measures BIO-3 would ensure that any potential impact is reduced to a **less than significant level**.

None of the fully protected wildlife species listed in the HCP/NCCP have been observed or are likely to occur within the property. The site does not is not likely to provide adequate nesting habitat for any of the raptors (Swainson's hawk, white-tailed kite, peregrine falcon, or golden eagle); nor does it contain adequate habitat for ringtails.

Conclusion

Due to the disturbed nature of the project site's ruderal annual grassland cover type, suitable habitat does not exist to support special-status plant species known to occur within the annual grassland cover type of East Contra Costa County. While the presence of special- status wildlife species is relatively unlikely, based upon the current land cover types found on-site, in accordance with the ECCCHCP, wildlife species surveys are required to determine whether any special-status wildlife species are occupying the project site prior to initiating on-site ground disturbance and vegetation removal. If the necessary preconstruction surveys are not carried out, the project could result in a potentially significant adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the U.S. Fish and Wildlife Service (USFWS), or the CDFW. The following mitigation measures would reduce the above-stated special-status wildlife impacts to a **less than significant** level.

Mitigation Measure(s)

San Joaquin Kit Fox

Mitigation Measure BIO-1: *Prior to any ground disturbance, a qualified biologist shall conduct a preconstruction survey for San Joaquin kit fox. Preconstruction surveys will be conducted within 30 days of ground disturbance. Preconstruction survey requirements include but are not limited to mapping of all dens within the project site footprint and within a 250-foot radius of the project site, and the provision of written survey results to the USFWS within five working days after surveying. If San Joaquin kit foxes and/or suitable dens are identified in the survey area, the applicant shall consult with the USFWS and CDFW to establish a mitigation plan that meets the requirements established within the* USFWS Standardized Recommendations for Protection of the endangered San Joaquin Kit Fox Prior to or During Ground Disturbance*. Ground disturbing activities shall not commence until the USFWS and CDFW verify that all required mitigation and avoidance measures have been properly implemented.*

Burrowing Owl

Mitigation Measure BIO-2A: *Prior to any ground disturbance related to activities covered under the ECCCHCP, a preconstruction survey of the 4.08-acre development plan area shall be completed.*

The surveys shall establish the presence or absence of western burrowing owl and/or habitat features, and evaluate use by owls in accordance with CDFW survey guidelines.

An approved biologist will conduct a preconstruction survey in areas identified in the planning surveys as having potential burrowing owl habitat. The surveys will establish the presence or absence of western burrowing owl and/or habitat features and evaluate use by owls in accordance with CDFW survey guidelines (California Department of Fish and Game 1995). On the parcel where the activity is proposed, the biologist will survey the proposed disturbance footprint and a 500- foot radius from the perimeter of the proposed footprint to identify burrows and owls. Adjacent parcels under different land ownership will not be surveyed. Surveys should take place near sunrise or sunset in accordance with CDFW guidelines. All burrows or burrowing owls will be identified and mapped. Surveys will take place no more than 30 days prior to construction. During the breeding season (February 1—August 31), surveys will document whether burrowing owls are nesting in or directly adjacent to disturbance areas. During the nonbreeding season (September 1—January 31), surveys will document whether burrowing owls are using habitat in or directly adjacent to any disturbance area. Survey results will be valid only for the season (breeding or nonbreeding) during which the survey is conducted. If burrowing owls and/or burrows are identified in the survey area, Mitigation Measure 3B shall be implemented. If burrowing owls and/or suitable burrows are not discovered, then further mitigation is not necessary.

Mitigation Measure BIO-2B: *If burrowing owls are found during the breeding season (February 1 August 31), the project proponent will avoid all nest sites that could be disturbed by project construction during the remainder of the breeding season or while the nest is occupied by adults or young. Avoidance will include establishment of a non-disturbance buffer zone (described below). Construction may occur during the breeding season if a qualified biologist monitors the nest and determines that the birds have not begun egg-laying and incubation or that the juveniles from the occupied burrows have fledged. During the nonbreeding season (September 1 —January 31), the project proponent should avoid the owls and the burrows they are using, if possible. Avoidance will include the establishment of a buffer zone (described below). During the breeding season, buffer zones of at least 250 feet in which no construction activities can occur will be established around each occupied burrow (nest site). Buffer zones of 160 feet will be established around each burrow being used during the nonbreeding season. The buffers will be delineated by highly visible, temporary construction fencing, if occupied burrows for burrowing owls are not avoided, passive relocation will be implemented. Owls should be excluded from burrows in the immediate impact zone and within a 160-foot buffer zone by installing one-way doors in burrow entrances. These doors should be in place for 48 hours prior to excavation. The project area should be monitored daily for 1 week to confirm that the owl has abandoned the burrow. Whenever possible, burrows should be excavated using hand tools and refilled to prevent reoccupation (California Department of Fish and Game 1995). Plastic tubing or a similar structure should be inserted in the tunnels during excavation to maintain an escape route for any owls inside the burrow.*

Covered Migratory Birds

Mitigation Measure BIO-3: *Prior to any ground disturbance a pre-construction survey for covered migratory birds shall be completed. This survey shall be conducted in the morning or evening hours within 30 days prior to any construction activities. The entire site and surrounding vegetation, will be surveyed for birds, nests and nesting behavior. Common nesting behavior by birds includes; collecting nesting materials, bringing food items to a nest and vocalizations from young or from adults to attract a mate and to establish or defend a nesting territory. A construction-free buffer of suitable dimensions must be established around any active migratory bird nests (up to 250 feet, depending on the location and species) for the duration of the project or until it has been determined by a qualified ornithologist that the chicks have fledged and are independent of their parents.*

Responses b), c): Less than Significant. Riparian habitats are described as the land and vegetation that is situated along the bank of a stream or river. Wetlands are areas where water covers the soil, or is present either at or near the surface of the soil all year or for varying periods of time during the year. Wetlands usually must possess hydrophytic vegetation (i.e., plants adapted to inundated or saturated conditions), wetland hydrology (e.g., topographic low areas, exposed water tables, stream channels), and hydric soils (i.e., soils that are periodically or permanently saturated, inundated or flooded). Vernal pools are seasonal depressional wetlands that are covered by shallow water for variable periods from winter to spring, but may be completely dry for most of the summer and fall. Vernal pools range in size from small puddles to shallow lakes and are usually found in a gently sloping plain of grassland.

There is no aquatic habitat at the site and no jurisdictional waters or wetlands are present onsite, and no Army Corps of Engineers or Regional Water Quality Control Board (RWQCB) permits would be required relating to jurisdictional waters. As a result, the implementation of the proposed project would have a **less than significant** impact to any riparian habitat, seasonal wetlands, or vernal pools as defined by Section 404 of the Clean Water Act through direct removal, filling, hydrological interruption, or other means.

Responses d): Less than Significant. While the proposed project would result in substantial development of the project site, the site is adjacent to existing developments. The project site provides limited opportunities for native, resident, or migratory wildlife to use as a movement corridor. The CNDDB record search did not reveal any documented wildlife corridors or wildlife nursery sites on or adjacent to the project site. Furthermore, the field survey did not reveal any wildlife nursery sites on or adjacent to the project site.

Given that the project site provides limited habitat due to previous cultivation, impacts related to the movement of any resident or migratory fish or wildlife species or with established resident or migratory wildlife corridors, or impeding the use of wildlife nursery sites are considered **less than significant**.

Responses e), f): Less than Significant. Vegetation on the project site currently consists of ruderal vegetation. The site is within the boundaries of the ECCC HCP/NCCP. In July 2007 the ECCC HCP/NCCP was adopted by Contra Costa County, the City of Brentwood, other member cities, the USFWS and the CDFW. The ECCC HCP/NCCP provides guidance for the mitigation of

impacts to covered species. Mitigation of impacts is accomplished through the payment of a Development Fee. The Development Fee requires payment based on a cost per acre for all acres converted to non-habitat with the cost per acre based on the quality of the habitat converted. The fees are used to acquire higher value habitats in preserved areas and to fund their restoration and management. Because the City of Brentwood is a signatory to the ECCC HCP/NCCP, anticipated project impacts could be mitigated through the payment of Development Impact fees to the ECCC HCP/NCCP Conservancy. However, at the time that the ECCC HCP/NCCP was adopted, the site was mapped with a land cover designation of Urban, Turf, Landfill, or Aqueduct, and will not be assessed the Development Fee, as the site is not considered suitable for covered species habitat. Therefore, the proposed project would not conflict with the provisions of an adopted Habitat Conservation Plan, Natural Conservation Community Plan, or other approved local, regional, or state habitat conservation plan, resulting in an impact that is **less than significant**.

V. CULTURAL RESOURCES -- WOULD THE PROJECT:

	Potentially Significant Impact	*Less Than Significant with Mitigation Incorporation*	*Less Than Significant Impact*	*No Impact*
a) Cause a substantial adverse change in the significance of a historical resource pursuant to in § 15064.5?			X	
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?		X		
c) Disturb any human remains, including those interred outside of formal cemeteries?		X		

RESPONSES TO CHECKLIST QUESTIONS

Response a): Less than Significant with Mitigation. A record search was conducted for the project site and surrounding area through the Northwest Information Center (NWIC) of the California Historical Resources Information System on December 12, 2019 (NWIC file No.:19-0989) (see Appendix B). The record search indicates that the project site does not contain any recorded buildings or structures listed on the State Office of Historic Preservation Historic Property Directory (which includes listings of the California Register of Historical Resources, California State Historical Landmarks, California State Points of Historical Interest, and the National Register of Historic Places). In addition to these inventories, the NWIC base maps show no recorded buildings or structures within the proposed project area.

The 2014 Brentwood General Plan Update EIR identifies 24 historic properties in the Brentwood Planning Area. None of the 24 properties listed are within the proposed project site[3]. Since there are no existing buildings on the project site, there is nothing on that site that could be considered a "historical resource" under Section 15064.5 of the CEQA Guidelines.

For the above-stated reasons, development of the proposed project would have a **less than significant** impact on historical resources.

Responses b), c): Less than Significant with Mitigation. As noted above, a record search was conducted for the project area and surrounding area through the NWIC of the California Historical Resources Information System on December 12, 2019 (NWIC file No.:19-0989). There are no known sites in the project area or within a one-eighth mile radius of the project area.

Given that no known archaeological resources are associated with the project site, the subject parcel is considered of low archaeological sensitivity for prehistoric cultural resources. However, ground-disturbing activities may have the potential to uncover buried cultural deposits. As a result, during construction and excavation activities, previously unknown archaeological resources, including human bone, may be uncovered, resulting in a potentially significant impact.

[3] City of Brentwood. 2014 Brentwood General Plan Update EIR [pg. 3.5-7]. July 22, 2014.

Implementation of the following mitigation measures would reduce the construction-related impacts to a **less than significant** level.

Mitigation Measure(s)

Mitigation Measure CUL-1: *Prior to grading permit issuance, the developer shall submit plans to the Community Development Department for review and approval which indicate (via notation on the improvement plans) that if historic and/or cultural resources are encountered during site grading or other site work, all such work shall be halted immediately within the area of discovery and the developer shall immediately notify the Community Development Department of the discovery. In such case, the developer shall be required, at their own expense, to retain the services of a qualified archaeologist for the purpose of recording, protecting, or curating the discovery as appropriate. The archaeologist shall be required to submit to the Community Development Department for review and approval a report of the findings and method of curation or protection of the resources. Further grading or site work within the area of discovery would not be allowed until the preceding work has occurred.*

Mitigation Measure CUL-2: *Pursuant to California Health and Safety Code §7050.5(c), if human bone or bone of unknown origin is found during construction, all work shall stop with 100 feet of the find and the Contra Costa County Coroner shall be contacted immediately. If the remains are determined to be Native American, then per California Public Resources Code §5097.98, the coroner shall notify the Native American Heritage Commission, who shall notify the person believed to be the most likely descendant. The most likely descendant shall work with the contractor to develop a program for reinternment of the human remains and any associated artifacts. Additional work is not to take place within 100 feet of the find until the identified appropriate actions have been implemented.*

VI. ENERGY

Would the project:	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporation*	*Less Than Significant Impact*	*No Impact*
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?			X	
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?			X	

RESPONSES TO CHECKLIST QUESTIONS

Responses a), b): Appendix F of the State CEQA Guidelines requires consideration of the potentially significant energy implications of a project. CEQA requires mitigation measures to reduce "wasteful, inefficient and unnecessary" energy usage (Public Resources Code Section 21100[b][3]). According to Appendix F of the CEQA Guidelines, the means to achieve the goal of conserving energy include decreasing overall energy consumption, decreasing reliance on natural gas and oil, and increasing reliance on renewable energy sources. In particular, the proposed project would be considered "wasteful, inefficient, and unnecessary" if it were to violate state and federal energy standards and/or result in significant adverse impacts related to project energy requirements, energy inefficiencies, energy intensiveness of materials, cause significant impacts on local and regional energy supplies or generate requirements for additional capacity, fail to comply with existing energy standards, otherwise result in significant adverse impacts on energy resources, or conflict or create an inconsistency with applicable plan, policy, or regulation.

The proposed project includes the construction of 11 single-family residential units. The amount of energy used at the project site would directly correlate to the size of the proposed units, the energy consumption of associated unit appliances, and outdoor lighting. Other major sources of proposed project energy consumption include fuel used by vehicle trips generated during project construction and operation, and fuel used by off-road construction vehicles during construction.

The following discussion provides calculated levels of energy use expected for the proposed project, based on commonly used modelling software (i.e. CalEEMod v.2016.3.2 and the California Air Resource Board's EMFAC2014). It should be noted that many of the assumptions provided by CalEEMod are conservative relative to the proposed project. Therefore, this discussion provides a conservative estimate of proposed project emissions.

Electricity and Natural Gas

Electricity and natural gas used by the proposed project would be used primarily to power on-site buildings. Total annual electricity (kWh) and natural gas (kBTU) usage associated with the operation of the proposed project are shown in Table 4, below (as provided by CalEEMod).

According to Calico's *Appendix A: Calculation Details for CalEEMod*, CalEEMod uses the California Commercial End Use Survey (CEUS) database to develop energy intensity value for non-residential buildings. The energy use from residential land uses is calculated based on the Residential Appliance Saturation Survey (RASS). Similar to CEUS, this is a comprehensive energy use assessment that includes the end use for various climate zones in California.

Table 4: Project Operational Natural Gas and Electricity Usage

Emissions[(a)]	*Natural Gas (kBTU/year)*	*Electricity (kWh/year)*
Single Family Housing	319,716	88,996
Total	**319,716**	**88,996**

SOURCE: CALEEMOD (V.2016.3.2.)

Energy usage during the operational phases of the proposed project would be typical for a project of this kind, and therefore would not represent a wasteful, inefficient, or unnecessary consumption of energy resources. Additionally, the proposed project would not conflict with or obstruct any state or local plan for renewable energy or energy efficiency.

On-Road Vehicles (Operation)

The proposed project would generate vehicle trips during its operational phase. In order to calculate new daily vehicle trips and operational on-road vehicle energy usage and emissions, default average daily trips and trip lengths generated by CalEEMod were used, which are based on the project land use, location and urbanization level parameters De Novo (the Initial Study consultant) selected within CalEEMod (i.e. "Single Family Housing" Land Use, "Bay Area Air Quality Management District" project location, and "Urban" setting, respectively). These values are provided by the individual districts or use a default average for the state, depending on the location of the proposed project (CAPCOA, 2017). Based on default factors provided by CalEEMod, the project would generate approximately 103 new daily vehicles trips and the average distance per trip was conservatively calculated to be approximately 7.1 miles. Therefore, the proposed project would generate at total of approximately 736 average daily vehicle miles travelled (Average Daily VMT). Using fleet mix data provide by CalEEMod (v2016.3.2), and Year 2021 gasoline and diesel MPG (miles per gallon) factors for individual vehicle classes as provided by EMFAC2014, De Novo derived weighted MPG factors for operational on-road vehicles of approximately 26.3 MPG for gasoline and 10.2 MPG for diesel vehicles. With this information, De Novo calculated as a conservative estimate that the unmitigated proposed project would generate vehicle trips that would use a total of approximately 26 gallons of gasoline and 5 gallons of diesel fuel per day, on average, or 9,552 gallons of gasoline and 1,651 annual gallons of diesel fuel per year.

On-Road Vehicles (Construction)

The proposed project would also generate on-road vehicle trips during project construction (from construction workers and vendors). Estimates of vehicle fuel consumed were derived based on the assumed construction schedule, vehicle trip lengths and number of workers per construction phase as provided by CalEEMod, and Year 2020 gasoline MPG factors provided by EMFAC2014. For the purposes of simplicity, it was assumed that all worker vehicles used

gasoline as a fuel source (as opposed to diesel fuel or alternative sources) and all vendor vehicles used diesel fuel as a fuel source (as opposed to gasoline or alternative sources). Table 6, below, describes gasoline and diesel fuel used by on-road mobile sources during each phase of the construction schedule. As shown, the vast majority of on-road mobile vehicle fuel used during the construction of the proposed project would occur during the building construction phase. See Appendix C for a detailed calculation.

Table 6: On-Road Mobile Fuel Generated by Project Construction Activities – By Phase

Construction Phase	*# of Days*	*Total Daily Worker Trips[(a)]*	*Total Daily Vendor Trips[(a)]*	*Gallons of Gasoline Fuel[(b)]*	*Gallons of Diesel Fuel[(b)]*
Site Preparation	5	18	-	38	-
Grading	8	15	-	50	-
Building Construction	230	4	1	387	248
Paving	18	20	-	151	-
Architectural Coating	18	1	-	8	-
Total	**N/A**	**N/A**	**N/A**	**634**	**248**

NOTE: [(A)] PROVIDED BY CALEEMOD. [(B)]SEE APPENDIX C FOR FURTHER DETAIL
SOURCE: CALEEMOD (V.2016.3.2); EMFAC2014.

Off-Road Vehicles (Construction)

Off-road construction vehicles would use diesel fuel during the construction phase of the proposed project. A non-exhaustive list of off-road constructive vehicles expected to be used during the construction phase of the proposed project includes: cranes, forklifts, generator sets, tractors, excavators, and dozers. Based on the total amount of CO_2 emissions expected to be generated by the proposed project (as provided by the CalEEMod output), and a CO_2 to diesel fuel conversion factor (provided by the U.S. Energy Information Administration), the proposed project would use a total of approximately 1,039 gallons of diesel fuel for off-road construction vehicles (during the site preparation and grading phases of the proposed project). Detailed calculations are provided in Appendix C.

Other

Proposed project landscape maintenance activities would generally require the use fossil fuel (i.e. gasoline) energy. For example, lawn mowers require the use of fuel for power. As an approximation, it is estimated that landscape care maintenance would require approximately four individuals one full day per week, or 1,677 hours per year (or 416.8 hours per year per landscaper). Assuming an average of approximately 0.5 gallons of gasoline used per person-hour, the proposed project would require the use of approximately 839 gallons of gasoline per year to power landscape maintenance equipment. The energy used to power landscape maintenance equipment would not differ substantially from the energy required for landscape maintenance for similar projects.

The proposed project could also use other sources of energy not identified here. Examples of other energy sources include alternative and/or renewable energy (such as solar PV) and/or

on-site stationary sources (such as on-site diesel generators) for electricity generation. The proposed project would be solar-ready, which could reduce the need for fossil fuel-based energy (for proposed project buildings), including for electricity.

Conclusion

The proposed project would use energy resources for the operation of project buildings (electricity and natural gas), for on-road vehicle trips (e.g. gasoline and diesel fuel) generated by the proposed project, and from off-road construction activities associated with the proposed project (e.g. diesel fuel). Each of these activities would require the use of energy resources. The proposed project would be responsible for conserving energy, to the extent feasible, and relies heavily on reducing per capita energy consumption to achieve this goal, including through Statewide and local measures.

The proposed project would be in compliance with all applicable Federal, State, and local regulations regulating energy usage. For example, PG&E is responsible for the mix of energy resources used to provide electricity for its customers, and it is in the process of implementing the Statewide Renewable Portfolio Standard (RPS) to increase the proportion of renewable energy (e.g. solar and wind) within its energy portfolio. PG&E is expected to achieve at least a 33% mix of renewable energy resources by 2020, and 50% by 2030. Additionally, energy-saving regulations, including the latest State Title 24 building energy efficiency standards ("part 6"), would be applicable to the proposed project. Other Statewide measures, including those intended to improve the energy efficiency of the statewide passenger and heavy-duty truck vehicle fleet (e.g. the Pavley Bill and the Low Carbon Fuel Standard), would improve vehicle fuel economies, thereby conserving gasoline and diesel fuel. These energy savings would continue to accrue over time.

As a result, the proposed project would not result in any significant adverse impacts related to project energy requirements, energy use inefficiencies, and/or the energy intensiveness of materials by amount and fuel type for each stage of the project including construction, operations, maintenance, and/or removal. PG&E, the electricity and natural gas provider to the site, maintains sufficient capacity to serve the proposed project. The proposed project would comply with all existing energy standards, including those established by the City of Brentwood, and would not result in significant adverse impacts on energy resources. Furthermore, existing connections exist between the project site and nearby pedestrian and bicycle pathways, and public transit access exists nearby, reducing the need for local motor vehicle travel. Although improvements to the City's pedestrian, bicycle, and public transit systems would provide further opportunities for alternative transit, the proposed project would be linked closely with existing networks that, in large part, are sufficient for most residents of the proposed project and the City of Brentwood as a whole. For these reasons, the proposed project would not be expected cause an inefficient, wasteful, or unnecessary use of energy resources nor cause a significant impact on any of the threshold as described by Appendix F of the CEQA Guidelines. This is a ***less than significant*** impact.

VII. GEOLOGY AND SOILS -- WOULD THE PROJECT:

	Potentially Significant Impact	*Less Than Significant with Mitigation*	*Less Than Significant Impact*	*No Impact*
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.		X		
ii) Strong seismic ground shaking?		X		
iii) Seismic-related ground failure, including liquefaction?			X	
iv) Landslides?			X	
b) Result in substantial soil erosion or the loss of topsoil?		X		
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?			X	
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?		X		
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?				X
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?		X		

RESPONSES TO CHECKLIST QUESTIONS

Responses a.i), a.ii): Less than Significant with Mitigation. The site is not located within a currently designated Alquist-Priolo Earthquake Fault Zone, and known surface expression of active faults does not exist within the site. However, the site is located within a seismically active region. According to the USGS Fault and Fold Database, the nearest active fault is the Greenville Fault, located about 8.8 miles southwest. The potentially active Davis Fault and

Midland Fault are located about 2.8 west and 5.5 miles east of the site, respectively. The Greenville Fault is considered to be capable of a moment magnitude earthquake of 6.8 to 7.0.

Geologic Hazards

Potential seismic hazards resulting from a nearby moderate to major earthquake could generally be classified as primary and secondary. The primary seismic hazard is ground rupture, also called surface faulting. The common secondary seismic hazards include ground shaking and ground lurching.

Ground Rupture

Because the property does not have known active faults crossing the site, and the site is not located within an Earthquake Fault Special Study Zone, ground rupture is unlikely at the subject property.

Ground Shaking

An earthquake of moderate to high magnitude generated within the San Francisco Bay region could cause considerable ground shaking at the site, similar to that which has occurred in the past. The project would be built using standard engineering and seismic safety design techniques. Building design at the project site would be completed in conformance with the recommendations of the geotechnical investigation required by Mitigation Measure GEO-2 below, as reviewed and approved by the City of Brentwood Building Division. The structures would be required to meet the standards of applicable Building and Fire Codes, including the 2019 California Building Code (CBC), as adopted or updated by the City of Brentwood. Seismic design provisions of current building codes generally prescribe minimum lateral forces, applied statically to the structure, combined with the gravity forces of dead-and-live loads. The code-prescribed lateral forces are generally considered to be substantially smaller than the comparable forces that would be associated with a major earthquake. Therefore, structures would be able to: (1) resist minor earthquakes without damage, (2) resist moderate earthquakes without structural damage but with some nonstructural damage, and (3) resist major earthquakes without collapse but with some structural as well as nonstructural damage.

Ground Lurching

Ground lurching is a result of the rolling motion imparted to the ground surface during energy released by an earthquake. Such rolling motion could cause ground cracks to form in weaker soils. The potential for the formation of these cracks is considered greater at contacts between deep alluvium and bedrock. Such an occurrence is possible at the site as in other locations in the Bay Area, but based on the site location, the offset is expected to be very minor.

Conclusion

The project site is not within an Alquist-Priolo Special Studies Zone; however, the Brentwood area is located in a seismically active zone. Five active faults are located within an approximate 50-mile radius of the project site. The nearest State of California zoned, active fault is the

Greenville fault, located approximately 8.8 miles southwest of the project site. Development of the proposed project in this seismically active zone could expose people or structures to substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault and/or strong seismic ground shaking. Therefore, a potentially significant impact could result. The City of Brentwood General Plan Action SA 1a requires the submission of geologic and soils reports for all new developments. The geologic risk areas that are determined from these studies shall have standards established and recommendations shall be incorporated into development. Implementation of the following mitigation measures would ensure the potential impacts are **less than significant.**

Mitigation Measure(s)

Mitigation Measure GEO-1*: All project buildings shall be designed in conformance with the current edition of the California Building Code (CBC).*

Mitigation Measure GEO-2: *Prior to grading permit issuance, the applicant shall submit a final geotechnical evaluation of the project site that analyzes soil stability including soil expansion, and the potential for lateral spreading, subsidence, liquefaction or collapse. The report shall identify any on site soil and seismic hazards and provide design recommendations for onsite soil and seismic conditions. The geotechnical evaluation shall be reviewed and approved by the Director of Public Works/City Engineer, Chief Building Official, and a qualified Geotechnical Engineer to ensure that all geotechnical recommendations specified in the geotechnical report are properly incorporated and utilized in the project design in order to adhere to all geotechnical requirements contained in the California Building Code.*

Mitigation Measure GEO-3*: All grading and foundation plans for the development shall be designed by a Civil and Structural Engineer and reviewed and approved by the Director of Public Works/City Engineer, Chief Building Official, and a qualified Geotechnical Engineer prior to issuance of grading and building permits to ensure that all geotechnical recommendations specified in the geotechnical report are properly incorporated and utilized in the project design in order to adhere to all geotechnical requirements contained in the California Building Code.*

Responses a.iii), c): Less than Significant. Soil liquefaction results from loss of strength during cyclic loading, such as that which is imposed by earthquakes. Soils most susceptible to liquefaction are clean, loose, saturated, uniformly graded, and fine-grained sands.

According to the City of Brentwood General Plan Draft EIR Figure 3.6-2, the risk of liquefaction is considered moderate throughout the entirety of the project site. As discussed previously, the City of Brentwood General Plan Action SA 1a requires the submission of geologic and soils reports for all new developments. The geologic risk areas that are determined from these studies shall have standards established and recommendations shall be incorporated into development.

Considering the moderate risk of liquefaction at the proposed project site, potentially significant impacts relating to soil stability are present. As stated previously, Mitigation Measure GEO-2 requires the preparation of a geotechnical evaluation of the project site.

Implementation of Mitigation Measure GEO-2 would reduce impacts to **less than significant** levels related to soil stability, and the potential result in, lateral spreading, subsidence, liquefaction or collapse.

Mitigation Measure(s)
Implement Mitigation Measure GEO-2

Responses a, iv): Less than Significant. The proposed project site is not susceptible to landslides because the area is essentially flat. This is a **less than significant** impact.

Response b): Less than Significant with Mitigation. The project site currently consists of undeveloped land. According to the project site plans prepared for the proposed project, development of the proposed project would result in the creation of new impervious surface areas throughout the project site. The development of the project site would also cause ground disturbance of top soil. The ground disturbance would be limited to the areas proposed for grading and excavation, including the residential building pads and drainage, sewer, and water infrastructure improvements. After grading and excavation, and prior to overlaying the disturbed ground surfaces with impervious surfaces and structures, the potential exists for wind and water erosion to occur, which could adversely affect downstream storm drainage facilities.

Without implementation of appropriate Best Management Practices (BMPs) related to prevention of soil erosion during construction, development of the project would result in a potentially significant impact with respect to soil erosion.

Implementation of the following mitigation measures would ensure the impact is **less than significant**.

Mitigation Measure(s)
Mitigation Measure GEO-4: *Prior to grading permit issuance, the applicant shall submit a final grading plan to the Director of Public Works/City Engineer for review and approval. If the grading plan differs significantly from the proposed grading illustrated on the approved project plans, plans that are consistent with the new revised grading plan shall be provided for review and approval by the Director of Public Works/City Engineer.*

Mitigation Measure GEO-5: *Any applicant for a grading permit shall submit an erosion control plan to the Director of Public Works/City Engineer for review and approval. The plan shall identify protective measures to be taken during construction, supplemental measures to be taken during the rainy season, the sequenced timing of grading and construction, and subsequent revegetation and landscaping work to ensure water quality in creeks and tributaries in the General Plan Area is not degraded from its present level. All protective measures shall be shown on the grading plans and specify the entity responsible for completing and/or monitoring the measure and include the circumstances and/or timing for implementation.*

Mitigation Measure GEO-6*: Grading, soil disturbance, or compaction shall not occur during periods of rain or on ground that contains freestanding water. Soil that has been soaked and*

wetted by rain or any other cause shall not be compacted until completely drained and until the moisture content is within the limit approved by a Soils Engineer. Approval by a Soils Engineer shall be obtained prior to the continuance of grading operations. Confirmation of this approval shall be provided to the Public Works Department prior to commencement of grading.

Response d): Less than Significant with Mitigation. Expansive soils shrink/swell when subjected to moisture fluctuations, which could cause heaving and cracking of slabs-on-grade, pavements, and structures founded on shallow foundations. Building damage due to moisture changes in expansive soils could be reduced by appropriate grading practices and using post-tensioned slab foundations or similarly stiffened foundation systems which are designed to resist the deflections associated with soil expansion. According to the City of Brentwood General Plan Draft EIR Figure 3.6-4, the project site has a high (6%-9%) Linear Extensibility (which directly relates to the soils shrink-swell potential). Therefore, because of the potential presence of expansive soils on the site, a **potentially significant** impact could occur. However, as mentioned previously, Mitigation Measure GEO-2 requires a final geotechnical evaluation of the project site that analyzes soil stability, including soil expansion. Implementation of Mitigation Measure GEO-2 ensures project soils are analyzed and design recommendations are provided by a qualified geotechnical engineer to ensure the safety and welfare of future project residents. Therefore, with implementation of Mitigation Measure GEO-2, this impact is considered **less than significant**.

Mitigation Measure(s)

Implementation of Mitigation Measure GEO-2.

Response e): No Impact. The project has been designed to connect to the existing City sewer system and septic systems will not be used. Therefore, **no impact** would occur related to soils incapable of adequately supporting the use of septic tanks.

Responses f): Less than Significant with Mitigation. The project is not expected to contain subsurface paleontological resources; however, it is possible that undiscovered paleontological resources could be encountered during ground-disturbing activities.

Damage to or destruction of a paleontological resource would be considered a potentially significant impact under local, state, or federal criteria. Implementation of the following mitigation measure would ensure steps would be taken to reduce impacts to paleontological resources in the event that they are discovered during construction. This mitigation measure would reduce this impact to a ***less than significant*** level.

Mitigation Measure GEO-7*: If any paleontological resources are found during grading and construction activities, all work shall be halted immediately within a 200-foot radius of the discovery until a qualified paleontologist has evaluated the find.*

Work shall not continue at the discovery site until the paleontologist evaluates the find and makes a determination regarding the significance of the resource and identifies recommendations for conservation of the resource, including preserving in place or relocating within the project site, if

feasible, or collecting the resource to the extent feasible and documenting the find with the University of California Museum of Paleontology.

VIII. GREENHOUSE GAS EMISSIONS – WOULD THE PROJECT:

	Potentially Significant Impact	***Less Than Significant with Mitigation Incorporation***	***Less Than Significant Impact***	***No Impact***
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?			X	
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gasses?			X	

RESPONSES TO CHECKLIST QUESTIONS

Responses a), b): Less than Significant. Implementation of the proposed project would cumulatively contribute to increases of GHG emissions that are associated with global climate change. Estimated GHG emissions attributable to future development would be primarily associated with increases of carbon dioxide (CO_2) and, to a lesser extent, other GHG pollutants, such as methane (CH_4) and nitrous oxide (N_2O). Sources of GHG emissions include area sources, mobile sources or vehicles, utilities (electricity and natural gas), water usage, wastewater generation, and the generation of solid waste. The common unit of measurement for GHG is expressed in terms of annual metric tons of CO_2 equivalents ($MTCO_2e$/yr).

The City of Brentwood has determined that the BAAQMD thresholds of significance are the best available option for evaluation of GHG impacts for this project and, thus, are used in this analysis.

The BAAQMD identifies screening criteria for development projects, which provide a conservative indication of whether a development could result in a potentially significant impact associated with GHG emissions. If the screening criterion for GHG is met by a project, an assessment of that project's GHG emissions would be required. The operational GHG screening criterion for a single-family residential development is if the development is less than or equal to 56 dwelling units. Because the proposed project consists of a total of 11 single-family residential dwelling units, a GHG assessment is not required for the proposed project.

The proposed project site was designated for Residential Very Low Density uses in the Brentwood General Plan in effect at the time ABAG projections were forecast. The proposed project is consistent with the General Plan land use designation. Therefore, the project would not conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs, and impacts associated with the generation of GHG emissions would be **less than significant**.

IX. HAZARDS AND HAZARDOUS MATERIALS -- WOULD THE PROJECT:

	Potentially Significant Impact	*Less Than Significant with Mitigation Incorporation*	*Less Than Significant Impact*	*No Impact*
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?		X		
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?		X		
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?			X	
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?				X
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?				X
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?			X	
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?				X

RESPONSES TO CHECKLIST QUESTIONS

Responses a), b): Less than Significant with Mitigation. The following discussion addresses potential hazards associated with existing site conditions of the project site, as well as the potential use of hazardous materials during operation of the project.

Proposed Project Uses

The proposed project has limited potential for the routine transport, use, or disposal of hazardous materials. The proposed residential uses would not involve the routine transport, use, or disposal of hazardous materials, or present a reasonably foreseeable release of hazardous materials. Hazardous materials associated with the residential uses would consist mostly of typical household-type cleaning products and fertilizers, which would be utilized in small quantities and in accordance with label instructions. This is a less than significant impact, and no mitigation is required.

Existing Site Conditions

There are two separate parcels that make up the project site. Both parcels APN: 018-080-025 and 018-080-022 were analyzed for potential soil contamination and other existing hazards, prior to the preparation of this IS/MND. In general, APN 018-080-025 makes up the western half of the project site, and APN 018-080-022 makes up the eastern half (and southern portion) of the project site.

A Phase 1 Environmental Site Assessment Report was prepared for parcel 018-080-025, and as described in greater detail below, there were no significant hazardous substances found on this site.

A Voluntary Cleanup Agreement and Removal Action Workplan was prepared for parcel 018-080-022 where potential lead contamination of the soil was found, as described in greater detail below.

APN 018-080-025 Site Conditions

A Phase I Environmental Site Assessment (Phase I Report), dated August, 2019, was prepared for the project site at APN: 018-08-025 by TRC Solutions Inc. (TRC). TRC conducted a review of federal, state and local regulatory agency databases provided by Environmental Data Resources (EDR) to evaluate the likelihood of contamination incidents at and near the site. The database sources and the search distances are in complete accordance with the requirements of ASTM E 1527-13. The purpose of the records review was to obtain reasonably available information to help identify Recognized Environmental Conditions (RECs). Additionally, TRC conducted a reconnaissance of the project site on April 30, 2019. The site reconnaissance was conducted by walking and driving representative areas of the site. Results of the site reconnaissance and records searches are as follows:

Site Reconnaissance: The site was observed to be vacant and entirely unpaved. No hazardous substances including raw materials; finished products and formulations; hazardous wastes; hazardous constituents and pollutants including intermediates and byproducts that are currently present at the Site; and no unidentified substance containers (when open or damaged, and containing unidentified substances suspected of being hazardous or petroleum products) were observed at the Site. TRC observed no visual evidence, including vent pipes, fill ports or dispensing equipment, of underground storage tanks (USTs) at the Site.

A pump house was observed on the adjoining property to the southeast of the Site. This well is identified as USGS California Water Science Center monitoring location 001N002E02K001M in the EDR Well Report. The EDR report also indicated that 9 additional water wells and 16 oil and gas wells are present on surrounding properties. None of these wells were observed during Site reconnaissance. According to the California Department of Conservation – Division of Oil, Gas, and Geothermal Resources, these oil and gas wells have been plugged, inspected, and approved according to the requirements of the Division.

A small pile of degraded asphalt debris is present between the northern border of the Site and Lone Tree Way. The lot to the west of the Site is currently vacant, but has evidence of a former building. A residence and a vacant lot are present to the south of the Site. A pump house was observed on this vacant lot. This well is identified as USGS California Water Science Center monitoring location 001N002E02K001M in the EDR Well Report. The lot to the east of the Site is undeveloped. To the north, south, and east of the Site, surrounding properties are generally residential. Land to the west is generally mixed residential and commercial, and also includes a plant nursery approximately 400 feet west of the Site. Railroad tracks are present approximately 800 feet west of the site.

Structures: No existing structures were identified at the site.

Hazardous Substances and Soil Sampling*:* No hazardous substances including raw materials; finished products and formulations; hazardous wastes; hazardous constituents and pollutants including intermediates and byproducts that are currently present at the site; and no unidentified substance containers (when open or damaged, and containing unidentified substances suspected of being hazardous or petroleum products) were observed at the Site.

TRC observed no visual evidence, including vent pipes, fill ports or dispensing equipment, of underground storage tanks (USTs) or aboveground storage tanks (ASTs) at the Site.

To help evaluate the general soil quality, soil samples were collected on May 29, 2019 to June 26, 2019, from 2 feet below ground surface were collected using a hand auger.

A total of 13 surface soil samples and 3 near-surface soil samples were submitted for chemical testing. Laboratory testing included arsenic and lead (EPA Test Method 6020), and organochlorine Pesticides (OCPs) (EPA Test Method 8081).

Results of analyses detected no organchlorine pesticides exceeding respective residential ESLs in any of the three surface soil samples. Detected arsenic concentrations in three surface samples ranged from 7.1 to 9.1 mg/kg, which is consistent with regional background arsenic concentrations. Analyses detected total lead concentrations ranging from 8.7 to 150 mg/kg in sixteen surface and near-surface soil samples with only three surface soil samples exceeding the residential ESL of 80 mg/kg for lead. Using the EPA's ProUCL software, the calculated 95 percent Upper Confidence Level (UCL) for lead in surface soil at the Site 78.76 mg/kg, which is less than the residential ESL of 80 mg/kg. Detailed results of the testing are included in Phase I Environmental Assessment presented in Appendix E.

TRC concluded that the assessment has revealed no evidence of Recognized Environmental Conditions, Controlled Recognized Environmental Conditions or Historical Recognized Environmental Conditions in connection with the Site with the exception of the following:

REC No. 1
File review and discussion with the DTSC indicates that lead concentrations ranging from 37 to 410 mg/kg are present in soil at the adjacent property to the east (aka Skipolini property). To evaluate potential lead impacts, soil samples were collected across the Site. Results of analyses

detected no organchlorine pesticides exceeding respective residential Environmental Screening Levels (ESLs) established by the Regional Water Quality Control Board (RWQCB) in any of the three surface soil samples tested. Detected arsenic concentrations ranged from 7.1 to 9.1 mg/kg in the three samples tested, which is consistent with background values for the Bay Area. Analyses detected total lead concentrations ranging from 8.7 to 150 mg/kg in sixteen (16) surface and near-surface soil samples with only three (3) surface soil samples exceeding the residential ESL of 80 mg/kg for lead. Using the EPA's ProUCL software, the calculated 95 percent Upper Confidence Level (UCL) for lead in the thirteen (13) surface soil at the Site 78.76 mg/kg, which is less than the residential ESL of 80 mg/kg. Accordingly, TRC recommends no additional soil investigation at this time.

APN 018-080-022 Site Conditions

In 2014, ENGEO conducted a Phase I Environmental Site Assessment and subsequent Agrichemical Impact Assessment for the approximately 2.96-acre portion of the project site, identified as APN_018-0080-022. No significant pesticide or arsenic impacts were identified; however, elevated lead concentrations exceeding residential screening levels were identified in one area of the parcel. Lead is the only identified chemical of potential concern (COPC). Based on the findings of the soil sampling and laboratory testing, the soil impacts appear to be limited to an approximately 21,000 sf area in the west-central portion of the parcel. The depth of the impacted soil is likely limited to the upper 12 inches of soil measured from the ground surface, equating to an approximate volume of 800 to 1,000 cubic yards.

The owner of the site (project proponent) located at APN: 018-0080-022 entered into a Voluntary Cleanup Agreement (VCA) with DTSC, which led to the preparation of a Removal Action Workplan (ENGEO, 2019). The purpose of this Agreement is for the project proponent to investigate and/or remediate a release or threatened release of any hazardous substance at or from the site under the oversight of DTSC. Based on the information available to DTSC and project proponent, the site is or may be contaminated with hazardous substances, including Lead. The proponent agreed to soil remediation subject to the review and approval of the DTSC. As noted above, a Removal Action Work plan (RAW) was prepared for the site. The purpose of the RAW is to describe the proposed procedures and protocols for remediation of lead-impacted soil at the site and present the remedial measures to mitigate lead-impacted soil to allow for possible future development.

According to the RAW, soil will be sampled, excavated, and analyzed prior to transporting the excavated soil offsite for disposal in Vasco Road Landfill or Altamont Landfill. Excavation work will be conducted by a licensed grading contractor with current hazardous material certifications. Prior to implementation of the RAW, a grading permit will be obtained from the City of Brentwood. A hauling plan/permit will also be submitted to the City of Brentwood for approval.

Conclusion

Development of the proposed project would include the construction of 11 residential units and associated infrastructure. Projects that involve the routine transport, use, or disposal of hazardous materials are typically industrial in nature. The proposed project would not involve the routine transport, use, or disposal of hazardous materials. No mitigation for this environmental topic is required.

The Phase I prepared for parcel 018-080-025 revealed Recognized Environmental Conditions at the project site associated with contaminated soils. Soil sampling was conducted, and no potential impacts associated with soil contamination were identified. No additional soil investigation requirements were identified in the Phase I ESA. No additional mitigation is required for this portion of the overall project site.

For parcel APN 018-080-022, the project proponent has entered into a VCA and RAW in order analyze, excavate and dispose of contaminated soil onsite. This is a potentially significant impact. However, the implementation of Alternative 3 Soil Excavation/Off-Site Disposal identified in section 4.3.3 of the Removal Action Workplan will mitigate this impact to a Less than Significant level.

Excavation/off site disposal is a well-proven, readily implementable solution that is a common method for cleaning up contaminated sites. The affected area will be divided into approximately 35 grids, 25 by 25 feet. The grids with affected soils will initially be excavated to a depth of 12 inches. The excavated soil will be stockpiled in approximate 100-cubic-yard volume on site, outside of the planned excavation area, prior to being profiled for landfill disposal. As necessary, soil stockpiles will be covered with 10-mil plastic sheeting and secured to prevent dust or runoff during storm events. Stockpiles will be managed in accordance with the Dust Control Plan. Following excavation, each of the excavated grids will be sampled by the collection of one discrete soil sample from the center-base of the grid. The grid samples will be analyzed for total lead using the Disposal/Refuse Criteria identified in table 5.2-1 of the removal Action Work Plan. Soil grids with confirmation sampling concentrations exceeding the soil cleanup levels will be re-excavated an additional 6 inches and re-sampled. Excavation will proceed until soil cleanup levels are achieved. Grids with confirmation samples below the soil cleanup levels will be considered complete with no further excavation conducted. Although implementation of Alternative 3 will result in greater transport truck traffic to and from the site as soil loads will be transported from the site to landfills, it would reduce or eliminate potential exposure to soil contamination, and therefore mitigate potentially significant environmental impacts. Once implemented, Alternative 3 would not require any further management or site controls.

Implementation of the following mitigation measure would reduce the above impact to a **less than significant** level.

Mitigation Measure(s)

Mitigation Measure HAZ-1: *The project proponent shall implement soil excavation and disposal in accordance with section 4.3.3 Alternative 3 Soil Excavation/Off-site Disposal and section 5.0 Removal Action Implementation, as detailed in the Removal Work Action Plan included in Appendix H of this IS/MND. Prior to implementation of ground disturbing activities, a grading permit shall be obtained with the City of Brentwood for approval. Excavation work shall be conducted by a licensed grading contractor with current hazardous material certifications. Work activities will be conducted Monday – Friday between 7:00 AM and 6:00 PM.*

Mitigation Measure HAZ-2: *Prior to the transportation and disposal of contaminated soils, a hauling plan/permit shall be submitted to the City of Brentwood for approval. Transportation and disposal of soils shall be conducted in accordance with the Transportation Plan identified in Appendix B of the Removal Action Work Plan.*

Mitigation Measure HAZ-3*: Upon completion of soil excavation, disposal, and confirmation sampling, the project proponent shall prepare a Removal Action Completion Report documenting Site activities. The report shall provide all compiled laboratory data and disposal manifests for the project. The report shall be signed by a California Professional Engineer and/or Professional Geologist. The report shall be submitted to DTSC for review and approval. The City of Brentwood shall not permit any additional site grading or earthwork on the subject parcel until the City has received confirmation from DTSC that the remediation efforts have been satisfactorily completed, as required by the conditions established in both the RAW and VCA.*

Response c): Less than Significant. Freedom high school is located approximately 0.6 miles to the northeast; Marsh Creek Elementary School is located approximately 0.9 miles to the southeast; Pioneer Elementary School is located approximately 1.01 miles to the southwest; and Golden Hills Christian School is located approximately 1.03 miles to the west; however, the proposed project has limited potential for the routine transport, use, or disposal of hazardous materials as discussed above in Responses a) and b). The proposed residential uses would not involve the routine transport, use, or disposal of hazardous materials, or present a reasonably foreseeable release of hazardous materials. Therefore, the project would have a **less than significant** impact with respect to emitting hazardous emissions or handling hazardous or acutely hazardous materials, substances, or waste within ¼ mile of an existing or proposed school.

Response d): No impact. In preparing the Phase 1 Environmental Site Assessment (2019), TRC performed a search of Federal, State, and local hazardous materials/sites databases regarding the project site and nearby properties.

The environmental database report identified 25 listings, including 15 that could be mapped and 10 that could not (i.e., orphan properties) within the ASTM-required radii of the Site. Eight of these orphan properties are listed as stormwater construction sites. Two orphan properties are former spill sites associated with the Brentwood Oil and Gas Field. Both of these properties are located near the intersection of Deer Valley Road and Lone Tree Way, more than two miles away from the target property. One water well for the property is located southeast of the

project site. The project site has not been identified in any of the hazardous databases, nor is the site on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5. As a result, the proposed project would have **no impact** under this criterion.

Responses e): No impact. The project site is not within an airport land use plan or within two miles of an airport. The nearest airport, Funny Farm Airfield, is a private airfield located approximately 4.1 miles southeast of the project site. Therefore, implementation of the proposed project would result in **no impact** to this environmental topic.

Response f): Less than significant. The Brentwood General Plan currently designates the proposed project site for residential very low density uses, such as those proposed for the project. Implementation of the proposed project would not result in any substantial modifications to the existing roadway system and would not interfere with potential evacuation or response routes used by emergency response teams. Therefore, the impact would be **less than significant**.

Response g): No impact. The site is not located within an area where wildland fires occur. The site is predominately surrounded by existing development which have a low potential for wildland fires. Therefore, **no impact** would occur.

X. HYDROLOGY AND WATER QUALITY – WOULD THE PROJECT:

	Potentially Significant Impact	*Less Than Significant with Mitigation Incorporation*	*Less Than Significant Impact*	*No Impact*
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?		X		
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?			X	
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:				
(i) result in substantial erosion or siltation on- or off-site;		X		
(ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;		X		
(iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or		X		
(iv) impede or redirect flood flows?			X	
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?			X	
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?			X	

RESPONSES TO CHECKLIST QUESTIONS

Responses a): Less than Significant with Mitigation.

During the early stages of construction activities, topsoil would be exposed due to grading and partial leveling of the site. After grading and leveling and prior to overlaying the ground surface with impervious surfaces and structures, the potential exists for wind and water erosion to discharge sediment and/or urban pollutants into stormwater runoff.

The State Water Resources Control Board (SWRCB) regulates stormwater discharges associated with construction activities where clearing, grading, or excavation results in a land disturbance of one or more acres. Performance Standard NDCC-13 of the City's National Pollutant Discharge Elimination System (NPDES) permit requires applicants to show proof of coverage under the State's General Construction Permit prior to receipt of any construction permits. The State's

General Construction Permit requires a Storm Water Pollution Prevention Plan (SWPPP) to be prepared for the site. A SWPPP describes BMPs to control or minimize pollutants from entering stormwater and must address both grading/erosion impacts and non-point source pollution impacts of the development project, including post-construction impacts. The City of Brentwood requires all development projects to use BMPs to treat runoff.

In summary, disturbance of the on-site soils during construction activities could result in a potentially significant impact to water quality should adequate BMPs not be incorporated during construction in accordance with SWRCB regulations.

Implementation of the following mitigation measure would reduce the above impact to a **less than significant** level.

Mitigation Measure(s)

Mitigation Measure HYD-1: *Prior to issuance of grading permits, the contractor shall prepare a Storm Water Pollution Prevention Plan (SWPPP). The Developer shall file the Notice of Intent (NOI) and associated fee to the SWRCB. The SWPPP shall serve as the framework for identification, assignment, and implementation of BMPs. The contractor shall implement BMPs to reduce pollutants in stormwater discharges consistent with the requirements established in 15.52.60(F): Erosion and Sediment Control of the City's Municipal Code. The SWPPP shall be submitted to the Director of Public Works/City Engineer for review and approval and shall remain on the project site during all phases of construction. Following implementation of the SWPPP, the contractor shall subsequently demonstrate the SWPPP's effectiveness and provide for necessary and appropriate revisions, modifications, and improvements to reduce pollutants in stormwater discharges to the maximum extent practicable.*

Mitigation Measure HYD-2: *Prior to the completion of construction, the applicant shall prepare and submit, for the City's review, an acceptable Stormwater Control Operation and Maintenance Plan. In addition, prior to the sale, transfer, or permanent occupancy of the site the applicant shall be responsible for paying for the long-term maintenance of treatment facilities, and executing a Stormwater Management Facilities Operation and Maintenance Agreement and Right of Entry in the form provided by the City of Brentwood. The applicant shall accept the responsibility for maintenance of stormwater management facilities until such responsibility is transferred to another entity.*

The applicant shall submit, with the application of building permits, a draft Stormwater Facilities and Maintenance Plan, including detailed maintenance requirements and a maintenance schedule for the review and approval by the Director of Public Works/City Engineer. Typical routine maintenance consists of the following:

- *Limit the use of fertilizers and/or pesticides. Mosquito larvicides shall be applied only when absolutely necessary.*
- *Replace and amend plants and soils as necessary to insure the planters are effective and attractive. Plants must remain healthy and trimmed if overgrown. Soils must be maintained to efficiently filter the storm water.*

- *Visually inspect for ponding water to ensure that filtration is occurring.*
- *After all major storm events, remove bubble-up risers for obstructions and remove if necessary.*
- *Continue general landscape maintenance, including pruning and cleanup throughout the year.*
- *Irrigate throughout the dry season. Irrigation shall be provided with sufficient quantity and frequency to allow plants to thrive.*
- *Excavate, clean and or replace filter media (sand, gravel, topsoil) to insure adequate infiltration rate (annually or as needed).*

Mitigation Measure HYD-3: *Design of both the on-site drainage facilities shall meet with the approval of both the Director of Public Works/City Engineer and the Contra Costa County Flood Control and Water Conservation District prior to the issuance of grading permits.*

Mitigation Measure HYD-4: *Contra Costa County Flood Control and Water Conservation District drainage fees for the Drainage Area shall be paid prior to issuance of grading permits to the satisfaction of the Director of Public Works/City Engineer.*

Mitigation Measure HYD-5: *The Applicant/Developer shall ensure that the project site shall drain into a street, public drain, or approved private drain, in such a manner that un-drained depressions shall not occur. Satisfaction of this measure shall be subject to the approval of the Director of Public Works/City Engineer.*

Mitigation Measure HYD-6: *The construction plans shall indicate roof drains emptying into a pipe leading to the project bioswale areas for the review and approval of the Director of Public Works/City Engineer prior to the issuance of building permits.*

Mitigation Measure HYD-7: *The improvement plans shall indicate concentrated drainage flows not crossing sidewalks or driveways for the review and approval of the Director of Public Works/City Engineer prior to the issuance of grading permits.*

Response b): Less than Significant. The City provides domestic, potable water to its residents using both surface water and groundwater resources. The City has seven active groundwater wells, which provided approximately 30 percent of the potable water supplied during 2010. Brentwood is located within the Tracy Subbasin of the San Joaquin Valley Groundwater Basin. While the project would create new impervious surface areas on portions of the 4.08 acre project site, the Tracy Subbasin comprises 345,000 acres (539 square miles); therefore, recharge of the groundwater basin within which the project site is located comes from many sources over a broad geographic area. The new impervious surfaces associated with the project would not cause a substantial depletion of recharge within the Tracy Subbasin. Additionally, the proposed landscape areas would provide an area for on-site groundwater recharge. Further, except for seasonal variations resulting from recharge and pumping, water levels in most of the wells of the Tracy Sub-basin have remained stable over at least the last 10 years (as of 2015)[4].

[4] Erler & Kalinowski, Inc. City of Tracy 2015 Urban Water Management Plan. July 2016.

It should be noted that the City of Brentwood has adequate water supply to meet the demands of the proposed project, as well as future anticipated development allowed under the Brentwood General Plan, as described in greater detail in Section XIX, Utilities and Service Systems. The project itself does not include installation of any wells, but would include eventual connections to existing City of Brentwood water infrastructure. Non-potable water infrastructure is not currently available at the project site. The City is currently in the process of developing and expanding infrastructure for non-potable water. This infrastructure is not yet complete, therefore, the applicant will be required to construct onsite nonpotable water infrastructure that stubs out on Lone Tree Way. The project will require connection to the City's potable water distribution system.

The proposed project is consistent with the General Plan land use designation for the site. The potential water demand of future site development was accounted for and considered in the General Plan EIR and the most recent Urban Water Management Plan. As demonstrated in these documents, the City has adequate supply availability to meet future buildout water demands. Therefore, the project would result in a **less than significant** impact with respect to substantially depleting groundwater supplies or interfering substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level

Responses c.i), c.ii), c.iii, e): Less than Significant with Mitigation

When land is in a natural or undeveloped condition, soils, mulch, vegetation, and plant roots absorb rainwater. This absorption process is called infiltration or percolation. Much of the rainwater that falls on natural or undeveloped land slowly infiltrates the soil and is stored either temporarily or permanently in underground layers of soil. When the soil becomes completely soaked or saturated with water or the rate of rainfall exceeds the infiltration capacity of the soil, the rainwater begins to flow on the surface of land to low lying areas, ditches, channels, streams, and rivers. Rainwater that flows off a site is defined as storm water runoff. When a site is in a natural condition or is undeveloped, a larger percentage of rainwater infiltrates into the soil and a smaller percentage flows off the site as storm water runoff.

The infiltration and runoff process is altered when a site is developed. Buildings, sidewalks, roads, and parking lots introduce asphalt, concrete, and roofing materials to the landscape. These materials are relatively impervious, which means that they absorb less rainwater. As impervious surfaces are added to the ground conditions, the natural infiltration process is reduced. As a result, the volume and rate of storm water runoff increases. The increased volumes and rates of storm water runoff can result in flooding if adequate storm drainage facilities are not provided.

The project would create approximately 55,665 square feet of new impervious surface on a site that previously contained zero square feet of impervious surface area. The project would be served by existing storm drainage infrastructure. Wastewater, water, and storm drainage lines would be connected via existing lines along the Gann Street right-of-way. The project will include an onsite stormwater treatment area and two drainage management areas to manage

water runoff. Stormwater treatment and drainage management would include a bioretention area and grading infrastructure strategies (a valley gutter, a concrete level spreader, and a dirt berm) that will ensure adequate drainage. Therefore, project development would not result in a substantial increase in the rate of amount of surface runoff in a manner which would result in flooding nor would it create or contribute to runoff water which would exceed the capacity of existing or planned stormwater drainage system.

For the proposed project, three bio-retention areas throughout the project site are proposed that would channel site stormwater to a catch basin near the center of the site. Flows will percolate through the basin before being released into the stormdrain system.

A long-term maintenance plan is needed to ensure that all proposed stormwater treatment BMPs and facilities function properly. Should the proposed water quality treatment facilities not be maintained properly, a potentially significant impact could occur with respect to creating or contributing runoff water that would exceed the capacity of existing or planned stormwater drainage systems or providing substantial additional sources of polluted runoff.

If left uncontrolled, the operation of the proposed project could result in the potential for pollutants to wash down and potentially drain into Marsh Creek. However, all municipalities within Contra Costa County (and the County itself) are required to develop more restrictive surface water control standards for new development projects as part of the renewal of the Countywide NPDES permit. Known as the "C.3 Standards," new development and redevelopment projects that create or replace 10,000 or more square feet of impervious surface area must contain and treat stormwater runoff from the site. The proposed project is a C.3 regulated project and is required to include appropriate site design measures, source controls, and hydraulically-sized stormwater treatment measures. These measures would include a bioretention area to treat stormwater runoff before allowing it to proceed into the drainage management area.

The proposed project would not substantially alter the existing drainage pattern of the site or the area. Therefore, with implementation of the following mitigation measure, the proposed project would result in **less than significant** impacts related to the alteration of the existing drainage pattern of the site or area, or create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff.

Mitigation Measure(s)

Implement Mitigation Measure HYD-2

Responses c.iv): Less than Significant. According to the June 16, 2009 FEMA Flood Insurance Rate Maps (FIRM), the project site is not located within a designated flood zone. Therefore, a **less than significant** impact would result from implementation of the proposed project with respect to placing structures within a 100- year floodplain, which would impede or redirect flood flows.

Response d): Less than Significant. Tsunamis are defined as sea waves created by undersea fault displacement. A tsunami poses little danger away from shorelines; however, when a tsunami reaches the shoreline, a high swell of water breaks and washes inland with great force. Historic records of the Bay Area used by one study indicate that nineteen tsunamis were recorded in San Francisco Bay during the period of 1868-1968. Maximum wave height recorded at the Golden Gate tide gauge (where wave heights peak) was 7.4 feet. The available data indicate a standard decrease of original wave height from the Golden Gate to about half original wave height on the shoreline near Richmond, and to nil at the head of the Carquinez Strait. As Brentwood is several miles inland from the Carquinez Strait, the project site is not exposed to flooding risks from tsunamis and adverse impacts are not expected to result. This is a less than significant impact.

A seiche is a long-wavelength, large-scale wave action set up in a closed body of water such as a lake or reservoir, whose destructive capacity is not as great as that of tsunamis. Seiches are known to have occurred during earthquakes, but none have been recorded in the Bay Area. In addition, the project is not located near a closed body of water. Therefore, risks from seiches and adverse impacts are not expected to result. This is a **less than significant** impact.

XI. LAND USE AND PLANNING - Would the project:

	Potentially Significant Impact	***Less Than Significant with Mitigation Incorporation***	***Less Than Significant Impact***	***No Impact***
a) Physically divide an established community?				X
b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?			X	

RESPONSES TO CHECKLIST QUESTIONS

Responses a): No Impact. As noted in the General Plan, the City of Brentwood has planned for orderly, logical development that supports compatibility among adjacent uses. The General Plan goals seek to retain the character of existing communities and ensure that future land uses are compatible with existing uses. Currently, there are no existing structures on the site, and the site is surrounded by residential neighborhoods, with the exception of the nursery to the west. The proposed project, which includes residential development, would not physically divide an established community due to the nature of the site, and its location within city limits. Therefore, the project would have **no impact** related to physically dividing an established community.

Responses b): Less than Significant. The Brentwood General Plan identifies the project site for Residential Very Low Density land uses. The Residential Very Low Density land use requires densities between 1.1 and 3 du/ac. The proposed project consists of the development of 11 single-family residential units on 4.08 acres, which results in approximately 2.7 du/ac, which is within the General Plan density requirements, provided the applicant receives approval from the City Council of its request to develop above the mid-range. Therefore, the proposed project is consistent with the existing General Plan land use designation. The project would require a Zoning Amendment to change the Zoning designation from Residential Single Family (R-1-12) to Planned Development (PD). However, the R-1-12 Zoning designation was not adopted for the purpose of avoiding or mitigating an environmental effect, and amendments to the Zoning Code reflect the City's vision identified for the project site under the current General Plan Land Use Map. As a result, the project would have a **less than significant** impact related to conflicting with applicable land use plans, policies, regulations, or surrounding uses.

XII. MINERAL RESOURCES -- WOULD THE PROJECT:

	Potentially Significant Impact	***Less Than Significant with Mitigation Incorporation***	***Less Than Significant Impact***	***No Impact***
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?			X	
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?			X	

RESPONSES TO CHECKLIST QUESTIONS

Responses a), b): Less than Significant. The 2014 Brentwood General Plan Update EIR does not identify significant mineral resources within the area. In addition, Figure 3.6-6 in the 2014 Brentwood General Plan Update EIR does not show an existing active oil and gas well on the project site. Therefore, the impact regarding the loss of availability of a known mineral resource that would be of value to the region, as well as the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan, would be **less than significant**.

XIII. NOISE -- WOULD THE PROJECT RESULT IN:

	Potentially Significant Impact	*Less Than Significant with Mitigation Incorporation*	*Less Than Significant Impact*	*No Impact*
a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?		X		
b) Generation of excessive groundborne vibration or groundborne noise levels?			X	
c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?				X

BACKGROUND

Acoustics is the science of sound. Sound may be thought of as mechanical energy of a vibrating object transmitted by pressure waves through a medium to human (or animal) ears. If the pressure variations occur frequently enough (at least 20 times per second), then they can be heard and are called sound. The number of pressure variations per second is called the frequency of sound, and is expressed as cycles per second or Hertz (Hz). Noise is a subjective reaction to different types of sounds.

Noise is typically defined as (airborne) sound that is loud, unpleasant, unexpected or undesired, and may therefore be classified as a more specific group of sounds. Perceptions of sound and noise are highly subjective from person to person.

Measuring sound directly in terms of pressure would require a very large and awkward range of numbers. To avoid this, the decibel scale was devised. The decibel scale uses the hearing threshold (20 micropascals), as a point of reference, defined as 0 dB. Other sound pressures are then compared to this reference pressure, and the logarithm is taken to keep the numbers in a practical range. The decibel scale allows a million-fold increase in pressure to be expressed as 120 dB, and changes in levels (dB) correspond closely to human perception of relative loudness.

The perceived loudness of sounds is dependent upon many factors, including sound pressure level and frequency content. However, within the usual range of environmental noise levels, perception of loudness is relatively predictable, and can be approximated by A-weighted sound levels. There is a strong correlation between A-weighted sound levels (expressed as dBA) and the way the human ear perceives sound. For this reason, the A-weighted sound level has become the standard tool of environmental noise assessment. All noise levels reported in this section are in terms of A-weighted levels, but are expressed as dB, unless otherwise noted.

The decibel scale is logarithmic, not linear. In other words, two sound levels 10-dB apart differ in acoustic energy by a factor of 10. When the standard logarithmic decibel is A-weighted, an increase of 10-dBA is generally perceived as a doubling in loudness. For example, a 70-dBA sound is half as loud as an 80-dBA sound, and twice as loud as a 60 dBA sound. Community noise is commonly described in terms of the ambient noise level, which is defined as the all-encompassing noise level associated with a given environment. A common statistical tool is the average, or equivalent, sound level (Leq), which corresponds to a steady-state A-weighted sound level containing the same total energy as a time varying signal over a given time period (usually one hour). The Leq is the foundation of the composite noise descriptor, Ldn, and shows very good correlation with community response to noise. The day/night average level (Ldn) is based upon the average noise level over a 24-hour day, with a +10- decibel weighing applied to noise occurring during nighttime (10:00 p.m. to 7:00 a.m.) hours. The nighttime penalty is based upon the assumption that people react to nighttime noise exposures as though they were twice as loud as daytime exposures. Because Ldn represents a 24-hour average, it tends to disguise short-term variations in the noise environment.

Effects of Noise on People

The effects of noise on people can be placed in three categories:

- Subjective effects of annoyance, nuisance, and dissatisfaction
- Interference with activities such as speech, sleep, and learning
- Physiological effects such as hearing loss or sudden startling

Environmental noise typically produces effects in the first two categories. Workers in industrial plants can experience noise in the last category. There is no completely satisfactory way to measure the subjective effects of noise or the corresponding reactions of annoyance and dissatisfaction. A wide variation in individual thresholds of annoyance exists and different tolerances to noise tend to develop based on an individual's past experiences with noise. Thus, an important way of predicting a human reaction to a new noise environment is the way it compares to the existing environment to which one has adapted: the so-called ambient noise level. In general, the more a new noise exceeds the previously existing ambient noise level, the less acceptable the new noise will be judged by those hearing it. With regard to increases in A-weighted noise level, the following relationships occur:

- Except in carefully controlled laboratory experiments, a change of 1-dBA cannot be perceived;
- Outside of the laboratory, a 3-dBA change is considered a just-perceivable difference;
- A change in level of at least 5-dBA is required before any noticeable change in human response would be expected; and
- A 10-dBA change is subjectively heard as approximately a doubling in loudness, and can cause an adverse response.

Stationary point sources of noise – including stationary mobile sources such as idling vehicles – attenuate (lessen) at a rate of approximately 6-dB per doubling of distance from the source, depending on environmental conditions (i.e. atmospheric conditions and either vegetative or manufactured noise barriers, etc.). Widely distributed noises, such as a large industrial facility

spread over many acres, or a street with moving vehicles, would typically attenuate at a lower rate.

Existing Ambient Noise Level

The existing noise environment in the project area is primarily defined traffic on Lone Tree Way directly north of the project site.

To quantify the existing ambient noise environment in the project vicinity, Saxelby Acoustics conducted continuous (24-hr.) noise level measurements at two locations on the project site. Noise measurement locations are shown on Figure 5 of this Initial Study. A summary of the noise level measurement survey results is provided in Table 2 below. Appendix F contains the complete results of the noise monitoring. The sound level meters were programmed to record the maximum, median, and average noise levels at each site during the survey. The maximum value, denoted Lmax, represents the highest noise level measured. The average value, denoted Leq, represents the energy average of all of the noise received by the sound level meter microphone during the monitoring period. The median value, denoted L50, represents the sound level exceeded 50 percent of the time during the monitoring period. Larson Davis Laboratories (LDL) model 812 and 820 precision integrating sound level meters were used for the ambient noise level measurement survey.

The meters were calibrated before and after use with a B&K Model 4230 acoustical calibrator to ensure the accuracy of the measurements. The equipment used meets all pertinent specifications of the American National Standards Institute for Type 1 sound level meters (ANSI S1.4).

Table 2: Summary of Existing Background Noise Measurement Data

Site	***Date***	***CNEL/ L_{dn}***	***Average Measured Hourly Noise Levels, dBA***					
			Daytime (7am-10pm)			***Nighttime (10pm-7am)***		
			L_{eq}	L_{50}	L_{max}	L_{eq}	L_{50}	L_{max}
Continuous (24-hour) Noise Level Measurements								
LT-1	12/09/19-12/10/19	70	67	65	84	62	52	78
LT-2	12/09/19-12/10/19	58	55	54	70	50	45	62

Source: Saxelby Acoustics – 2019

Evaluation of Transportation Noise on Project site

Saxelby Acoustics used the SoundPLAN noise model to calculate traffic noise levels at the proposed single-family uses due to traffic on Lone Tree Way. Traffic noise levels were predicted for existing conditions with a +1 dBA adjustment for future conditions. The results of this analysis are shown graphically on Figure 6.

Railroad Noise

Union Pacific Railroad Line (UPRR) – Currently Inactive

The Union Pacific Railroad (UPRR) line is bisects the City of Brentwood from the northwest corner of the City to the southeast corner of the City. This portion of the railroad line has not been in use since sometime prior to the year 2000. The line is maintained by UPRR as a standby route with no planned use for freight movement. However, there is the potential that future use of the line could be used for commuter passenger service or future freight service.

Rail operations associated with light rail passenger service is generally quiet in comparison to freight train operations. Although light rail operations may include 50 or more operations per day, the 60 dB CNEL contour will generally not extend more than 100 feet from the railroad track centerline.

To conservatively estimate potential noise impacts associated with railroad line activities, it was assumed that up to 10 freight train operations may occur during a 24-hour period. Assuming that each train generated a sound exposure level (SEL) of 100 dB at a distance of 100 feet from the railroad centerline, the Ldn noise level can be calculated using the following equation.

$$Ldn = SEL + 10 \log N_{eq} - 49.4 \text{ dB, where:}$$

SEL is the typical single event sound exposure level of an individual train event (100 dB at a distance of 100 feet), N_{eq} is the sum of the daytime (7 a.m. to 10 p.m.) train events, plus 10 times the number of nighttime (10 p.m. to 7 a.m.) train events (a total of 44), and 49.4 is ten times the logarithm of the number of seconds per day. Assuming an even distribution of trains between daytime, evening and nighttime hours, the Ldn would be 67 dB at 100 feet.

Saxelby Acoustics used the SoundPLAN noise model to calculate potential railroad noise levels across the project site. The results of this analysis are shown graphically on Figure 6.

Significance Criteria

The following criteria were used to evaluate the significance of environmental noise resulting from the project:

A significant noise impact would be identified if the project would expose persons to or generate noise levels that would exceed applicable noise standards presented in the City of Brentwood General Plan. Specifically, based upon Table N-1 of the City of Brentwood General Plan, residential uses are considered normally acceptable in ambient noise environments up to 60 dBA L_{dn}, and conditionally acceptable in noise environments up to 75 dBA L_{dn}. However, policy N-1 limits exterior noise levels to 65 dBA L_{dn} for new residential uses adjacent to State Route 4 corridor, major arterials within Brentwood, and noise from the UPRR. The City of Brentwood also establishes an interior noise level criterion of 45 dBA L_{dn} for residential uses.

RESPONSES TO CHECKLIST QUESTIONS

Response a): Less than Significant with Mitigation.

Traffic Noise Increases

The proposed project is consistent with the City's General Plan and no traffic study was required for the project. Therefore, no substantial increases in traffic noise are predicted.

Operational Noise Increases

The proposed project would include typical residential noise which would be compatible with the adjacent existing residential uses.

Traffic and Railroad Noise at New Sensitive Receptors – Exterior Areas

As shown on Figure 6, the project site is predicted to be exposed to exterior noise levels up to approximately 67 dBA L_{dn}. This would exceed the City of Brentwood 65 dB L_{dn} Community Noise Exposure standards for new developments in the vicinity of major arterial roadways. Therefore, exterior noise control measures would be required to ensure that future residents are not exposed to exterior noise levels exceeding City standards. Specifically, 8-foot tall sound walls were analyzed at the location shown on Figure 7. Based upon the noise predictions shown on Figure 7, exterior noise levels would be reduced to 65 dBA L_{dn}, or less with use of these barriers.

Traffic and Railroad Noise at New Sensitive Receptors – Interior Areas

Based upon Figure 7, the proposed project would be exposed to exterior noise levels of up to 62 dBA L_{dn} at the ground floor building facades closest to Lone Tree Way. Second floor locations would not receive substantial shielding from the 8-foot tall sound wall and would be expected to be exposed to exterior noise levels of up to 67 dBA L_{dn}.

Modern building construction typically yields an exterior-to-interior noise level reduction of 25 dBA. Therefore, where exterior noise levels are 70 dBA L_{dn}, or less, no additional interior noise control measures are typically required. For this project, exterior noise levels are predicted to be up to 67 dBA L_{dn}, resulting in an interior noise level of 42 dBA L_{dn} based on typical building construction. This would meet the City's 45 dBA L_{dn} interior noise level standard. Impacts resulting from exterior noise levels exceeding the threshold of significance due to interior traffic noise would be considered ***potentially significant***.

Construction Activities

During the construction phases of the project, noise from construction activities would add to the noise environment in the immediate project vicinity. Activities involved in construction would generate maximum noise levels ranging from 76 to 90 dBA L_{max} at a distance of 50 feet. Most of the building construction would occur at distances of 50 feet or greater from the nearest residences. Construction noise associated with streets would be similar to noise that would be associated with public works projects, such as a roadway widening or paving projects.

Construction activities would be temporary in nature and would only be permitted to occur during normal daytime working hours.

Noise would also be generated during the construction phase by increased truck traffic on area roadways. A project-generated noise source would be truck traffic associated with transport of heavy materials and equipment to and from the construction site. This noise increase would be of short duration, and would occur during daytime hours.

Construction activities are conditionally exempt from the Noise Ordinance during certain hours. Construction activities are exempt from the noise standard from 7 AM to 6 PM Monday through Friday, and from 8 AM to 5 PM on Saturdays with written approval of the city engineer or designee.

Conclusion

Although construction activities are temporary in nature and would likely occur during normal daytime working hours, construction-related noise could result in sleep interference at existing noise-sensitive land uses in the vicinity of the construction if construction activities were to occur outside the normal daytime hours. Therefore, impacts resulting from noise levels temporarily exceeding the threshold of significance due to construction would be considered **potentially significant**.

Implementation of the following mitigation measures would ensure that future residences at the project site would not be subject to exterior and interior noise levels in excess of the City's standards, resulting in a **less than significant** impact.

Mitigation Measure(s)

Mitigation Measure NOI-1*: Prior to approval of project improvement plans, the improvement plans for the proposed project shall show that the first-row lots shall be shielded from the Lone Tree Way through the use of eight-foot tall masonry sound walls, constructed of materials that will achieve exterior noise levels of 65 dB L_{dn}, per the approval of the City Engineer. The approximate locations of these barriers are shown on Figure 7. Other types of barrier may be employed but shall be reviewed by an acoustical engineer prior to being constructed.*

Mitigation Measure NOI-2: *Construction activities shall be limited to the hours set forth below:*

> *Monday-Friday 7:00 AM to 3:30 PM or until 5:30 PM with written approval from the City Engineer*
> *Saturday 8:00 AM to 5:00 PM with written approval from the City Engineer*

Construction shall be prohibited on Sundays and City holidays. These criteria shall be included in the grading plan submitted by the applicant/developer for review and approval of the Community Development Director prior to issuance of grading permits. Exceptions to allow expanded construction activities shall be reviewed on a case-by-case basis as determined by the Chief Building Official and/or City Engineer, and shall not be allowed on any date or time that would violate the City's applicable noise standards.

Mitigation Measure NOI-3*: The project contractor shall ensure that the following construction noise BMPs are met on-site during all phases of construction:*

- *All equipment driven by internal combustion engines shall be equipped with mufflers, air-inlet silencers where appropriate, and any other shrouds, shields, or other noise-reducing features in good operating condition that meet or exceed original factory specifications. Mobile or fixed "package" equipment (e.g., arc welders, air compressors) shall be equipped with shrouds and noise- control features that are readily available for that type of equipment.*
- *All mobile or fixed noise-producing equipment used on the project site that are regulated for noise output by a federal, state, or local agency shall comply with such regulations while in the course of project activity.*
- *The construction contractor shall utilize "quiet" models of air compressors and other stationary noise sources where technology exists.*
- *At all times during project grading and construction, stationary noise-generating equipment shall be located as far as practicable from sensitive receptors and placed so that emitted noise is directed away from residences.*
- *Unnecessary idling of internal combustion engines shall be prohibited.*
- *Construction staging areas shall be established at locations that would create the greatest distance between the construction-related noise sources and noise-sensitive receptors nearest the project site during all project construction activities, to the extent feasible.*
- *Construction site and access road speed limits shall be established and enforced during the construction period.*
- *The use of noise-producing signals, including horns, whistles, alarms, and bells, shall be for safety warning purposes only.*
- *Project-related public address or music systems shall not be audible at any adjacent receptor.*
- *Neighbors located adjacent to the construction site shall be notified of the construction schedule in writing.*
- *The construction contractor shall designate a "noise disturbance coordinator" who would be responsible for responding to any local complaints about construction noise. The disturbance coordinator shall be responsible for determining the cause of the noise complaint (e.g., starting too early, poor muffler, etc.) and instituting reasonable measures as warranted to correct the problem. A telephone number for the disturbance coordinator shall be conspicuously posted at the construction site.*

Construction noise BMPs shall be included in the grading plan submitted by the developer for review and approval by the Community Development Director prior to grading permit issuance.

Response b): Less than Significant. Vibration is like noise in that it involves a source, a transmission path, and a receiver. While vibration is related to noise, it differs in that noise is generally considered to be pressure waves transmitted through air, whereas vibration usually consists of the excitation of a structure or surface. As with noise, vibration consists of an amplitude and frequency. A person's perception to the vibration will depend on their individual sensitivity to vibration, as well as the amplitude and frequency of the source and the response of the system which is vibrating.

Vibration can be measured in terms of acceleration, velocity, or displacement. A common practice is to monitor vibration measures in terms of peak particle velocities in inches per second. Standards pertaining to perception as well as damage to structures have been developed for vibration levels defined in terms of peak particle velocities.

Human and structural response to different vibration levels is influenced by several factors, including ground type, distance between source and receptor, duration, and the number of perceived vibration events. The threshold for damage to structures ranges from 0.2 to 0.6 peak particle velocity in inches per second (in/sec p.p.v). One-half this minimum threshold or 0.1 in/sec p.p.v. is considered a safe criterion that would protect against architectural or structural damage. The general threshold at which human annoyance could occur is noted as 0.1 in/sec p.p.v.

The primary vibration-generating activities associated with the proposed project would occur during construction when activities such as grading, utilities placement, and roadway construction occur.

Sensitive receptors which could be impacted by construction related vibrations, especially vibratory compactors/rollers, are located approximately 25 to 50 feet or further from the project site. At this distance, construction vibrations are not predicted to exceed acceptable levels. Additionally, construction activities would be temporary in nature and would likely occur during normal daytime working hours.

The primary vibration-generating activities associated with the proposed project would occur during construction when activities such as grading, utilities placement, and parking lot construction occur. Table 3 shows the typical vibration levels produced by construction equipment.

TABLE 3: VIBRATION LEVELS FOR VARIOUS CONSTRUCTION EQUIPMENT

Type of Equipment	Peak Particle Velocity at 25 feet (inches/second)	Peak Particle Velocity at 50 feet (inches/second)	Peak Particle Velocity at 100 feet (inches/second)
Large Bulldozer	0.089	0.031	0.011
Loaded Trucks	0.076	0.027	0.010
Small Bulldozer	0.003	0.001	0.000
Auger/drill Rigs	0.089	0.031	0.011
Jackhammer	0.035	0.012	0.004
Vibratory Hammer	0.070	0.025	0.009

Vibratory Compactor/roller	0.210 (Less than 0.20 at 26 feet)	0.074	0.026

Source: *Transit Noise and Vibration Impact Assessment Guidelines.* Federal Transit Administration. May 2006.

Table 3 data indicates that construction vibration levels anticipated for the project are less than the 0.2 in/sec threshold at distances of 26 feet. Sensitive receptors which could be impacted by construction related vibrations, especially vibratory compactors/rollers, are located approximately 26 feet, or further, from typical construction activities. At these distances construction vibrations are not predicted to exceed acceptable levels. Additionally, construction activities would be temporary in nature and would likely occur during normal daytime working hours. As a result, short-term groundborne vibration impacts would be considered **less than significant** and no mitigation is required**.**

Response c): No Impact. The project site is not located near an existing airport and is not within an existing airport land use plan. The nearest airport, Funny Farm Airfield, is a private airfield located approximately 4 miles east of the project site. Although aircraft-related noise could occasionally be audible at the project site, noise would be extremely minimal. Exterior and interior noise levels resulting from aircraft would be compatible with the proposed project. Therefore, there would be **no impact**.

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Inez Subdivision

City of Brentwood, California

Figure 5

Noise Measurement Sites

Legend

- Project Site
- Noise Measurement - Long Term
- Noise Measurement - Short Term

25 ft 75 ft 125 ft 175 ft

Projection: State Plane (California Zone 3) / NAD83 / meters
Rev. Date: 12/10/2019

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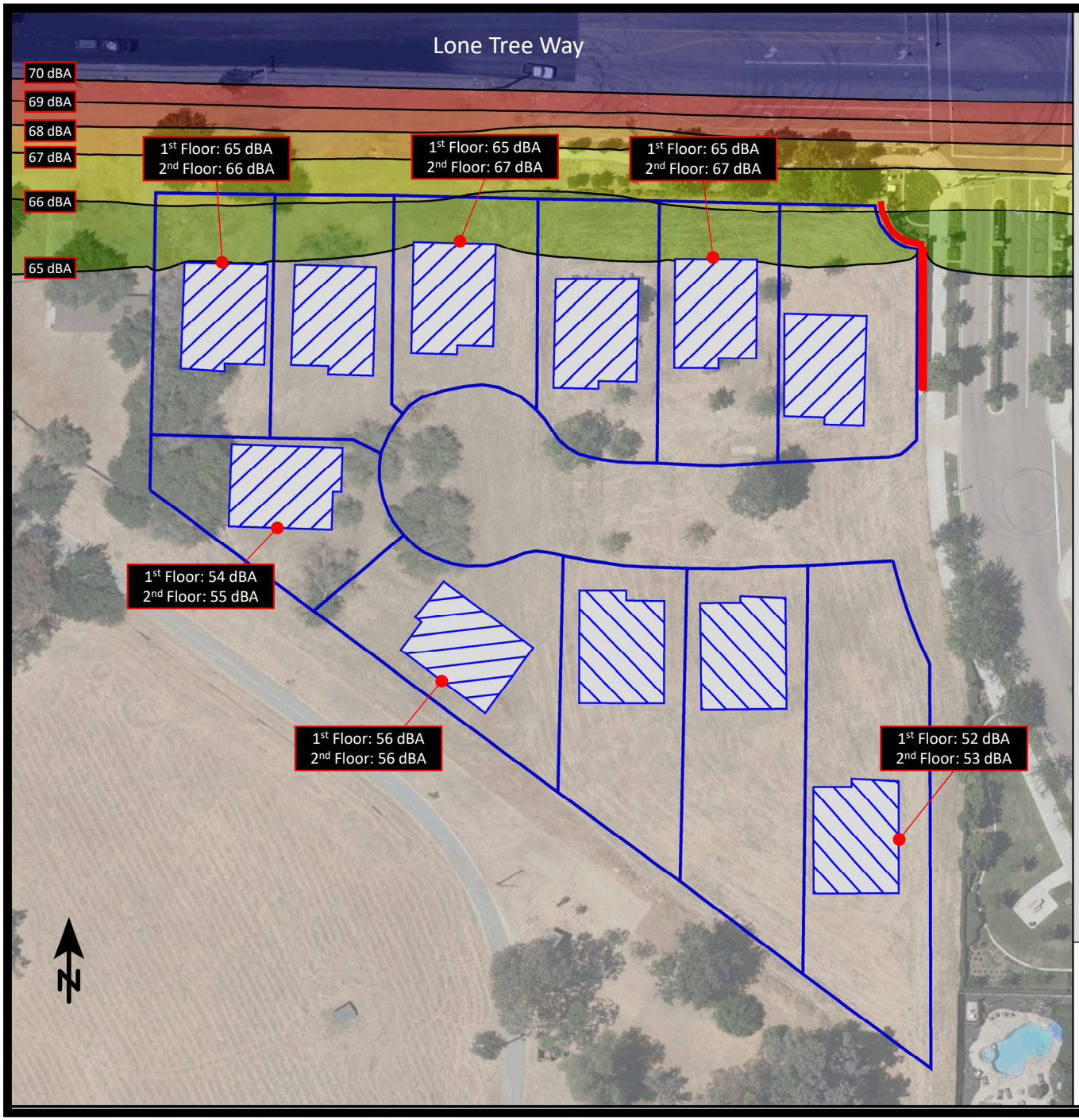

Inez Subdivision

City of Brentwood, California

Figure 6

Future Traffic and Railroad Noise Levels (dBA L^{dn})

Signs and symbols

- Project Boundary
- Existing Wall
- Proposed Building

Levels in dB(A)

	<= 65
	65 - 67
	67 - 69
	69 - 71
	71 - 73
	73 - 75
	> 75

1 : 927

0 4.5 9 18 27 36 m

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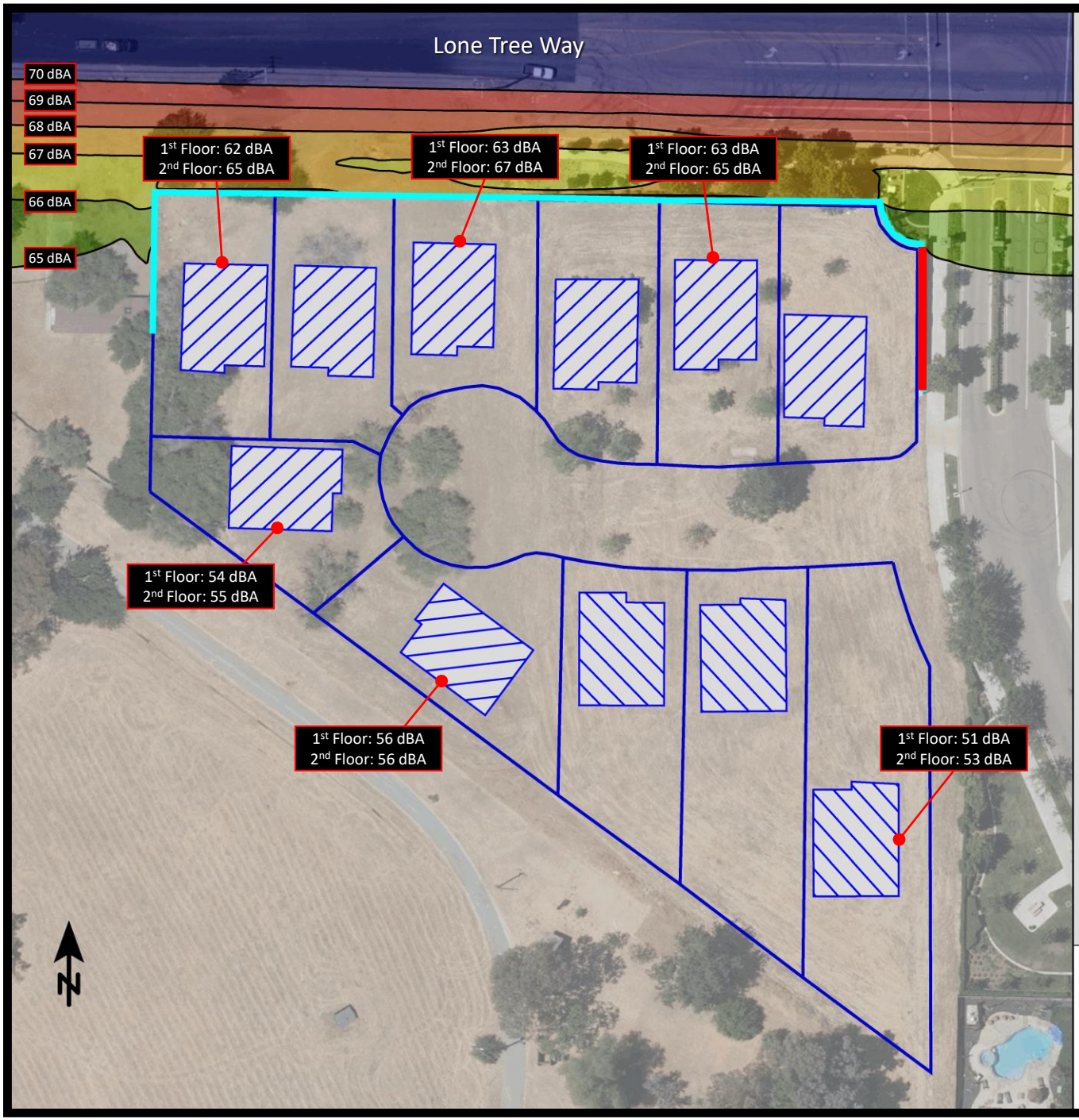

Inez Subdivision

City of Brentwood, California

Figure 7

Future Traffic and Railroad Noise Levels (dBA L_{dn})

Signs and symbols

- Project Boundary
- Recommended 8 ft. Wall
- Proposed Building
- Existing Wall

Levels in dB(A)

- <= 65
- 65 - 67
- 67 - 69
- 69 - 71
- 71 - 73
- 73 - 75
- > 75

1 : 927

0 4.5 9 18 27 36 m

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XIV. POPULATION AND HOUSING -- Would the project:

	Potentially Significant Impact	***Less Than Significant with Mitigation Incorporation***	***Less Than Significant Impact***	***No Impact***
a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?			X	
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?				X

RESPONSES TO CHECKLIST QUESTIONS

Response a): Less than Significant. The proposed project would directly result in population growth in the area through the proposed construction of 11 single family dwelling units, generating approximately 35 additional residents (based on 3.22 persons per household[5]). Resulting growth from the proposed project is consistent with the General Plan Land Use designation for the project site, and would fall within the anticipated population growth levels analyzed in the Brentwood General Plan EIR (2014). As discussed below, the utility systems (e.g., water and sewer) serving the project could accommodate the additional demands created by the project and the project includes infrastructure improvements needed to connect the project to these existing utility systems. In addition, as discussed below in Section XV (Public Services), public service providers such as police and fire, could accommodate the additional demands for service created by the project. As a result, the impact would be **less than significant** with respect to inducing population growth because the demands resulting from said growth could be accommodated by existing utility systems and service providers.

Responses b): No Impact. There are no existing homes or residences located on the project site. There is **no impact**.

[5] City of Brentwood. *2014 Brentwood General Plan Update EIR* [pg. 3.10-32]. July 22, 2014.

XV. PUBLIC SERVICES

	Potentially Significant Impact	*Less Than Significant with Mitigation Incorporation*	*Less Than Significant Impact*	*No Impact*
Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
a) Fire protection?			X	
b) Police protection?			X	
c) Schools?		X		
d) Parks?		X		

RESPONSES TO CHECKLIST QUESTIONS

Response a): Less than Significant. The proposed project is located within the jurisdiction of the East Contra Costa Fire Protection District (ECCFPD). In accordance with ECCFPD efforts to reorganize due to budgetary constraints and the failure of the recent parcel tax, the district employs 34 personnel: 3 Battalion Commanders, 10 Captains, 10 Engineers, and 11 Firefighters. The District currently staffs three stations, one station in Oakley, one in Discovery Bay, and one in Brentwood.

- Station 52, at 201 John Muir Parkway, Brentwood
- Station 59, at 1685 Bixler Road, Discovery Bay
- Station 93, at 530 O'Hara Avenue, Oakley

The City of Brentwood is served primarily by Station 52. Station 52 is located roughly 3 miles southwest of the project site.

The Brentwood General Plan includes nine policies and four actions (Policies CSF 1-1 through 1-3, and 4-1 through 4-6, and Actions CSF 1a, and 4a-c) to ensure that fire protection services are provided in a timely fashion, are adequately funded, are coordinated between the City and appropriate service agency, and that new development pays their fair share of services. Among the action items included in the Brentwood General Plan that are applicable to the project are:

- Action CSF 1a: Requiring new development to pay their fair share fees of the cost of on and off-site community services and facilities;

- Action CSF 4a: Continue to enforce the California Building Code and the California Fire Code to ensure that all construction implements fire-safe techniques, including fire resistant materials, where required;
- Action CSF 4b: As part of the City's existing development review process for new projects, the City would continue to refer applications to the ECCFPD for determination of the project's potential impacts on fire protection services. Requirements would be added as conditions of project approval, if appropriate.

The project would comply with these General Plan actions. For example, the City of Brentwood collects development impact fees that support the construction of new fire facilities in the amount of approximately $905 per new single-family residence. In addition to providing additional revenue for fire facilities, the project would be required to comply with all ECCFPD standard conditions of approval related to provision of fire flow, roadway widths, etc. The project is also subject to the City of Brentwood residential life safety sprinkler requirements set forth in Section 15.64.010 of the Municipal Code.

ECCFPD currently has adequate capacity to provide fire protection services for the proposed project without inducing demand for an additional fire station[6]. Additionally, the 2014 Brentwood General Plan Update EIR concluded implementation of the General Plan would result in a less than significant impact related to the provision of public services throughout the City.[7] The project is consistent with the General Plan designation for the site; therefore, the additional demand for fire protection services resulting from the proposed project has already been evaluated in the General Plan EIR. Given the project's compliance with the relevant General Plan policies and actions related to fire service, the impact from the proposed project, consistent with the General Plan EIR determination, would be **less than significant** regarding the need for the construction of new fire protection facilities which could cause significant environmental impacts.

Response b): Less than Significant. The City of Brentwood Police Department would provide police protection services to the project site. Currently, the Brentwood Police Department provides law enforcement and police protection services throughout the City. Established in 1948, the Brentwood Police Department is a full service law enforcement agency that is charged with the enforcement of local, State, and Federal laws, and with providing 24-hour protection of the lives and property of the public. The Police Department functions both as an instrument of public service and as a tool for the distribution of information, guidance, and direction.

The Brentwood Police Department services an area of approximately 14 square miles. As of November 2019, the Department had 62 sworn police officers and another 30 civilian support

[6] Personal Communication with Steve Aubert, City of Brentwood Fire Department Fire Marshal. February 24, 2020.
[7] City of Brentwood. *2014 Brentwood General Plan Update EIR* [pg. 3.12-23]. July 22, 2014

staff. In addition to the permanent staff, the Department had approximately 20 volunteers who are citizens of the community and assist with day to day operations.

The department is located at 9100 Brentwood Boulevard, approximately four miles from the project site.

The Brentwood General Plan includes eight policies and five actions (Policies CSF 1-1 through 1-3, and 3-1 through 3-5; and Actions CSF 1a and 3a-d) to ensure that police protection services are provided in a timely fashion, are adequately funded, are coordinated between the City and appropriate service agency, and that new development pays their fair share of services. Among the policies and actions items included in the Brentwood General Plan that are applicable to the project are:

- Policy CSF 3-4: Emphasize the use of physical site planning as an effective means of preventing crime. Open spaces, landscaping, parking lots, parks, play areas, and other public spaces should be designed with maximum feasible visual and aural exposure to community residents.
- Policy CSF 3-5: Promote coordination between land use planning and urban design through consultation and coordination with the Police Department during the review of new development applications.
- Action CSF 1a: Requiring new development to pay their fair share fees of the cost of on and off-site community services and facilities;
- Action CSF 3c: As part of the development review process, consult with the police department in order to ensure that the project design facilitates adequate police staffing and that the project addresses its impacts on police services.

The project applicant will be required by the City to comply with these policies and actions. In addition, the City also has Community Facilities Districts which generate special tax revenue that can be used for a variety of services, and which are currently being allocated primarily towards public protection and safety provided by the Brentwood Police Department. These funds amount to approximately $1,595 per year per home and could be used to fund new facilities, and maintain existing facilities and equipment, and pay for salaries and benefits.

Therefore, consistent with the General Plan EIR conclusion related to governmental facility impacts resulting from General Plan build-out, the project would have a **less than significant** impact regarding the need for the construction of new police protection facilities which could cause significant environmental impacts.

Response c): Less than Significant with Mitigation. The project site is located within the Liberty Union High School District and the Brentwood Union School District (BUSD). Liberty Union High School District (LUHSD) includes three comprehensive high schools: Liberty High, Freedom High, and Heritage High. In addition, the District includes one continuation high school, La Paloma, and one alternative high school, Independence High School. According to the LUHSD, all three comprehensive high school sites were built with a 2,200 student capacity; this capacity is currently being exceeded at all three high schools and facility needs are being met

with portables.[8] The LUHSD student generation factors for grades 9-12 are 0.2074 for single-family detached units. With 11 single-family units, the project is expected to generate approximately 2 new high school students. Available capacity does not exist to accommodate these additional students.

The BUSD consists of eight elementary schools and three middle schools. In 2019 the District had a K-6th grade enrollment of 7,026 with K-6th capacity of 6,391. The District's 2019 7-8th grade enrollment is 2,260 with a 7-8th grade capacity of 2,354[9]. Therefore, the District has excess capacity for another 455 K-6th grade students, but is over capacity for grades 7-8th by approximately 141 students. Utilizing the District's current Student Generation Rates, the 11 units proposed for the proposed project would introduce approximately 4 new K-6th students (11 * 0.32) to the District and 1 new 7-8th grade student (11 * 0.12). Available capacity exists to accommodate 7-8th students anticipated from the project, but not the new K-6th grade students.

The applicant is required to pay school impact fees. Proposition 1A/SB 50 prohibits local agencies from using the inadequacy of school facilities as a basis for denying or conditioning approvals of any "[…] legislative or adjudicative act…involving …the planning, use, or development of real property" (Government Code 65996(b)). Satisfaction of the Proposition 1A/SB 50 statutory requirements by a developer is deemed to be "full and complete mitigation."

Because the LUHSD is already over capacity; and the BUSD is over capacity for grades 7-8, adding students to the districts may result in further overcrowding and compromising programs. Therefore, the project would have a potentially significant impact regarding the need for the construction of new school facilities which could cause significant environmental impacts.

Consistent with State law, implementation of the following mitigation measure would reduce the impacts to a **less than significant** level.

Mitigation Measure(s)

Mitigation Measure PUB-1: *Prior to building permit issuance for any residential development, the developer shall submit to the Community Development Department written proof from the Liberty Union High School District and the Brentwood Union School District that appropriate school mitigation fees have been paid.*

Response d): Less than Significant with Mitigation. The proposed project includes the construction of 11 residences. Applying the Brentwood standard of 3.22 residents per dwelling unit, the proposed project would create housing for approximately 35 additional residents. The Brentwood General Plan calls for 5 acres of park per 1,000 residents. The proposed project would thus require approximately 0.18 acres of park space for these additional residents. However, the proposed project does not include active park space as called for in the General Plan. Therefore, the project could result in a **potentially significant** impact.

[8] As cited in the Bella Fiore IS/MND, dated August 2014 (pg. 86): Debra Fogarty, Chief Business Officer, Liberty Union High School District, email communication, November 12, 2013.

[9] Cooperative Strategies. School Facility Needs Analysis for Brentwood Union School District. May 9, 2019

Implementation of the following mitigation measure would ensure that the City requirements are satisfied, resulting in a **less than significant** impact.

Mitigation Measure(s)

Mitigation Measure PUB-2: *Prior to the recordation of final map(s), the project applicant shall pay the required park in-lieu fees as determined by the Parks and Recreation Department and the Community Development Department.*

XVI. RECREATION

	Potentially Significant Impact	*Less Than Significant with Mitigation Incorporation*	*Less Than Significant Impact*	*No Impact*
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?		X		
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?		X		

RESPONSES TO CHECKLIST QUESTIONS

Responses a), b): Less than Significant With Mitigation. As explained above in Question 'd' of the Public Services section, the proposed project does not include sufficient park land acreage for the 11 residential units. As a result, in-lieu fee payments would be required to meet the City's park land requirements. Therefore, the proposed project's impact related to the provision of adequate recreational facilities would be **potentially significant**.

Implementation of the following mitigation measure would reduce the impact to a **less than significant** level.

Mitigation Measure(s)

Implementation of Mitigation Measure PUB-2.

XVII. TRANSPORTATION -- WOULD THE PROJECT:

	Potentially Significant Impact	*Less Than Significant with Mitigation Incorporation*	*Less Than Significant Impact*	*No Impact*
a) Conflict with an applicable program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?			X	
b) Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?			X	
c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?			X	
d) Result in inadequate emergency access?			X	

RESPONSES TO CHECKLIST QUESTIONS

Response a), b): Less than Significant Access to the site would be via a proposed road off of Gann Street that would terminate in a cul-de-sac. Gann Street is a north-south street in northern Brentwood that currently terminates at Lone Tree Way to the north and Gold Poppy Street to the southeast. This route generally has two lanes in each direction, turn lanes at intersections and sidewalks. The posted speed limit is 25 mph.

The nearest major intersection to the project site, and the one most likely to be affected by project generated traffic, is the intersection of Lone Tree Way and Gann Street, immediately northeast of the project site. As shown in Table 3.13-4 of the General Plan EIR, this intersection currently has an AM peak hour LOS of B and PM peak hour LOS of A.

The General Plan designates the project site for residential uses, consistent with the uses proposed by the project. As such, the traffic generated by the proposed project would fall within the analysis parameters in the General Plan EIR, and would not degrade roadway operations or level of service beyond the levels analyzed in the General Plan EIR.

The project would not have any detrimental effects on the existing and planned bicycle and pedestrian network in Brentwood, nor would it conflict with any plans or planned improvements to these systems. The project is a single family neighborhood surrounded by similar residential uses, and as such, the vast majority of people travelling to and from the site would travel in their vehicles. However, it is possible that residents would travel to and from via bicycle or on foot.

Sidewalks exist on the southbound travel lane on Gann Street, immediately east of the project site. While the proposed access at Gann Street will divide the existing sidewalk, crossing and

street frontage improvements will be provided that will facilitate pedestrian continuity. As such, the project would not substantially degrade pedestrian conditions.

In summary, impacts related to conflicts with a program plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities, would be less than significant and any impacts related to an increase in vehicle miles travelled as addressed in CEQA Guidelines section 15064.3 would be **less than significant**

Response c): Less than Significant. No site circulation or access issues have been identified that would cause a traffic safety problem/hazard or any unusual traffic congestion or delay that could impede emergency vehicles or emergency access. Parking for the project would be provided by garages and driveways for each residence, and additional on street parking options available for emergency vehicles. The site access, on-site circulation, and parking is adequate. Therefore, the project will not increase hazards due to a geometric design feature or incompatible use. In addition, the project will undergo a comprehensive site plan review by the City. This impact would be **less than significant**.

Responses d): **Less than Significant.** Access to the site would be via a proposed cul-de-sac road off of Gann Street. The proposed site plan is shown in Figure 4. All accesses would be designed to City standards that accommodate turning requirements for fire trucks, facilitating entry by emergency vehicles into the project site. Implementation of the proposed project would have a less than significant impact related to emergency access, and would not interfere with an emergency evacuation plan. Therefore, the impact is **less than significant.**

XVIII. TRIBAL CULTURAL RESOURCES

	Potentially Significant Impact	***Less Than Significant with Mitigation Incorporation***	***Less Than Significant Impact***	***No Impact***
a) Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				
i) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k)?		X		
ii) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1? In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resources to a California Native American tribe.		X		

Background

Assembly Bill 52 (AB 52) requires a lead agency, prior to the release of a negative declaration, mitigated negative declaration, or environmental impact report for a project, to begin consultation with a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the proposed project if: (1) the California Native American tribe requested to the lead agency, in writing, to be informed by the lead agency through formal notification of proposed projects in the geographic area that is traditionally and culturally affiliated with the tribe, and (2) the California Native American tribe responds, in writing, within 30 days of receipt of the formal notification, and requests the consultation. The City of Brentwood received requests from two California Native American tribes to be informed through formal notification of proposed projects in the City's geographic area. No requests for consultation were received from either tribe with respect to this project.

RESPONSES TO CHECKLIST QUESTIONS

Responses a.i), a.ii): Less than Significant with Mitigation. The City of Brentwood General Plan and EIR do not identify the site as having prehistoric period cultural resources. Additionally, there are no unique cultural resources known to occur on, or within the immediate vicinity of the project site. The site has previously been used for agricultural uses. No instances of cultural resources or human remains have been unearthed on the project site. However, based on the record search conducted by the Northwest Information Center of the California Historical Resources Information System on December 12, 2019 (NWIC file No.:19-0989) (see Appendix B), the project site has the potential for the discovery of prehistoric, ethnohistoric, or historic archaeological sites that may meet the definition of Tribal Cultural Resources. Although no Tribal Cultural Resources have been documented in the project site, the project is located in a region where cultural resources have been recorded and there remains a

potential that undocumented archaeological resources that may meet the Tribal Cultural Resource definition could be unearthed or otherwise discovered during ground-disturbing and construction activities. Examples of significant archaeological discoveries that may meet the Tribal Cultural Resources definition would include villages and cemeteries.

Due to the possible presence of undocumented Tribal Cultural Resources within the project site, construction-related impacts on tribal cultural resources would be potentially significant. Implementation of Mitigation Measures CUL-1 and CUL-2 would require appropriate steps to preserve and/or document any previously undiscovered resources that may be encountered during construction activities, including human remains. Implementation of these measures, in addition to Mitigation Measure TRI-1, would reduce this impact to a **less than significant** level.

Mitigation Measure(s)

Implement Mitigation Measures CUL-1 and CUL-2.

Mitigation Measure TRI-1: *If cultural resources are discovered during project-related construction activities, all ground disturbances within a minimum of 50 feet of the find shall be halted until a qualified professional archaeologist can evaluate the discovery. The archaeologist shall examine the resources, assess their significance, and recommend appropriate procedures to the lead agency to either further investigate or mitigate adverse impacts. If the find is determined by the lead agency in consultation with the Native American tribe traditionally and culturally affiliated with the geographic area of the project site to be a tribal cultural resource and the discovered archaeological resource cannot be avoided, then applicable mitigation measures for the resource shall be discussed with the geographically affiliated tribe. Applicable mitigation measures that also take into account the cultural values and meaning of the discovered tribal cultural resource, including confidentiality if requested by the tribe, shall be completed (e.g., preservation in place, data recovery program pursuant to Public Resources Code §21083.2[i]). During evaluation or mitigative treatment, ground disturbance and construction work could continue on other parts of the project site.*

XIX. UTILITIES AND SERVICE SYSTEMS -- WOULD THE PROJECT:

	Potentially Significant Impact	***Less Than Significant with Mitigation Incorporation***	***Less Than Significant Impact***	***No Impact***
a) Require or result in the relocation or construction of new or expanded water, or wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?			X	
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?			X	
c) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the projects projected demand in addition to the providers existing commitments?			X	
d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?			X	
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?			X	

RESPONSES TO CHECKLIST QUESTIONS

Responses a), and c): Less than Significant. The following discussion addresses available wastewater treatment plant (WWTP) capacity and wastewater infrastructure to serve the project site.

Wastewater Treatment Plant Capacity

The existing WWTP is located on approximately 70 acres of land owned by the City on the north side of Sunset Road and east of Brentwood Boulevard. The WWTP is designed to have sufficient capacity to handle all wastewater flows at build-out per the General Plan. The WWTP has a current treatment capacity of 5 million gallons per day (mgd) with an average dry weather flow (ADWF) of 3.6 mgd in 2013.

The current WWTP system is designed to expand to 10 mgd in 2.5 mgd increments and the City collects development impact fees from new development to fund future expansion efforts. Phase I of the WWTP expansion was completed in 1998-2002, to bring the treatment plant to current levels. Preliminary planning of the Phase II expansion of the WWTP has been completed. Final design is currently underway and construction would follow after that. Phase

II would expand capacity to 7.5 or 10.0 mgd by adding oxidation ditches, secondary clarifiers, filters, and related appurtenances.

Buildout of the proposed project would result in the construction of 11 dwelling units generating approximately 35 additional residents (based on 3.22 persons per household). The 2014 Brentwood General Plan Update EIR uses a wastewater generation factor of 85 gallons per day per person of residential development. Therefore, the total wastewater flow from the project site would be about 0.003 MGD. Therefore, the current capacity of the WWTP would be sufficient to handle the wastewater flow from the proposed project. In addition, the proposed project is required to pay sewer impact fees which would contribute towards the cost of future upgrades, when needed. As a result, the proposed project would not have adverse impacts to wastewater treatment capacity.

Wastewater Infrastructure

The wastewater generated by the project would be collected by an internal sewer system, which would connect to the existing sewer conveyance line along Gann Street in the eastern portion of the project site.

Conclusion

Because the project applicant would pay City sewer impact fees, and adequate long-term wastewater treatment capacity is available to serve full build-out of the project, a **less than significant impact** would occur related to requiring or resulting in the construction of new wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.

Response b): Less than Significant. The following discussion addresses available water supply infrastructure to serve the project site.

Water Supply System

The City of Brentwood has prepared an Urban Water Management Plan (UWMP) that predicts the water supply available to the City of Brentwood in normal, single-dry, and multiple-dry years out to 2035. The total supply available in 2035 during all scenarios (normal, single-dry, and multiple-dry) well exceeds the projected demand. The future demand projections included in the UWMP are based upon General Plan land uses. The proposed project's use is consistent with the General Plan; therefore, the proposed project's future water demand was considered in the UWMP. As a result, with respect to the availability of sufficient water supplies to serve the project, the impact from the proposed project would be **less than significant**.

Water Supply Infrastructure

The project would involve the construction of the necessary water infrastructure to serve the proposed neighborhoods. The project includes installation of 8-inch water lines within the internal street ROWs which would connect to the existing mains along Gann Street.

Conclusion

Because adequate long-term water supply is available to serve full buildout of the proposed project and the project includes the extension of adjacent water line infrastructure, the project's impact to water supply would be **less than significant**.

Responses d) and e): Less than Significant. The City's Solid Waste Division, a division of the Public Works Department, provides municipal solid waste collection and transfer services for residential and commercial use within the City of Brentwood. The solid waste from Brentwood is disposed of at Keller Canyon County landfill. Keller Canyon Landfill covers 2,600 acres of land; 244 acres are permitted for disposal. The site currently handles 2,500 tons of waste per day, although the permit allows up to 3,500 tons of waste per day to be managed at the facility. As of September 2008, the remaining capacity of the landfill's disposal area is estimated at 60-64 million cubic yards, and the estimated closing date for the landfill is 2050[10]. Because the 2014 Brentwood General Plan Update EIR determined that solid waste capacity is adequate to serve the demand resulting from General Plan build-out and the proposed project's use is consistent with the General Plan designation for the project site; the project's impact to solid waste would be less than significant. This is a **less than significant** impact.

[10] City of Brentwood. *2014 Brentwood General Plan Update EIR* [pg. 3.14-45]. July 22, 2014.

XX. WILDFIRE

Would the project:	***Potentially Significant Impact***	***Less Than Significant with Mitigation Incorporation***	***Less Than Significant Impact***	***No Impact***
If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:				
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?			X	
d) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?			X	
c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?			X	
d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?			X	

EXISTING SETTING

There are no State Responsibility Areas (SRAs) within the vicinity of the Brentwood Planning Area. The City of Brentwood is not categorized as a "Very High" Fire Hazard Severity Zone (FHSZ) by CalFire. Only a few communities within Contra Coasta County have portions categorized as a "Very High" FHSZ by CalFire. Although this CEQA topic only applies to areas within a SRA or Very High FHSZ, out of an abundance of caution, these checklist questions are analyzed below.

RESPONSES TO CHECKLIST QUESTIONS

Response a): Less Than Significant. The project site will connect to an existing network of City streets. The proposed circulation improvements would allow for greater emergency access relative to existing conditions. The project would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. Therefore, impacts from project implementation would be considered ***less than significant*** relative to this topic.

Response b): Less Than Significant. The risk of wildfire is related to a variety of parameters, including fuel loading (vegetation), fire weather (winds, temperatures, humidity levels and fuel moisture contents) and topography (degree of slope). Steep slopes contribute to fire hazard by intensifying the effects of wind and making fire suppression difficult. Fuels such as grass are highly flammable because they have a high surface area to mass ratio and require less heat to reach the ignition point. The project site is located in an area that is predominately urban,

which is not considered at a significant risk of wildlife. Therefore, impacts from project implementation would be considered ***less than significant*** relative to this topic.

Response c): Less Than Significant. The project includes development of infrastructure (water, sewer, and storm drainage) required to support the proposed single-family use. The project site is surrounded by existing and future urban development. The project would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. The project would not require the installation or maintenance of infrastructure that may exacerbate fire risk. Therefore, impacts from project implementation would be considered ***less than significant*** relative to this topic.

Response d): Less Than Significant. The proposed project would require the installation of storm drainage infrastructure to ensure that storm waters properly drain from the project site and do not result in downstream flooding or major drainage changes. Storm drainage would be conveyed to on-site bioretention areas, which will discharge to the City's storm drainage system. The project proposes to include 3 bioretention areas in the throughout the site. Various storm drainage supporting structures and inlets will be located throughout the project site directing the direction of flow into the bioretention areas.

Runoff from the project site currently flows to the existing City storm drains located in Gann Street and Lone Tree Way. Upon development of the site, stormwater would flow to the on-site bioretention areas and/or the existing storm drains in the adjacent roadways. Additionally, the project site is not located within a FEMA designated flood hazard zone. Furthermore, because the site is essentially flat and located in an existing urbanized area of the City, downstream landslides would not occur.

Landslides include rockfalls, deep slope failure, and shallow slope failure. Factors such as the geological conditions, drainage, slope, vegetation, and others directly affect the potential for landslides. One of the most common causes of landslides is construction activity that is associated with road building (i.e. cut and fill). The project site is relatively flat; therefore, the potential for a landslide in the project site is essentially non-existent.

Overall, impacts from project implementation would be considered ***less than significant*** relative to this topic.

XXI. MANDATORY FINDINGS OF SIGNIFICANCE --

	Potentially Significant Impact	*Less Than Significant with Mitigation Incorporation*	*Less Than Significant Impact*	*No Impact*
a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?			X	
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?			X	
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?			X	

RESPONSES TO CHECKLIST QUESTIONS

Response a): Less than Significant. Although relatively unlikely, based upon the current land cover types found on-site, special- status wildlife species and/or federally- or state-protected birds not covered under the ECCCHCP could be occupying the site. In addition, although unlikely, the possibility exists for subsurface excavation of the site during grading and other construction activities to unearth deposits of cultural significance. However, this IS/MND includes mitigation measures that would reduce any potential impacts to less than significant levels. Therefore, the proposed project would have **less than significant** impacts related to degradation of the quality of the environment, reduction of habitat, threatened species, and/or California's history or prehistory.

Response b): Less than Significant. The proposed project in conjunction with other development within the City of Brentwood could incrementally contribute to cumulative impacts in the area. However, mitigation measures for all potentially significant project-level impacts identified for the proposed project in this IS/MND have been included that would reduce impacts to less than-significant levels. As such, the project's incremental contribution towards cumulative impacts would not be considered significant. In addition, all future discretionary development projects in the area would be required to undergo the same environmental analysis and mitigate any potential impacts, as necessary. Therefore, the proposed project would not have any impacts that would be cumulatively considerable, and impacts would be **less than significant**.

Response c): Less than Significant. The proposed project site is located within areas of existing and planned development and is consistent with the land use designation for the site. Due to the consistency of the proposed land use, substantial adverse effects on human beings are not anticipated with implementation of the proposed project. It should be noted that during construction activities, the project could result in potential impacts related to soil erosion and surface water quality impacts, and noise. However, this IS/MND includes mitigation measures that would reduce any potential impacts to a less-than-significant level. In addition, the proposed project would be designed in accordance with all applicable building standards and codes to ensure adequate safety is provided for the future residents of the proposed project. Therefore, impacts related to environmental effects that could cause adverse effects on human beings would be **less than significant**.

REFERENCES

- 2005 Ozone Strategy (BAAQMD 2006). January 2006.
- 2014 Brentwood General Plan Update EIR (City of Brentwood, 2014). July 2014.
- 2014 Brentwood General Plan Update (City of Brentwood, 2014). July 2014.
- 2018. City of Brentwood Development Fee Program (City of Brentwood, 2017). November 14, 2017.
- Arborist Report for a Portion of the Inez Estates Subdivision (Giannini property) in Brentwood, (Traverso Tree Service, 2019) June 18, 2019.
- CEQA Guidelines (BAAQMD, 2017). May 2017.
- City of Tracy 2015 Urban Water Management Plan (Erler & Kalinowski, Inc. 2016). July 2016.
- East Contra Costa County Habitat Conservation Plan/Natural Community Conservation Plan (East Contra Costa Habitat Conservation Plan Association, 2006). October 2006.
- Environmental Noise Assessment, Inez Subdivision (Saxelby Acoustics LLC). December 18, 2019.
- Geotechnical Investigation, Lone Tree Way Residential Development (TRC, 2019). May 28, 2019.
- Phase 1 Environmental Site Assessment, Lone Tree Way Project (TRC, 2019). August, 2019.
- Personal Communication with Steve Aubert, City of Brentwood Fire Department Fire Marshal. February 24, 2020.
- Removal Action Work Plan, Skipolini Property (ENGEO, 2019). August 5, 2019.
- Revised San Francisco Bay Area Ozone Attainment Plan for the 1-Hour National Ozone Standard (BAAQMD, 1999). June 1999.
- School Facility Needs Analysis for Brentwood Union School District (Cooperative Strategies, 2019) May 9, 2019
- U.S. Fish and Wildlife Service San Joaquin Kit Fox Survey Protocol for the Northern Range (Sacramento Fish and Wildlife Office, 2011). June 1999.
- Voluntary Cleanup Agreement, Skipolini Property (Cal EPA, DTSC). March 13, 2019.

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Appendix A

Arborist Report

TRAVERSO TREE SERVICE
WHEN IT HAS TO BE DONE RIGHT

June 18, 2019

Brian S. Kesler
Cyrus Land Investments, LLC
Jacqueline M. Seeno Construction Co., Inc.
4021 Port Chicago Highway
Concord, CA 94520
bkesler@seenohomes.com

Re: Arborist Report for a Portion of the Inez Estates Subdivision (Giannini property), in Brentwood

Dear Brian,

This arborist report addresses the newly acquired Giannini property, APN 018-080-025, to be included with previously inventoried lots for the proposed "Inez Estates" subdivision. This parcel is located half way in a vacant field adjacent to Lone Tree Way and Gann Street. Per the City of Brentwood's Oak Tree Preservation Ordinance Chapter 17.470.006, this report shall include the following:

- Tag, identify and measure all oak trees with a trunk diameter of 4" or larger, measured at 4.5' above grade, and all other trees $\geq$ 6" in diameter.
- Identify dripline locations and tree numbers on site plan.
- Assess individual tree health and structural condition.
- Assess proposed improvements for potential encroachment.
- Based on proposed encroachment, tree health, structure, and species susceptibility, make recommendations for preservation.

Site Summary
The site is flat and currently undeveloped. There are a total of 13 trees that are on or just outside the property. The tree inventory consists of 3 young valley oaks and 1 mature blue oak in fair to good condition, and 8 mature Siberian elms and 1 mulberry all in poor condition.

It is my opinion that the 9 non-native species are not worthy of retention, even if they are not to be impacted by the development. The 4 oaks, although fairly healthy, have less than desirable forms, leaning, one-sided, co-dominant stems, etc. They could be improved a bit through pruning, but I would not consider them highly desirable specimens. I suspect 2 property line oaks could be retained based on the tentative site plans. A 4" & 14" oak and all the non-native trees will need to be removed.

Assumptions & Limitations
This report is based on my site visit on 6/12/19, and the Tentative Site Plans provided by Apex Engineering dated May 20, 2019. Limited information was available at the time of this report; it's possible that the two property line oaks may also need to be removed, once more details of the lot improvements become available.

The health and structure of the trees were assessed visually from ground level. No drilling, root excavation, or aerial inspections were performed. Internal or non-detectable defects may exist, and could lead to part or whole tree failures. Due to the dynamic nature of trees and their environment, it is not possible for arborists to guarantee that trees will not fail in the future.

Tree Inventory & Assessment Table
#s: Each tree was given a numerical tag from #11-23. Their locations are shown on the attached aerial Google site map and site plan.

DBH: (Diameter at Breast Height): Trunk diameters in inches were calculated from the circumference measured at 4.5' above average grade.

Health & Structural Condition Rating
Dead: Dead or declining past chance of recovery.
Poor (P): Stunted or declining canopy, poor foliar color, possible disease or insect issues. Severe structural defects that may or may not be correctable. Usually not a reliable specimen for preservation.
Fair (F): Fair to moderate vigor. Minor structural defects that can be corrected. More susceptible to construction impacts than a tree in good condition.
Good (G): Good vigor and color, with no obvious problems or defects. Generally more resilient to impacts.
Very Good (VG): Exceptional specimen with excellent vigor and structure. Unusually nice.

Age
Young (Y): Within the first 20% of expected life span. High resiliency to encroachment.
Mature (M): Between 20% - 80% of expected life span. Moderate resiliency to encroachment.
Overmature (OM): In >80% of expected life span. Low resiliency to encroachment.

DE: Dripline Encroachment (X indicates encroachment)
CI: Anticipated Construction Impact (L = Low, M = Moderate, H = High)
PA: Project Arborist

#	Species	DBH	Health	Structure	Dripline				Age	DE	CI	Comments	Action
					N	E	S	W					
11	Siberian Elm *Ulmus pumila*	15", 18", 16", 20"	Poor	Poor	15	14	13	14	OM	X	H	Poor specimen, broken leaders, dieback, drought stressed.	Remove
12	Siberian Elm *Ulmus pumila*	9, 11, 10	Poor	Poor	12	12	12	14	OM	X	H	Poor specimen, broken leaders, dieback, drought stressed.	Remove
13	Siberian Elm *Ulmus pumila*	10, 14, 7	Poor	Poor	14	8	8	14	OM	X	H	Poor specimen, broken leaders, dieback, drought stressed.	Remove

#	Species	DBH	Health	Structure	Dripline N	Dripline E	Dripline S	Dripline W	Age	DE	CI	Comments	Action
14	Siberian Elm *Ulmus pumila*	7, 5, 5, 4	Poor	Poor	7	7	7	7	OM	X	H	Poor specimen, broken leaders, dieback, drought stressed.	Remove
15	Siberian Elm *Ulmus pumila*	20”	Poor	Poor	25	-	-	-	OM	X	H	Poor specimen, broken leaders, dieback, drought stressed.	Remove
16	Valley Oak *Quercus lobata*	10, 12	Good	Fair	6	12	22	10	M	?	?	Co-dominant leaders. Leader from adjacent elm broke out and wedged in canopy.	Save if possible.
17	Valley Oak *Quercus lobata*	4	Good	Fair	3	3	3	3	Y	X	H	Small leaning tree in middle of lot. Was hit by fallen dead elm.	Remove
18	Siberian Elm *Ulmus pumila*	8, 8, 9, 12	Poor	Poor	20	20	15	20	OM	?	?	Poor specimen, broken leaders, dieback, drought stressed.	Remove
19	Fruitless Mulberry *Morris alba*	19	Fair	Poor	15	15	20	15	OM	?	?	Decent foliage, butt previously topped and prone to future breakage.	Remove
20	Valley Oak *Quercus lobata*	9	Good	Fair	5	12	20	5	Y	?	?	5’ from existing stucco wall. One-sided due to neighbor’s olives. At southwest corner of lot 5. Protection fence at dripline.	Save if possible. Prune
21	Blue Oak *Quercus douglasii*	14	Good	poor	-	20	-	-	OM	X	H	One-sided with a heavy 45 degree sweeping lean to the east towards development.	Remove
22	Siberian Elm *Ulmus pumila*	29	Poor	Poor	10	20	25	20	OM	X	H	Poor specimen, broken leaders, dieback, drought stressed.	Remove
23	Siberian Elm *Ulmus pumila*	23, 20	Poor	Poor	10	25	15	15	OM	X	H	Poor specimen, broken leaders, dieback, drought stressed.	Remove

Discussion
Assuming all utilities, grading, and construction activities can avoid encroaching upon the driplines of oak trees #16 & #20, it is my opinion that those two trees are worthy of retention. The remaining 11 trees on the property are in poor condition and not worthy of retention.

Recommendations

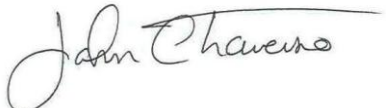
Pre-grading
- Remove trees #11-15, 17-19, and 21-23 (11 trees).
- Apply a 3" thick layer of chipper mulch from removals under trees #16 & 20 to be saved. Keep mulch at least 12" from trunks.
- Prune to remove deadwood in trees #16 & 20.
- Establish a tree protection zone (TPZ) by encompassing the driplines of trees #16 & 20 with chain-link fencing.

Grading and Construction Phase
- Keep all construction debris, fill soils, equipment, supplies, and toxic materials outside the TPZ's.
- Keep TPZ fencing in place until construction activities are completed and the project arborist approves its removal.
- Any TPZ encroachment deemed necessary shall be discussed and approved by the project arborist.

Site photos and maps attached

Please feel free to contact me if there are any questions or concerns.

Sincerely,



John C Traverso
ISA Board Certified Master Arborist #0206-BT
ISA Tree Risk Assessor Qualified

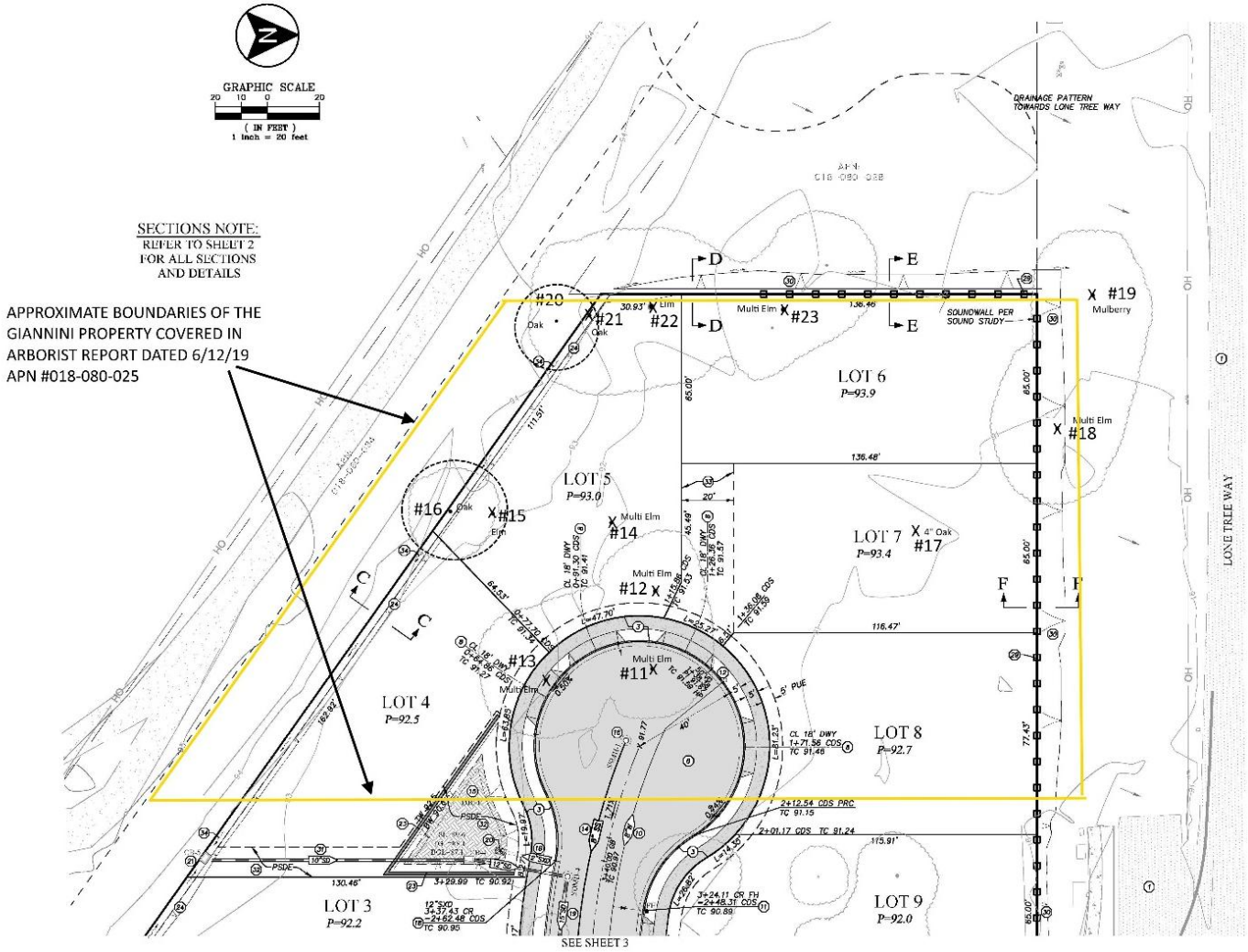
Site Photos

Google Map

PRELIMINARY GRADING DRAINAGE & UTILITY PLAN "INEZ ESTATES"

SUBDIVISION 9435

CITY OF BRENTWOOD
COUNTY OF CONTRA COSTA
STATE OF CALIFORNIA



SD/SS SUMMARY

STRUCTURE #	GRATE/RIM ELEVATION	FLOW LINE ELEVATION
EX.CB	TC 88.64±	15" FL 81.89 IN EX.30" FL 80.61 THRU
CB-1	G 88.80	4" FL 86.7 IK 10" FL 86.20 IN 15" FL 82.40 THRU
CB-2	G 92.00	10" FL 89.00 OUT
CB-3	G 89.80	4" FL 87.70 IN 15" FL 87.20 OUT
CB-4	G 90.10	4" FL 88.00 IN 10" FL 87.50 IN 15" FL 87.50 OUT
CD-5	G 92.00	10" FL 89.00 OUT
SDMH-1	RIM 88.43±	EX 30" FL 81.33± THRU
SDMH-2	RIM 89.49±	15" FL 84.00 THRU
SDMH-3	RIM 90.27±	15" FL 85.50 THRU
SDMH-4	RIM 90.63±	15" FL 87.00 THRU
EX.SSMH	RIM 89.30±	8" FL 82.60 IN EX. 12"±L 75.95± THRU
SSMH-1	RIM 91.59	8" FL 84.88 OUT

KEY LEGEND

1. EXISTING PAVEMENT TO REMAIN
2. PAVEMENT SAWCUT LINE (TYP)
3. CURB, GUTTER AND SEPARATED SIDEWALK PER COB STD DET ST-23
4. PORTION OF EX. CURB, GUTTER AND SIDEWALK TO BE REMOVED
5. MATCH EX. CURB, GUTTER AND SIDEWALK
6. ASPHALT. SECTION PER SOILS ENGINEER'S RECOMMENDATIONS
7. TYPE "A" HANDICAP RAMP PER COB STD DET ST-21a
8. 18' WIDE DRIVEWAY APPROACH PER COB STD DET ST-7B
9. CONNECT TO EXISTING WATER MAIN
10. 8" WATER MAIN PER COB STANDARDS
11. FIRE HYDRANT PER CCCFPD STANDARDS
12. 2" BLOWOFF PER COB STANDARDS
13. CONNECT TO EX. SANITARY SEWER MANHOLE
14. 8" SANITARY SEWER MAIN PER COB STANDARDS
15. BIO-RETENTION AREA. SEE DETAIL ON SHEET 2
16. SANITARY SEWER MANHOLE PER COB STANDARDS
17. REMOVE EX. INLET TOP AND REPLACE WITH MANHOLE CONE & RIM PER COB STD DET SD-1
18. SIDEWALK CROSS DRAIN (SXD). SEE DETAIL ON SHEET 2
19. 15" RCP STORM DRAIN PIPE @ S=0.5% MIN.
20. COBBLE STONES (TYP) @ SDX OUTFALL (0.5' ABOVE TSL)
21. TYPE "C" INLET PER COB STD DET SD-16a
22. CONNECT TO EXISTING INLET
23. RETAINING WALL AT PERIMETER OF BIO-RETENTION AREA
24. 2:1 SLOPE (TYP)
25. EX. WALL/PILASTER TO REMAIN
26. TYPICAL "STOP" INTERSECTION STRIPING PER COB STD DET ST-37
27. EXISTING ELECTROLIER AND PULL BOX TO BE RELOCATED
28. EXISTING CONCRETE WALK TO REMAIN
29. SOUNDWALL PER SOUND STUDY
30. 3:1 SLOPE (TYP)
31. 10" RCP STORM DRAIN PIPE @ S=0.5% MIN.
32. PRIVATE STORM DRAIN EASEMENT (PSDE)
33. 20' WIDE PRIVATE ACCESS & UTILITY EASEMENT
34. 24" WIDE x 8" DEEP EARTH SWALE @ 0.5% MIN. (TYP)

811 DIAL TOLL FREE 811 AT LEAST TWO DAYS BEFORE YOU DIG
UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

NOTE:
THE LOCATION OF ALL EXISTING UTILITIES SHOWN ON THE PLANS HAVE BEEN DETERMINED FROM THE BEST INFORMATION AVAILABLE. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY THE VARIOUS UTILITIES AND EXERCISE EXTREME CAUTION IN AREAS OF BURIED UTILITIES DURING CONSTRUCTION.

THE CITY OF BRENTWOOD — PUBLIC WORKS DEPARTMENT

APEX CIVIL ENGINEERING & LAND SURVEYING — 817 Arnold Drive, Ste. 50, Martinez, CA 94553, Ph: (925) 476-8199, www.apexce.net

NO.	REVISIONS	NO	BY	DATE

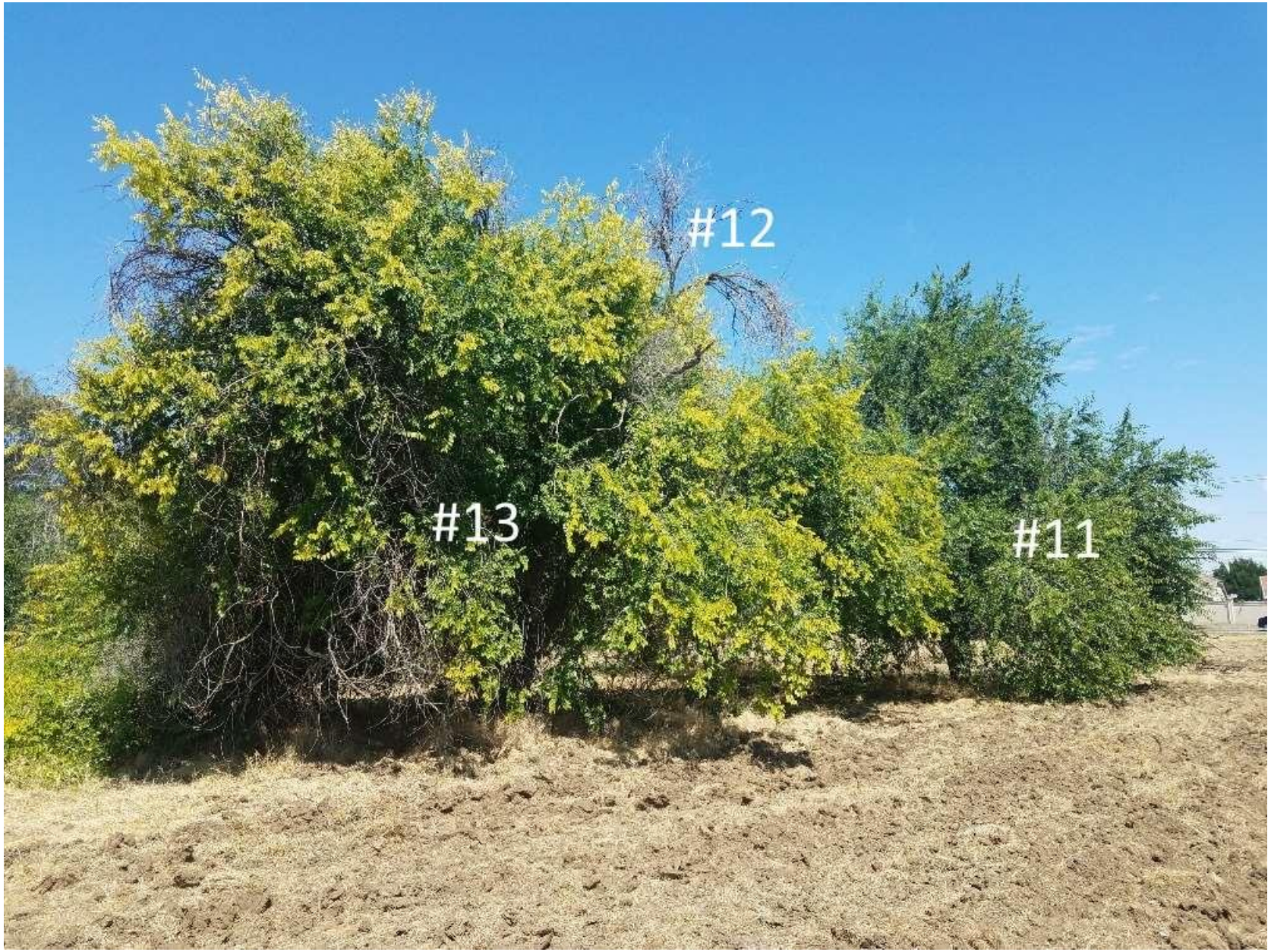
DESIGN: JV
DRAWN: STAFF
CHECKED: JV
PROJ. NO. 2018-1000

REGISTERED PROFESSIONAL ENGINEER — NO. 78203 — CIVIL — STATE OF CALIFORNIA

TENTATIVE MAP
PRELIMINARY GRADING, DRAINAGE & UTILITY PLAN
'INEZ ESTATES' SUB # 9435 BRENTWOOD, CA

SHEET 4 OF 5
DATE 05-20-2019

Tentative Grading & Drainage


#12
#13
#11


#16
Oak
#15
Fallen Elm
#14


#19
#18
#17


#21
#23
#22
#20

Appendix B

Paleontological and Cultural Resources Assessment (Confidential)

Appendix C

Energy Calculations

Off-road Mobile (Construction) Energy Usage

Note: For the sake of simplicity, and as a conservative estimation, it was assumed that all off-road vehicles use diesel fuel as an energy source.
Site preparation, and grading energy were used as the basis of this calculation.

Given Factor:	10.55	**metric tons**	**CO2**	**(provided in CalEEMod Output File)**
Conversion Factor:	2204.62	pounds	per metric ton	
Intermediate Result:	**23,256**	**pounds**	**CO2**	
Conversion Factor:	22.38	pounds	CO2 per 1 gallon of diesel fuel	(Source: U.S. EIA, 2016.
Final Result:	**1,039.14**	**gallons**	**diesel fuel**	Website: http://www.eia.gov/tools/faqs/faq.cfm?id=307&t=11)

On-road Mobile (Operational) Energy Usage

Note: For the sake of simplicity, it was assumed that passenger vehicles, light duty trucks, motorcycles, and mobile homes use gasoline, and all medium-duty trucks, heavy-duty trucks, and buses use diesel fuel.

Unmitigated:

Step 1: **Total Net Daily Trips (provided by Fehr & Peers)**

103

Res H-W	*Res H-S*	*Res H-O*
Trip Length (miles) (provided by CalEEMod)		
10.8	4.8	5.7
Trip %		
31.00%	15.00%	54.00%

Average Trip Length (weighted average)

7.1

Therefore:

Average Daily VMT:

736

Step 2: Given:

Fleet Mix (provided by CalEEMod v2016.3.2)

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
58.2%	3.9%	18.6%	12.3%	1.7%	0.5%	1.1%	2.4%	0.2%	0.1%	0.5%	0.3%	0.1%

And:

Gasoline MPG Factors for each Vehicle Class (from EMFAC2014) - Year 2020

LDA	LDT1	LDT2	MDV	MCY	MH	OBUS
29.93009483	24.879991	22.223868	16.02637345	36.90467564	6.572330026	6.572733

Diesel MPG Factors for each Vehicle Class (from EMFAC2014) - Year 2020

LHD1	LHD2	MHD	HHD	UBUS	SBUS
17.32849472	15.764626	8.096859	5.528806	4.682830913	7.232482739

Therefore:

Weighted Average MPG Factors

Gasoline: **26.3** Diesel: **10.2**

Step 3: **Therefore:**

26 daily gallons of gasoline **5 daily gallons of diesel**

or

9,552	**annual gallons of gasoline**	**1,651**	**annual gallons of diesel**

On-road Mobile (Construction) Energy Usage - Demolition

Step 1:

Total Daily Worker Trips (provided by CalEEMod)
0

Worker Trip Length (miles) (provided by CalEEMod)
10.8

Therefore:
Average Worker Daily VMT:
-

Total Hauling Trips (provided by CalEEMod)
-

Hauling Trip Length (miles) (provided by CalEEMod)
20

Total Hauler VMT:
-

Step 2:

Given:
Assumed Fleet Mix for Workers

LDA	LDT1	LDT2
0.3333333	0.333333	0.333333

And:
Gasoline MPG Factors for each Vehicle Class (from EMFAC2014) - Year 2020

LDA	LDT1	LDT2
29.930095	24.87999	22.22387

Therefore:
Weighted Average Worker MPG Factor
25.7

Assumed Fleet Mix for Haulers (provided by CalEEMod v2016.3.2)

MHD	HHD
0.5	0.5

Diesel:

MHD	HHD
8.0968586	5.452029

Weighted Average Hauler (Diesel) MPG Factor
6.8

Step 3:

Therefore:
0.0 Worker daily gallons of gasoline

Step 4:

20 **# of Days (see CalEEMod)**

Therefore:

Result: - **Total gallons of gasoline**

Therefore:

- **Total gallons of diesel**

On-road Mobile (Construction) Energy Usage - Site Preparation

Step 1: **Total Daily Worker Trips (provided by CalEEMod)**

18

Worker Trip Length (miles) (provided by CalEEMod)

10.8

Therefore:

Average Worker Daily VMT:

194

Step 2: Given:

Assumed Fleet Mix for Workers (provided by CalEEMod v2016.3.2)

LDA	LDT1	LDT2
0.3333333	0.3333333	0.3333333

And:

Gasoline MPG Factors for each Vehicle Class (from EMFAC2014) - Year 2020

LDA	LDT1	LDT2
29.930095	24.879991	22.223868

Therefore:

Weighted Average Worker MPG Factor

25.7

Step 3: Therefore:

7.6 Worker daily gallons of gasoline

Step 4: 5 **# of Days (see CalEEMod)**

Therefore:

Result: **38 Total gallons of gasoline**

On-road Mobile (Construction) Energy Usage - Grading

Step 1: **Total Daily Worker Trips (provided by CalEEMod)**

15

Worker Trip Length (miles) (provided by CalEEMod)

10.8

Therefore:

Average Worker Daily VMT:

162

Step 2: Given:

Assumed Fleet Mix for Workers (provided by CalEEMod v2016.3.2)

LDA	LDT1	LDT2
0.3333333	0.3333333	0.3333333

And:

Gasoline MPG Factors for each Vehicle Class (from EMFAC2014) - Year 2020

LDA	LDT1	LDT2
29.930095	24.879991	22.223868

Therefore:

Weighted Average Worker MPG Factor

25.7

Step 3: **Therefore:**

6.3 Worker daily gallons of gasoline

Step 4: 8 **# of Days (see CalEEMod)**

Therefore:

Result: **50 Total gallons of gasoline**

On-road Mobile (Construction) Energy Usage - Building Construction

Step 1:

Total Daily Worker Trips (provided by CalEEMod)
4

Total Daily Vendor Trips (provided by CalEEMod)
1

Total Daily Hauler Trips (provided by CalEEMod)
0

Worker Trip Length (miles) (provided by CalEEMod)
10.8

Vendor Trip Length (miles) (provided by CalEEMod)
7.3

Hauling Trip Length (miles) (provided by CalEEMod)
0

Therefore:

Average Worker Daily VMT:
43.20

Average Vendor Daily VMT:
7

Average Hauling Daily VMT:
-

Step 2:

Given:

Assumed Fleet Mix for Workers (provided by CalEEMod v2016.3.2)

LDA	LDT1	LDT2
0.33333333	0.333333	0.333333

Assumed Fleet Mix for Vendors (provided by CalEEMod v2016.3.2)

MHD	HHD
0.5	0.5

And:

MPG Factors for each Vehicle Class (from EMFAC2014) - Year 2020

Gasoline:

LDA	LDT1	LDT2
29.9300948	24.87999	22.22387

Diesel:

MHD	HHD
8.096858558	5.452029

Therefore:

Weighted Average Worker (Gasoline) MPG Factor
25.7

Weighted Average Vendor (Diesel) MPG Factor
6.8

Weighted Average Hauling MPG Factor
0.0

Step 3:

Therefore:
2 Worker daily gallons of gasoline

Therefore:
1 Vendor daily gallons of diesel

Therefore:
0.0

Step 4:

230 **# of Days (see CalEEMod)**

Therefore:
387 Total gallons of gasoline

Therefore:
247.84 Total gallons of diesel

On-road Mobile (Construction) Energy Usage - Paving

Step 1: **Total Daily Worker Trips (provided by CalEEMod)**

20

Worker Trip Length (miles) (provided by CalEEMod)

10.8

Therefore:

Average Worker Daily VMT:

216

Step 2: Given:

Assumed Fleet Mix for Workers (provided by CalEEMod v2016.3.2)

LDA	LDT1	LDT2
0.3333333	0.3333333	0.3333333

And:

Gasoline MPG Factors for each Vehicle Class (from EMFAC2014) - Year 2020

LDA	LDT1	LDT2
29.930095	24.879991	22.223868

Therefore:

Weighted Average Worker MPG Factor

25.7

Step 3: **Therefore:**

8.4 Worker daily gallons of gasoline

Step 4: 18 **# of Days (see CalEEMod)**

Therefore:

Result: **151 Total gallons of gasoline**

On-road Mobile (Construction) Energy Usage - Architectural Coating

Step 1: **Total Daily Worker Trips (provided by CalEEMod)**

1

Worker Trip Length (miles) (provided by CalEEMod)

10.8

Therefore:

Average Worker Daily VMT:

11

Step 2: Given:

Assumed Fleet Mix for Workers (provided by CalEEMod v2016.3.2)

LDA	LDT1	LDT2
0.3333333	0.3333333	0.3333333

And:

Gasoline MPG Factors for each Vehicle Class (from EMFAC2014) - Year 2020

LDA	LDT1	LDT2
29.930095	24.879991	22.223868

Therefore:

Weighted Average Worker MPG Factor

25.7

Step 3: **Therefore:**

0.4 Worker daily gallons of gasoline

Step 4: 18 **# of Days (see CalEEMod)**

Therefore:

Result: **8 Total gallons of gasoline**

Appendix D

Air Quality and Greenhouse Gas Modeling

Brentwood Inez Subdivision

Contra Costa County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Single Family Housing	11.00	Dwelling Unit	4.08	19,800.00	35

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	58
Climate Zone	4			**Operational Year**	2021
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	641.35	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Size of project site, 3.22 Persons per household

Construction Phase - No demolition phase: No existing structures on site, vacant site

Woodstoves - No fireplaces are proposed, only natural gas hearths

Area Coating -

Energy Use -

Construction Off-road Equipment Mitigation -

Mobile Land Use Mitigation -

Area Mitigation -

Water Mitigation -

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblFireplaces	NumberGas	2.75	0.00
tblFireplaces	NumberNoFireplace	0.88	11.00
tblFireplaces	NumberWood	4.73	0.00
tblLandUse	LotAcreage	3.57	4.08
tblLandUse	Population	31.00	35.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2019	6.6000e-003	0.0684	0.0339	6.0000e-005	0.0273	3.5900e-003	0.0309	0.0150	3.3000e-003	0.0183	0.0000	5.3193	5.3193	1.6300e-003	0.0000	5.3600
2020	0.3026	2.4789	2.1590	3.5100e-003	0.0507	0.1419	0.1927	0.0251	0.1332	0.1584	0.0000	303.3730	303.3730	0.0744	0.0000	305.2323
2021	0.1100	0.0107	0.0129	2.0000e-005	6.0000e-005	6.6000e-004	7.1000e-004	1.0000e-005	6.6000e-004	6.7000e-004	0.0000	1.8343	1.8343	1.2000e-004	0.0000	1.8374
Maximum	**0.3026**	**2.4789**	**2.1590**	**3.5100e-003**	**0.0507**	**0.1419**	**0.1927**	**0.0251**	**0.1332**	**0.1584**	**0.0000**	**303.3730**	**303.3730**	**0.0744**	**0.0000**	**305.2323**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2019	6.6000e-003	0.0684	0.0339	6.0000e-005	0.0124	3.5900e-003	0.0160	6.7600e-003	3.3000e-003	0.0101	0.0000	5.3193	5.3193	1.6300e-003	0.0000	5.3600
2020	0.3026	2.4789	2.1590	3.5100e-003	0.0264	0.1419	0.1683	0.0123	0.1332	0.1455	0.0000	303.3727	303.3727	0.0744	0.0000	305.2320
2021	0.1100	0.0107	0.0129	2.0000e-005	6.0000e-005	6.6000e-004	7.1000e-004	1.0000e-005	6.6000e-004	6.7000e-004	0.0000	1.8343	1.8343	1.2000e-004	0.0000	1.8374
Maximum	**0.3026**	**2.4789**	**2.1590**	**3.5100e-003**	**0.0264**	**0.1419**	**0.1683**	**0.0123**	**0.1332**	**0.1455**	**0.0000**	**303.3727**	**303.3727**	**0.0744**	**0.0000**	**305.2320**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**50.25**	**0.00**	**17.50**	**52.52**	**0.00**	**11.88**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	**12-27-2019**	**3-26-2020**	0.7981	0.7981
2	**3-27-2020**	**6-26-2020**	0.7047	0.7047
3	**6-27-2020**	**9-26-2020**	0.7047	0.7047
4	**9-27-2020**	**12-26-2020**	0.6242	0.6242
5	**12-27-2020**	**3-26-2021**	0.1542	0.1542
		Highest	0.7981	0.7981

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0966	1.3700e-003	0.1077	9.0000e-005		4.6600e-003	4.6600e-003		4.6600e-003	4.6600e-003	0.5637	0.1334	0.6971	2.7600e-003	0.0000	0.7662
Energy	1.7200e-003	0.0147	6.2700e-003	9.0000e-005		1.1900e-003	1.1900e-003		1.1900e-003	1.1900e-003	0.0000	42.9513	42.9513	1.5000e-003	5.5000e-004	43.1541
Mobile	0.0278	0.1261	0.3158	1.0500e-003	0.0896	9.1000e-004	0.0906	0.0241	8.5000e-004	0.0249	0.0000	95.9828	95.9828	3.5800e-003	0.0000	96.0723
Waste						0.0000	0.0000		0.0000	0.0000	2.9840	0.0000	2.9840	0.1764	0.0000	7.3927
Water						0.0000	0.0000		0.0000	0.0000	0.2274	1.5882	1.8156	0.0234	5.7000e-004	2.5700
Total	**0.1261**	**0.1422**	**0.4297**	**1.2300e-003**	**0.0896**	**6.7600e-003**	**0.0964**	**0.0241**	**6.7000e-003**	**0.0308**	**3.7751**	**140.6557**	**144.4308**	**0.2076**	**1.1200e-003**	**149.9552**

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0938	9.4000e-004	0.0819	0.0000		4.5000e-004	4.5000e-004		4.5000e-004	4.5000e-004	0.0000	0.1334	0.1334	1.3000e-004	0.0000	0.1367
Energy	1.7200e-003	0.0147	6.2700e-003	9.0000e-005		1.1900e-003	1.1900e-003		1.1900e-003	1.1900e-003	0.0000	42.9513	42.9513	1.5000e-003	5.5000e-004	43.1541
Mobile	0.0246	0.1021	0.2362	7.1000e-004	0.0585	6.4000e-004	0.0591	0.0157	6.0000e-004	0.0163	0.0000	65.0274	65.0274	2.7500e-003	0.0000	65.0960
Waste						0.0000	0.0000		0.0000	0.0000	2.9840	0.0000	2.9840	0.1764	0.0000	7.3927
Water						0.0000	0.0000		0.0000	0.0000	0.1819	1.3345	1.5164	0.0187	4.5000e-004	2.1202
Total	**0.1200**	**0.1178**	**0.3243**	**8.0000e-004**	**0.0585**	**2.2800e-003**	**0.0607**	**0.0157**	**2.2400e-003**	**0.0179**	**3.1659**	**109.4466**	**112.6125**	**0.1995**	**1.0000e-003**	**117.8996**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**4.83**	**17.17**	**24.52**	**34.96**	**34.78**	**66.27**	**36.99**	**34.76**	**66.57**	**41.74**	**16.14**	**22.19**	**22.03**	**3.93**	**10.71**	**21.38**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	12/27/2019	1/2/2020	5	5	
2	Grading	Grading	1/3/2020	1/14/2020	5	8	
3	Building Construction	Building Construction	1/15/2020	12/1/2020	5	230	
4	Paving	Paving	12/2/2020	12/25/2020	5	18	
5	Architectural Coating	Architectural Coating	12/26/2020	1/20/2021	5	18	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 4

Acres of Paving: 0

Residential Indoor: 40,095; Residential Outdoor: 13,365; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

<u>OffRoad Equipment</u>

Brentwood Inez Subdivision - Contra Costa County, Annual

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	1	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Cement and Mortar Mixers	2	6.00	9	0.56
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	2	6.00	132	0.36
Paving	Rollers	2	6.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	4.00	1.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	8	20.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	1.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Soil Stabilizer

Replace Ground Cover

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Site Preparation - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0271	0.0000	0.0271	0.0149	0.0000	0.0149	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.5000e-003	0.0684	0.0331	6.0000e-005		3.5900e-003	3.5900e-003		3.3000e-003	3.3000e-003	0.0000	5.1253	5.1253	1.6200e-003	0.0000	5.1658
Total	**6.5000e-003**	**0.0684**	**0.0331**	**6.0000e-005**	**0.0271**	**3.5900e-003**	**0.0307**	**0.0149**	**3.3000e-003**	**0.0182**	**0.0000**	**5.1253**	**5.1253**	**1.6200e-003**	**0.0000**	**5.1658**

3.2 Site Preparation - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0000e-004	7.0000e-005	7.6000e-004	0.0000	2.1000e-004	0.0000	2.2000e-004	6.0000e-005	0.0000	6.0000e-005	0.0000	0.1940	0.1940	1.0000e-005	0.0000	0.1942
Total	**1.0000e-004**	**7.0000e-005**	**7.6000e-004**	**0.0000**	**2.1000e-004**	**0.0000**	**2.2000e-004**	**6.0000e-005**	**0.0000**	**6.0000e-005**	**0.0000**	**0.1940**	**0.1940**	**1.0000e-005**	**0.0000**	**0.1942**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0122	0.0000	0.0122	6.7000e-003	0.0000	6.7000e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.5000e-003	0.0684	0.0331	6.0000e-005		3.5900e-003	3.5900e-003		3.3000e-003	3.3000e-003	0.0000	5.1253	5.1253	1.6200e-003	0.0000	5.1658
Total	**6.5000e-003**	**0.0684**	**0.0331**	**6.0000e-005**	**0.0122**	**3.5900e-003**	**0.0158**	**6.7000e-003**	**3.3000e-003**	**0.0100**	**0.0000**	**5.1253**	**5.1253**	**1.6200e-003**	**0.0000**	**5.1658**

3.2 Site Preparation - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0000e-004	7.0000e-005	7.6000e-004	0.0000	2.1000e-004	0.0000	2.2000e-004	6.0000e-005	0.0000	6.0000e-005	0.0000	0.1940	0.1940	1.0000e-005	0.0000	0.1942
Total	**1.0000e-004**	**7.0000e-005**	**7.6000e-004**	**0.0000**	**2.1000e-004**	**0.0000**	**2.2000e-004**	**6.0000e-005**	**0.0000**	**6.0000e-005**	**0.0000**	**0.1940**	**0.1940**	**1.0000e-005**	**0.0000**	**0.1942**

3.2 Site Preparation - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0181	0.0000	0.0181	9.9300e-003	0.0000	9.9300e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.0800e-003	0.0424	0.0215	4.0000e-005		2.2000e-003	2.2000e-003		2.0200e-003	2.0200e-003	0.0000	3.3431	3.3431	1.0800e-003	0.0000	3.3701
Total	**4.0800e-003**	**0.0424**	**0.0215**	**4.0000e-005**	**0.0181**	**2.2000e-003**	**0.0203**	**9.9300e-003**	**2.0200e-003**	**0.0120**	**0.0000**	**3.3431**	**3.3431**	**1.0800e-003**	**0.0000**	**3.3701**

3.2 Site Preparation - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.0000e-005	4.0000e-005	4.5000e-004	0.0000	1.4000e-004	0.0000	1.4000e-004	4.0000e-005	0.0000	4.0000e-005	0.0000	0.1252	0.1252	0.0000	0.0000	0.1253
Total	**6.0000e-005**	**4.0000e-005**	**4.5000e-004**	**0.0000**	**1.4000e-004**	**0.0000**	**1.4000e-004**	**4.0000e-005**	**0.0000**	**4.0000e-005**	**0.0000**	**0.1252**	**0.1252**	**0.0000**	**0.0000**	**0.1253**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					8.1300e-003	0.0000	8.1300e-003	4.4700e-003	0.0000	4.4700e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.0800e-003	0.0424	0.0215	4.0000e-005		2.2000e-003	2.2000e-003		2.0200e-003	2.0200e-003	0.0000	3.3431	3.3431	1.0800e-003	0.0000	3.3701
Total	**4.0800e-003**	**0.0424**	**0.0215**	**4.0000e-005**	**8.1300e-003**	**2.2000e-003**	**0.0103**	**4.4700e-003**	**2.0200e-003**	**6.4900e-003**	**0.0000**	**3.3431**	**3.3431**	**1.0800e-003**	**0.0000**	**3.3701**

3.2 Site Preparation - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.0000e-005	4.0000e-005	4.5000e-004	0.0000	1.4000e-004	0.0000	1.4000e-004	4.0000e-005	0.0000	4.0000e-005	0.0000	0.1252	0.1252	0.0000	0.0000	0.1253
Total	**6.0000e-005**	**4.0000e-005**	**4.5000e-004**	**0.0000**	**1.4000e-004**	**0.0000**	**1.4000e-004**	**4.0000e-005**	**0.0000**	**4.0000e-005**	**0.0000**	**0.1252**	**0.1252**	**0.0000**	**0.0000**	**0.1253**

3.3 Grading - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0262	0.0000	0.0262	0.0135	0.0000	0.0135	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.7200e-003	0.1055	0.0642	1.2000e-004		5.0900e-003	5.0900e-003		4.6900e-003	4.6900e-003	0.0000	10.4235	10.4235	3.3700e-003	0.0000	10.5078
Total	**9.7200e-003**	**0.1055**	**0.0642**	**1.2000e-004**	**0.0262**	**5.0900e-003**	**0.0313**	**0.0135**	**4.6900e-003**	**0.0182**	**0.0000**	**10.4235**	**10.4235**	**3.3700e-003**	**0.0000**	**10.5078**

3.3 Grading - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.0000e-004	1.5000e-004	1.5100e-003	0.0000	4.8000e-004	0.0000	4.8000e-004	1.3000e-004	0.0000	1.3000e-004	0.0000	0.4175	0.4175	1.0000e-005	0.0000	0.4177
Total	**2.0000e-004**	**1.5000e-004**	**1.5100e-003**	**0.0000**	**4.8000e-004**	**0.0000**	**4.8000e-004**	**1.3000e-004**	**0.0000**	**1.3000e-004**	**0.0000**	**0.4175**	**0.4175**	**1.0000e-005**	**0.0000**	**0.4177**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0118	0.0000	0.0118	6.0600e-003	0.0000	6.0600e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.7200e-003	0.1055	0.0642	1.2000e-004		5.0900e-003	5.0900e-003		4.6900e-003	4.6900e-003	0.0000	10.4235	10.4235	3.3700e-003	0.0000	10.5078
Total	**9.7200e-003**	**0.1055**	**0.0642**	**1.2000e-004**	**0.0118**	**5.0900e-003**	**0.0169**	**6.0600e-003**	**4.6900e-003**	**0.0108**	**0.0000**	**10.4235**	**10.4235**	**3.3700e-003**	**0.0000**	**10.5078**

3.3 Grading - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.0000e-004	1.5000e-004	1.5100e-003	0.0000	4.8000e-004	0.0000	4.8000e-004	1.3000e-004	0.0000	1.3000e-004	0.0000	0.4175	0.4175	1.0000e-005	0.0000	0.4177
Total	**2.0000e-004**	**1.5000e-004**	**1.5100e-003**	**0.0000**	**4.8000e-004**	**0.0000**	**4.8000e-004**	**1.3000e-004**	**0.0000**	**1.3000e-004**	**0.0000**	**0.4175**	**0.4175**	**1.0000e-005**	**0.0000**	**0.4177**

3.4 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2438	2.2064	1.9376	3.1000e-003		0.1285	0.1285		0.1208	0.1208	0.0000	266.3515	266.3515	0.0650	0.0000	267.9760
Total	**0.2438**	**2.2064**	**1.9376**	**3.1000e-003**		**0.1285**	**0.1285**		**0.1208**	**0.1208**	**0.0000**	**266.3515**	**266.3515**	**0.0650**	**0.0000**	**267.9760**

3.4 Building Construction - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.6000e-004	0.0132	3.3900e-003	3.0000e-005	7.6000e-004	7.0000e-005	8.2000e-004	2.2000e-004	6.0000e-005	2.8000e-004	0.0000	2.9998	2.9998	1.5000e-004	0.0000	3.0035
Worker	1.5400e-003	1.1200e-003	0.0116	4.0000e-005	3.6500e-003	2.0000e-005	3.6700e-003	9.7000e-004	2.0000e-005	9.9000e-004	0.0000	3.2006	3.2006	8.0000e-005	0.0000	3.2026
Total	**2.0000e-003**	**0.0143**	**0.0150**	**7.0000e-005**	**4.4100e-003**	**9.0000e-005**	**4.4900e-003**	**1.1900e-003**	**8.0000e-005**	**1.2700e-003**	**0.0000**	**6.2004**	**6.2004**	**2.3000e-004**	**0.0000**	**6.2061**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2438	2.2064	1.9376	3.1000e-003		0.1285	0.1285		0.1208	0.1208	0.0000	266.3512	266.3512	0.0650	0.0000	267.9757
Total	**0.2438**	**2.2064**	**1.9376**	**3.1000e-003**		**0.1285**	**0.1285**		**0.1208**	**0.1208**	**0.0000**	**266.3512**	**266.3512**	**0.0650**	**0.0000**	**267.9757**

3.4 Building Construction - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.6000e-004	0.0132	3.3900e-003	3.0000e-005	7.6000e-004	7.0000e-005	8.2000e-004	2.2000e-004	6.0000e-005	2.8000e-004	0.0000	2.9998	2.9998	1.5000e-004	0.0000	3.0035
Worker	1.5400e-003	1.1200e-003	0.0116	4.0000e-005	3.6500e-003	2.0000e-005	3.6700e-003	9.7000e-004	2.0000e-005	9.9000e-004	0.0000	3.2006	3.2006	8.0000e-005	0.0000	3.2026
Total	**2.0000e-003**	**0.0143**	**0.0150**	**7.0000e-005**	**4.4100e-003**	**9.0000e-005**	**4.4900e-003**	**1.1900e-003**	**8.0000e-005**	**1.2700e-003**	**0.0000**	**6.2004**	**6.2004**	**2.3000e-004**	**0.0000**	**6.2061**

3.5 Paving - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0107	0.1062	0.1105	1.7000e-004		5.8600e-003	5.8600e-003		5.4000e-003	5.4000e-003	0.0000	14.7348	14.7348	4.6300e-003	0.0000	14.8506
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0107**	**0.1062**	**0.1105**	**1.7000e-004**		**5.8600e-003**	**5.8600e-003**		**5.4000e-003**	**5.4000e-003**	**0.0000**	**14.7348**	**14.7348**	**4.6300e-003**	**0.0000**	**14.8506**

3.5 Paving - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.0000e-004	4.4000e-004	4.5200e-003	1.0000e-005	1.4300e-003	1.0000e-005	1.4400e-003	3.8000e-004	1.0000e-005	3.9000e-004	0.0000	1.2524	1.2524	3.0000e-005	0.0000	1.2532
Total	**6.0000e-004**	**4.4000e-004**	**4.5200e-003**	**1.0000e-005**	**1.4300e-003**	**1.0000e-005**	**1.4400e-003**	**3.8000e-004**	**1.0000e-005**	**3.9000e-004**	**0.0000**	**1.2524**	**1.2524**	**3.0000e-005**	**0.0000**	**1.2532**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0107	0.1062	0.1105	1.7000e-004		5.8600e-003	5.8600e-003		5.4000e-003	5.4000e-003	0.0000	14.7348	14.7348	4.6300e-003	0.0000	14.8506
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0107**	**0.1062**	**0.1105**	**1.7000e-004**		**5.8600e-003**	**5.8600e-003**		**5.4000e-003**	**5.4000e-003**	**0.0000**	**14.7348**	**14.7348**	**4.6300e-003**	**0.0000**	**14.8506**

3.5 Paving - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.0000e-004	4.4000e-004	4.5200e-003	1.0000e-005	1.4300e-003	1.0000e-005	1.4400e-003	3.8000e-004	1.0000e-005	3.9000e-004	0.0000	1.2524	1.2524	3.0000e-005	0.0000	1.2532
Total	**6.0000e-004**	**4.4000e-004**	**4.5200e-003**	**1.0000e-005**	**1.4300e-003**	**1.0000e-005**	**1.4400e-003**	**3.8000e-004**	**1.0000e-005**	**3.9000e-004**	**0.0000**	**1.2524**	**1.2524**	**3.0000e-005**	**0.0000**	**1.2532**

3.6 Architectural Coating - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0310					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.8000e-004	3.3700e-003	3.6600e-003	1.0000e-005		2.2000e-004	2.2000e-004		2.2000e-004	2.2000e-004	0.0000	0.5107	0.5107	4.0000e-005	0.0000	0.5116
Total	**0.0315**	**3.3700e-003**	**3.6600e-003**	**1.0000e-005**		**2.2000e-004**	**2.2000e-004**		**2.2000e-004**	**2.2000e-004**	**0.0000**	**0.5107**	**0.5107**	**4.0000e-005**	**0.0000**	**0.5116**

3.6 Architectural Coating - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0000e-005	0.0000	5.0000e-005	0.0000	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0139	0.0139	0.0000	0.0000	0.0139
Total	**1.0000e-005**	**0.0000**	**5.0000e-005**	**0.0000**	**2.0000e-005**	**0.0000**	**2.0000e-005**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0139**	**0.0139**	**0.0000**	**0.0000**	**0.0139**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0310					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.8000e-004	3.3700e-003	3.6600e-003	1.0000e-005		2.2000e-004	2.2000e-004		2.2000e-004	2.2000e-004	0.0000	0.5107	0.5107	4.0000e-005	0.0000	0.5116
Total	**0.0315**	**3.3700e-003**	**3.6600e-003**	**1.0000e-005**		**2.2000e-004**	**2.2000e-004**		**2.2000e-004**	**2.2000e-004**	**0.0000**	**0.5107**	**0.5107**	**4.0000e-005**	**0.0000**	**0.5116**

3.6 Architectural Coating - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0000e-005	0.0000	5.0000e-005	0.0000	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0139	0.0139	0.0000	0.0000	0.0139
Total	**1.0000e-005**	**0.0000**	**5.0000e-005**	**0.0000**	**2.0000e-005**	**0.0000**	**2.0000e-005**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0139**	**0.0139**	**0.0000**	**0.0000**	**0.0139**

3.6 Architectural Coating - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.1084					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.5300e-003	0.0107	0.0127	2.0000e-005		6.6000e-004	6.6000e-004		6.6000e-004	6.6000e-004	0.0000	1.7873	1.7873	1.2000e-004	0.0000	1.7903
Total	**0.1099**	**0.0107**	**0.0127**	**2.0000e-005**		**6.6000e-004**	**6.6000e-004**		**6.6000e-004**	**6.6000e-004**	**0.0000**	**1.7873**	**1.7873**	**1.2000e-004**	**0.0000**	**1.7903**

3.6 Architectural Coating - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.0000e-005	2.0000e-005	1.6000e-004	0.0000	6.0000e-005	0.0000	6.0000e-005	1.0000e-005	0.0000	2.0000e-005	0.0000	0.0470	0.0470	0.0000	0.0000	0.0470
Total	**2.0000e-005**	**2.0000e-005**	**1.6000e-004**	**0.0000**	**6.0000e-005**	**0.0000**	**6.0000e-005**	**1.0000e-005**	**0.0000**	**2.0000e-005**	**0.0000**	**0.0470**	**0.0470**	**0.0000**	**0.0000**	**0.0470**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.1084					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.5300e-003	0.0107	0.0127	2.0000e-005		6.6000e-004	6.6000e-004		6.6000e-004	6.6000e-004	0.0000	1.7873	1.7873	1.2000e-004	0.0000	1.7903
Total	**0.1099**	**0.0107**	**0.0127**	**2.0000e-005**		**6.6000e-004**	**6.6000e-004**		**6.6000e-004**	**6.6000e-004**	**0.0000**	**1.7873**	**1.7873**	**1.2000e-004**	**0.0000**	**1.7903**

3.6 Architectural Coating - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.0000e-005	2.0000e-005	1.6000e-004	0.0000	6.0000e-005	0.0000	6.0000e-005	1.0000e-005	0.0000	2.0000e-005	0.0000	0.0470	0.0470	0.0000	0.0000	0.0470
Total	**2.0000e-005**	**2.0000e-005**	**1.6000e-004**	**0.0000**	**6.0000e-005**	**0.0000**	**6.0000e-005**	**1.0000e-005**	**0.0000**	**2.0000e-005**	**0.0000**	**0.0470**	**0.0470**	**0.0000**	**0.0000**	**0.0470**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Increase Density

Improve Destination Accessibility

Increase Transit Accessibility

Improve Pedestrian Network

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0246	0.1021	0.2362	7.1000e-004	0.0585	6.4000e-004	0.0591	0.0157	6.0000e-004	0.0163	0.0000	65.0274	65.0274	2.7500e-003	0.0000	65.0960
Unmitigated	0.0278	0.1261	0.3158	1.0500e-003	0.0896	9.1000e-004	0.0906	0.0241	8.5000e-004	0.0249	0.0000	95.9828	95.9828	3.5800e-003	0.0000	96.0723

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Single Family Housing	104.72	109.01	94.82	240,011	156,542
Total	104.72	109.01	94.82	240,011	156,542

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Single Family Housing	10.80	4.80	5.70	31.00	15.00	54.00	86	11	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Single Family Housing	0.582298	0.039109	0.186022	0.123408	0.017184	0.005083	0.010615	0.023794	0.001605	0.001810	0.005454	0.002746	0.000871

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	25.8900	25.8900	1.1700e-003	2.4000e-004	25.9915
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	25.8900	25.8900	1.1700e-003	2.4000e-004	25.9915
NaturalGas Mitigated	1.7200e-003	0.0147	6.2700e-003	9.0000e-005		1.1900e-003	1.1900e-003		1.1900e-003	1.1900e-003	0.0000	17.0613	17.0613	3.3000e-004	3.1000e-004	17.1627
NaturalGas Unmitigated	1.7200e-003	0.0147	6.2700e-003	9.0000e-005		1.1900e-003	1.1900e-003		1.1900e-003	1.1900e-003	0.0000	17.0613	17.0613	3.3000e-004	3.1000e-004	17.1627

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Single Family Housing	319716	1.7200e-003	0.0147	6.2700e-003	9.0000e-005		1.1900e-003	1.1900e-003		1.1900e-003	1.1900e-003	0.0000	17.0613	17.0613	3.3000e-004	3.1000e-004	17.1627
Total		**1.7200e-003**	**0.0147**	**6.2700e-003**	**9.0000e-005**		**1.1900e-003**	**1.1900e-003**		**1.1900e-003**	**1.1900e-003**	**0.0000**	**17.0613**	**17.0613**	**3.3000e-004**	**3.1000e-004**	**17.1627**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Single Family Housing	319716	1.7200e-003	0.0147	6.2700e-003	9.0000e-005		1.1900e-003	1.1900e-003		1.1900e-003	1.1900e-003	0.0000	17.0613	17.0613	3.3000e-004	3.1000e-004	17.1627
Total		**1.7200e-003**	**0.0147**	**6.2700e-003**	**9.0000e-005**		**1.1900e-003**	**1.1900e-003**		**1.1900e-003**	**1.1900e-003**	**0.0000**	**17.0613**	**17.0613**	**3.3000e-004**	**3.1000e-004**	**17.1627**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Single Family Housing	88996.3	25.8900	1.1700e-003	2.4000e-004	25.9915
Total		**25.8900**	**1.1700e-003**	**2.4000e-004**	**25.9915**

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Single Family Housing	88996.3	25.8900	1.1700e-003	2.4000e-004	25.9915
Total		**25.8900**	**1.1700e-003**	**2.4000e-004**	**25.9915**

6.0 Area Detail

6.1 Mitigation Measures Area

Use only Natural Gas Hearths

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0938	9.4000e-004	0.0819	0.0000		4.5000e-004	4.5000e-004		4.5000e-004	4.5000e-004	0.0000	0.1334	0.1334	1.3000e-004	0.0000	0.1367
Unmitigated	0.0966	1.3700e-003	0.1077	9.0000e-005		4.6600e-003	4.6600e-003		4.6600e-003	4.6600e-003	0.5637	0.1334	0.6971	2.7600e-003	0.0000	0.7662

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0139					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0773					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	2.8400e-003	4.2000e-004	0.0258	8.0000e-005		4.2100e-003	4.2100e-003		4.2100e-003	4.2100e-003	0.5637	0.0000	0.5637	2.6400e-003	0.0000	0.6296
Landscaping	2.4800e-003	9.4000e-004	0.0819	0.0000		4.5000e-004	4.5000e-004		4.5000e-004	4.5000e-004	0.0000	0.1334	0.1334	1.3000e-004	0.0000	0.1367
Total	**0.0966**	**1.3600e-003**	**0.1077**	**8.0000e-005**		**4.6600e-003**	**4.6600e-003**		**4.6600e-003**	**4.6600e-003**	**0.5637**	**0.1334**	**0.6971**	**2.7700e-003**	**0.0000**	**0.7662**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0139					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0773					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	2.4800e-003	9.4000e-004	0.0819	0.0000		4.5000e-004	4.5000e-004		4.5000e-004	4.5000e-004	0.0000	0.1334	0.1334	1.3000e-004	0.0000	0.1367
Total	**0.0938**	**9.4000e-004**	**0.0819**	**0.0000**		**4.5000e-004**	**4.5000e-004**		**4.5000e-004**	**4.5000e-004**	**0.0000**	**0.1334**	**0.1334**	**1.3000e-004**	**0.0000**	**0.1367**

7.0 Water Detail

7.1 Mitigation Measures Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

Use Water Efficient Irrigation System

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	1.5164	0.0187	4.5000e-004	2.1202
Unmitigated	1.8156	0.0234	5.7000e-004	2.5700

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Single Family Housing	0.716694 / 0.451829	1.8156	0.0234	5.7000e-004	2.5700
Total		**1.8156**	**0.0234**	**5.7000e-004**	**2.5700**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Single Family Housing	0.573355 / 0.424267	1.5164	0.0187	4.5000e-004	2.1202
Total		**1.5164**	**0.0187**	**4.5000e-004**	**2.1202**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	2.9840	0.1764	0.0000	7.3927
Unmitigated	2.9840	0.1764	0.0000	7.3927

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Single Family Housing	14.7	2.9840	0.1764	0.0000	7.3927
Total		**2.9840**	**0.1764**	**0.0000**	**7.3927**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Single Family Housing	14.7	2.9840	0.1764	0.0000	7.3927
Total		**2.9840**	**0.1764**	**0.0000**	**7.3927**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Appendix E

Phase 1 Environmental Site Assessment

PHASE I ENVIRONMENTAL SITE ASSESSMENT

Lone Tree Way Project
Gann St. & Lone Tree Way
Brentwood, California

August 2019

TRC Project No: 338571.1000.0000

Prepared For:
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TRC
Results you can rely on

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EXECUTIVE SUMMARY

Subject to the qualifications and limitations stated in Section 1 of this report, TRC Solutions Inc. (TRC) was retained by Cyrus Land Investments, LLC (also known as "Client" or "User") to perform a Phase I Environmental Site Assessment (ESA) of the Lone Tree Way Project located at Gann St. and Lone Tree Way in Brentwood, Contra Costa County, California (herein referred to as the "Site"). TRC's assessment was conducted in support of Client's due diligence associated with the potential purchase of the Site. The Phase I ESA described in this report was performed in accordance with the scope and limitations of the American Society of Testing and Materials Practice E 1527-13 *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process* (ASTM E 1527-13). TRC also included limited soil sampling as part of this assessment. Limiting conditions and/or deviations from the ASTM E 1527-13 standard are described in Sections 1.3 and 7.5 of this report.

The Site comprises approximately 1.1 acres of undeveloped land located along Lone Tree Way near Gann Street in Brentwood, California. The Site is described by the Contra Costa County tax assessor as Assessor's Parcel Number (APN) 018-080-025.

As a result of the Phase I ESA, including but not limited to our visual observation of the Site; review of historical information, environmental databases, and information provided by the User; interviews with current Site representative(s); limited soil sampling; and TRC's professional judgment, no evidence of *recognized environmental conditions* (RECs) or *controlled recognized environmental conditions* (CRECs) associated with the Site, as defined by the ASTM E 1527-13 standard were identified, with the exception of the following:

<u>REC No. 1</u>

File review and discussion with the DTSC indicates that lead concentrations ranging from 37 to 410 mg/kg are present in soil at the adjacent property to the east (aka Skipolini property).

To evaluate potential lead impacts, soil samples were collected across the Site. Results of analyses detected no organchlorine pesticides exceeding respective residential Environmental Screening Levels (ESLs) established by the Regional Water Quality Control Board (RWQCB) in any of the three surface soil samples tested. Detected arsenic concentrations ranged form 7.1 to 9.1 mg/kg in the three samples tested, which is consistent with background values for the Bay Area. Analyses detected total lead concentrations ranging from 8.7 to 150 mg/kg in sixteen (16) surface and near-surface soil samples with only three (3) surface soil samples exceeding the residential ESL of 80 mg/kg for lead. Using the EPA's ProUCL software, the calculated 95 percent Upper Confidence Level (UCL) for lead in the thirteen (13) surface soil at the Site 78.76 mg/kg, which is less than the residential ESL of 80 mg/kg. Accordingly, TRC recommends no additional soil investigation at this time.

This Executive Summary is part of this complete report; any findings, opinions or conclusions in this Executive Summary are made in context with the complete report. TRC recommends that the User read the entire report for all supporting information related to findings, opinions and conclusions.

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1.0 INTRODUCTION

TRC Solutions Inc. (TRC) has prepared this Phase I Environmental Site Assessment (ESA) for Cyrus Land Investments, LLC (hereinafter "Client" or "User").

This report was prepared for and may be relied upon by Client for the purposes set forth herein; it may not be relied on by any party other than the Client and reliance may not be assigned without the express approval of TRC. Authorization for third party reliance on this report will be considered by TRC if requested by the Client. TRC reserves the right to deny reliance on this report by third parties.

1.1 Purpose and Scope of Services

The following Phase I ESA was performed for the property located along Lone Tree Way near Gann Street in Brentwood, Contra Costa County, California (hereinafter the "Site"). A Site location map is included as **Figure 1**. This Phase I ESA has been prepared by TRC in accordance with the American Society for Testing and Materials E 1527-13 *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process* (ASTM E 1527-13) and is intended for the sole use of Cyrus Land Investments, LLC.

The purpose of this assessment is to identify *Recognized Environmental Conditions* (RECs) at the Site, as defined by the ASTM E 1527-13 standard. Additionally, TRC completed surface and near-surface soil sampling to evaluate soil conditions as part of due diligence activities. The completion of this Phase I ESA report may be used to satisfy one of the requirements for the User to qualify for the *innocent landowner*, *contiguous property owner*, or *bona fide prospective purchaser* limitations pursuant to the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), thereby constituting *all appropriate inquiries into the previous ownership and uses of the property consistent with good commercial or customary practice* as defined by 42 U.S.C. §9601(35)(B) of CERCLA.

TRC understands that this assessment is not funded with a federal grant awarded under the United States Environmental Protection Agency (U.S. EPA) Brownfields Assessment and Characterization program.

The Scope of Services for this Phase I ESA included the following tasks:

- Site and vicinity reconnaissance;
- Site and vicinity description and physical setting;
- Historical source review and description of historical Site conditions;
- Interviews with owners, operators, and/or occupants of the Site, and/or local officials;
- Review of environmental databases and regulatory agency records;
- Review of previous environmental reports/documentation, as applicable;
- Review of environmental liens, if provided or authorized to obtain by the User;
- Soil sampling in areas of potential environmental concern; and

- Preparation of a report summarizing findings, soil analytical results, opinions and conclusions.

Pursuant to the ASTM E 1527-13 standard, recommendations to conduct Phase II sampling or other assessment activities are not required to be included in this report. TRC can provide such recommendations upon request.

1.2 Additional Services

Items outside the scope of the ASTM E 1527-13 standard include, but are not limited to, the following:

- Asbestos-containing building materials
- Radon
- Lead-based paint
- Lead in drinking water
- Wetlands
- Regulatory compliance
- Cultural and historic resources
- Industrial hygiene
- Health and safety
- Ecological resources
- Endangered species
- Indoor air quality unrelated to *releases* of *hazardous substances* or *petroleum products* into the environment
- Biological agents
- Mold

TRC's assessment of soil conditions was performed in areas of potential environmental concern. This service was performed in addition to the scope of the ASTM E 1527-13 standard.

1.3 Deviations to ASTM E 1527-13 Standard

Notwithstanding additions to the ASTM E 1527-13 standard, as listed in Sections 1.2 and 9, if applicable, no significant deviations or deletions to the ASTM standard were made during this Phase I ESA.

2.0 SITE DESCRIPTION

2.1 Site Location and Legal Description

The Site comprises approximately 1.1 acres of land located along Lone Tree Way, west of Gann Street in a mixed uses area that includes residential neighborhoods, fallow agricultural land, and a retail plant nursery. The Site is described by the Contra Costa County tax assessor as Assessor's Parcel Number (APN) 018-080-025 and is currently owned by Cyrus Land Investments, LLC. A Vicinity Map is included as **Figure 1**.

2.2 Site Improvements

Current on-site improvements are listed in the following table. A Site Plan is included as **Figure 2**.

Table 2.1 - Site Improvements

Site Feature	Description
Buildings (stories)	There are no buildings currently located on the site.
Construction date(s)	N/A
Exterior areas	Undeveloped land.
On-site roads/rail lines	N/A
Other large equipment	N/A
Potable water supply	N/A
Sewage disposal system(s)	N/A
Heating/Cooling system fuel source(s)	N/A
Back-up fuel source(s)	N/A
Electricity supplier(s)	N/A
Storm water system	Municipal storm water sewer system

2.3 Current and Historical Site Use

2.3.1 Current Site Use(s)

The Site is currently undeveloped land.

2.3.2 Previous Owner and Operator Information

Based on information provided by the User (Section 3), the historical record review (Section 4), and/or interviews conducted during this Phase I (Section 6), historical Site ownership and operator information is provided in the tables below.

Table 2.2 - Previous Owner and Operator Information

Site Owner	From	To
Rita M. Giannini	Unknown	May 5, 2019
Cyrus Land Investments, LLC	May 6, 2019	Present

2.4 Physical Setting

According to the United States Geological Survey (USGS) topographic map, Brentwood, California quadrangle dated 2012 (**Appendix A**), the Site is relatively flat, at an elevation of approximately 90 feet above mean sea level (MSL), and local topography slopes gently to the northeast. A subsurface investigation would be required to determine actual ground water flow direction.

The database radius report supplied by Environmental Data Resources, Inc. (EDR) was reviewed to obtain information regarding the dominant soil composition in the Site vicinity. The major soil unit is Capay clay. Please refer to the Geocheck Physical Setting Source Summary of the EDR report presented in **Appendix A** for further information regarding the soil composition in

the Site vicinity. According to EDR, the Site is not located in a Federal Emergency Management Agency (FEMA) flood zone.

3.0 USER PROVIDED INFORMATION

According to the ASTM E 1527-13 standard, certain tasks that may help identify the presence of RECs associated with the Site are generally conducted by the Phase I ESA User. These tasks include: providing, or authorizing the *environmental professional* to obtain, recorded land title records for environmental liens or activity and land use limitations (AULs); providing specialized knowledge related to RECs at the Site (e.g., information about previous ownership or environmental litigation); providing commonly known or *reasonably ascertainable* information within the local community about the *property* that is material to RECs in connection with the *property*; and informing the *environmental professional* if, as believed by the User, the purchase price of the *property* is lower than the fair market value due to contamination. Information provided by the User pursuant to that request is listed in Section 8.0. A copy of the User questionnaire is included in **Appendix B**.

3.1 Title & Judicial Records for Environmental Liens or Activity and Use Limitations

In addition to reviewing the EDR report (discussed in Section 4.2), state and local municipal records (Section 4.4) and Regional Water Quality Control Board's (RWQCB) GeoTracker and Department of Toxic Substances Control's (DTSC) EnviroStor online websites (Section 4.4) were also reviewed. No evidence of environmental liens or activity use limitations (AULs) associated with the site was identified.

3.2 Specialized Knowledge

The User was not aware of specialized knowledge related to RECs at the Site.

3.3 Property Value Reduction Issues

The User was not aware of property valuation reduction issues regarding the Site.

3.4 Commonly Known or Reasonably Ascertainable Information

TRC was supplied with commonly known and/or reasonably ascertainable information regarding a property adjacent to the Site by the User. This information was used during this Phase I ESA and has been incorporated in this report as applicable; documents related to this information can be found in **Appendix E**.

3.5 Reason for Conducting Phase I

It is TRC's understanding that the User requires a Phase I for due diligence purposes.

4.0 RECORDS REVIEW

4.1 Historical Use Information

Information regarding Site and vicinity historical uses was obtained from various publicly available and practically reviewable sources including:

- Aerial photographs (scale: 1" = 500') dated 1939, 1949, 1959, 1963, 1966, 1972, 1979, 1982, 1984, 1993, 1998, 2006, 2009, 2012, and 2016;
- Topographic maps dated 1914, 1916, 1940, 1943, 1954, 1968, 1978, and 2012.
- City directories dated 1992, 1995, 2000, 2005, 2010, and 2014;
- Local municipal records;
- An environmental database report; and
- Interviews with Site representative(s) and regulatory agency official(s), as necessary.

Historical research documentation is included in **Appendix C**.

Historical Sanborn® Fire Insurance Maps (Sanborn Maps) were originally produced for assessing fire insurance liability in urban areas in the United States. The maps provide detailed information (i.e., building construction, facility occupants, storage tank locations, and hazardous material storage areas), which can be used as a resource to document land use and structural change over time. Research concerning the availability of Sanborn Maps in the vicinity of the Site was conducted by EDR; however, EDR stated that Sanborn Map coverage does not exist for the Site or nearby surrounding area. The absence of maps for a specific area may signify the area was not significantly developed at the time at which the maps were published.

4.1.1 Site History

Operational History

Table 4.1 - Site History

Year	Site History
1914-present	The Site has been undeveloped since at least 1914.

It does not appear that topographic contours in the Site area have significantly changed during the time period reviewed.

Hazardous Substances

No hazardous substances including raw materials; finished products and formulations; hazardous wastes; hazardous constituents and pollutants including intermediates and byproducts were historically present at the Site. Current hazardous substances and petroleum products observed during the Site reconnaissance - including unidentified substance containers (when open or

damaged, and containing unidentified substances suspected of being hazardous or petroleum products) - are discussed in Section 5.2.

Table 4.2 - Historical Hazardous Substance Use

Material Name	Approximate Former Quantity (gallons/lbs.)	Former Storage Containers
N/A	N/A	N/A

4.1.2 Adjoining Property History

Table 4.3 - Adjoining Property History

Year	Adjoining Property History
North	Lone Tree Way has been present to the north of the Site since at least 1914, and appears as paved by 1966 but may have been paved prior to this date. Land to the north of the Site was used primarily for agricultural purposes from 1914-1998; a residence and several sheds are also visible north of Lone Tree Way in aerial photographs taken between 1949 and 1998. Between 1998 and 2006, the area to the north is developed as a residential neighborhood.
East	Land to the east of the Site has been used primarily for agricultural and residential purposes since 1939. A house is visible in aerial photographs from 1939-1998. Several small buildings (barns or cottages) are also visible in the 1949 aerial photograph, but were removed by 1959. A small orchard is present starting in 1966. By 2006, the lot to the east of the Site is largely vacant with a few remaining orchard trees.
South	Land to the south was used primarily for agriculture from 1939-1993. It is unknown what was grown on this land. Several barns and sheds are present in aerial photography from 1939-1959, but were removed by 1963. From 1939-1982, an irrigation ditch is present immediately to the south of the Site along the course of present-day Double K Road, but by 1984 is no longer present. A residence is also present to the southeast of the Site from 1972-2016.
West	Land to the west was undeveloped between 1914 and 1939. By 1949, a residence had been constructed to the west of the Site. This residence last appears in the 1998 aerial photograph. By 2006, the lot to the west is vacant.

4.1.3 Surrounding Property History

Table 4.4 - Surrounding Property History

Year	Surrounding Property History
North	The area to the north of the Site was used primarily for agriculture from 1939-1998, and had been developed as a residential neighborhood by 2006.
East	The area to the east of the Site was used primarily for agriculture from 1939-1998, and had been developed as a residential neighborhood by 2006.

Table 4.4 - Surrounding Property History

Year	Surrounding Property History
West	From at least 1939-1998, the land to the west was used primarily for agricultural purposes. Railway tracks have been present to the west of the site since at least 1914. A plant nursery is visible to the west of the Site in aerial photography beginning in 1993. By 2006, a residential neighborhood and public storage warehouses are present, and development of several commercial properties is underway. By 2009, construction of these commercial facilites had been completed.
South	The area to the south of the Site was used primarily for agriculture from 1939-1998, and had been developed as a residential neighborhood by 2006.

4.2 Database Report & Environmental Record Review

A database search report that identifies properties listed on state and federal databases within the ASTM-required radii of the Site was obtained from EDR and is included in **Appendix A**. The environmental database report identified 25 listings, including 15 that could be mapped and ten that could not (i.e., orphan properties). Eight of these orphan properties are listed as stormwater construction sites. Two orphan properties are former spill sites associated with the Brentwood Oil and Gas Field. Both of these properties are located near the intersection of Deer Valley Road and Lone Tree Way, more than two miles away from the target property. We also note that the Physical Setting Source Map in the EDR report listed one water well for the property located southeast of the Site.

The environmental database report identified no properties/listings for the Site, including unmapped sites.

4.2.1 Subject Site

Site information included in the database search report is summarized in the following table:

Site Facility Name(s) and/or Listed Address(es)	None listed
EDR Map No(s).	None listed
Database(s)	None listed
Description/ID No(s).	N/A
Database Review Summary	N/A

4.2.2 Adjoining & Surrounding Property Record Review

TRC evaluated the following factors to determine whether additional environmental records should be reviewed with respect to the potential for contaminant migration from the adjoining and surrounding properties:

(1) Whether the property is up-gradient or down-gradient of the Site with regard to **groundwater migration,** based on the local topography, and the assumed groundwater depth and shallow groundwater flow direction;

(2) Whether the property is up-gradient or down-gradient of the Site with regard to **vapor migration,** based on readily available information pursuant to the ASTM E 1527-13 standard, including soil and geological characteristics; contaminant characteristics; contaminated plume migration data; and significant conduits that might provide preferential pathways for vapor migration such as major utility corridors, sanitary sewers, and storm sewers vapor migration may also be influenced by the age and design of infrastructure features associated with these conduits);

(3) Property case status (i.e., whether a spill, release, or violation has been reported by an environmental agency or applicable regulatory authority) or similar documentation;

(4) Type of database and whether the presence of contamination is known; and

(5) The distance between the listed property and the Site.

4.2.2.1 Adjoining Properties

Adjoining property information included in the database search report is summarized in the following table(s):

Facility Name(s) and/or Listed Address(es)	Skipolini Property 7281 Lone Tree Way, Brentwood, CA 94513
EDR Map No(s).	1
Database(s)	EnviroStor, VCP, HAZNET

Description/ID No(s)	**EnviroStor:** The Department of Toxic Substances Control's (DTSC's) EnviroStor database identifies sites that have known contamination or sites for which there may be reasons to investigate further. The database includes the following site types: Federal Superfund sites (National Priorities List (NPL)); State Response, including Military Facilities and State Superfund; Volunatry Cleanup; and School sites. EnviroStor provides similar information to the information that was available in CalSites, and provides additional site information, including, but not limited to, identification of formerly-contaminated properties that have been released for reuse, properties where environmental deed restrictions have been recorded to prevent inapproptriate land uses, and risk characterization information that is used to assess potential impacts to public health and the envirionment at contaminated sites. **VCP:** The VCP database contains low threat level properties with either confirmed or unconfirmed releases and the project proponents have requested that DTSC oversee investigation and/or cleanup activities and have agreed to provide coverage for DTSC's costs. **HAZNET:** The HAZNET database contains data extracted from the copies of hazardous waste manifests received each year by the DTSC. This database begins in the year 1993. This property is listed for disposal of asbestos waste, likely the result of asbestos abatement at onsite building(s).
Database Review Summary	The Skipolini Property is listed as a voluntary cleanup site for lead-contaminated soil.

4.2.2.2 Surrounding Properties

Surrounding property information included in the database search report is summarized in the following table(s):

Facility Name(s) and/or Address(es)	Tri City Auto Plaza Inc. 6935 Lone Tree Way, Brentwood, CA 94513
Approximate Location Relative to Site	0.247 miles west
EDR Map No(s).	A3, A6, A8, A9
Database(s)	CERS Haz Waste, CERS Tanks, CERS, UST, AST, EMI, Contra Costa County Site List, RCRA NonGen/NLR

Description/ID No(s).	**CERS Haz Waste:** This database lists sites in the California Environmental Protection Agency (CalEPA) Regulated Site Portal that fall under the Hazardous Chemical Management, Hazardous Waste Onsite Treatment, Household Hazardous Waste Collection, Hazardous Waste Generator, and RCRA LQ HW Generator programs. **CERS tanks:** This database contains a list of sites in the CalEPA Regulated Site Portal that fall under the Aboveground Petroleum Storage and Underground Storage Tank regulatory programs. **CERS:** The CalEPA Regulate Site Portal database combines data about environmentally regulated sites and facilities in California into a single database. It combines data from a variety of state and federal databases, and provides an overview of regulated activities across the spectrum of environmental programs for any given location in California. These activities include hazardous materials and waste, state and federal cleanups, impacted ground and surface waters, and toxic materials. **UST:** The UST database contains information about active underground storage tank (UST) facilities gathered from the local regulatory agencies. **AST:** The Aboveground Petroleum Storage Tank Facilities (AST) database lists aboveground petroleum storage tank locations. **EMI:** The Emissions Inventory Data (EMI) database contains toxics and criteria pollutant emissions data collected by the ARB and local air pollution agencies. **Contra Costa County Site List:** This list includes sites from the underground tank, hazardous waste generator, and business plan/2185 programs. **RCRA NonGen/NLR:** RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat, and/or dispose of hazardous waste as defined by the RCRA. Non-Generators do not presently generate hazardous waste.
Elevation relative to Site	Higher
Database Review Summary	Tri City Auto Plaza was found in violation of the California Health and Safety Code 6.7 25290.1(e) on May 4, 2017 by the Contra Costa Health Services Department for failing to maintain properly the interstitial space of a UST such that a breach in containment would be detected before the hazardous substance stored in the UST would be released into the environment. Tri City Auto Plaza returned to compliance on May 26, 2017. Several other previous violations were found related to business plans and documentation, but the facility has since returned to compliance.

Facility Name(s) and/or Address(es)	Proposed Fourth Middle School Site, 2340 Smith Rd, Brentwood, CA 94513
Approximate Location Relative to Site	0.459 miles east-southeast
EDR Map No(s).	B10, B11
Database(s)	EnviroStor, SCH, SWEEPS UST, CA FID UST, Contra Costa County Site List, CERS, US Brownfields, FINDS

Description/ID No(s).	**EnviroStor:** The Department of Toxic Substances Control's (DTSC's) EnviroStor database identifies sites that have known contamination or sites for which there may be reasons to investigate further. The database includes the following site types: Federal Superfund sites (National Priorities List (NPL)); State Response, including Military Facilities and State Superfund; Volunatry Cleanup; and School sites. EnviroStor provides similar information to the information that was available in CalSites, and provides additional site information, including, but not limited to, identification of formerly-contaminated properties that have been released for reuse, properties where environmental deed restrictions have been recorded to prevent inapproptriate land uses, and risk characterization information that is used to assess potential impacts to public health and the envirionment at contaminated sites. **SCH:** The School Property Evaluation Program lists proposed and existing school sites that are being evaluated by DTSC for possible hazardous materials contamination. In some cases, these properties may be listed in the CalSites category depending on the level of threat to public health and safety or the environment they pose. **SWEEPS UST:** The Statewide Environmental Evaluation and Planning System underground storage tank listing was updated and maintained by a company contacted by the SWRCB in the early 1990's. The listing is no longer updated or maintained. The local agency is the contact for more information on a site on the SWEEPS list. **CA FID UST:** The Facility Inventory Database (FID) contains a historical listing of active and inactive underground storage tank locations from the State Water Resource Control Board. Refer to local/county source for current data. **CERS:** The CalEPA Regulate Site Portal database combines data about environmentally regulated sites and facilities in California into a single database. It combines data from a variety of state and federal databases, and provides an overview of regulated activities across the spectrum of environmental programs for any given location in California. These activities include hazardous materials and waste, state and federal cleanups, impacted ground and surface waters, and toxic materials. **Contra Costa County Site List:** This list includes sites from the underground tank, hazardous waste generator, and business plan/2185 programs. **US Brownfields:** A listing of Brownfields sites. Brownfields are real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. Assesment, Cleanup and Redevelopment Exchange System (ACRES) stores information reported by EPA Brownfields grant recipients on brownfield properties assessed or cleaned up with grant funding as well as information on Targeted Brownfields Assessments performed by EPA Regions. A listing of ACRES Brownfield sites is obtained form Cleanups in My Community. Cleanups in My Community provides information on Brownfields porperties for which information is reported back to EPA, as well as areas served by Brownfields grant programs. **FINDS:** The Facility Index System/Facility Registration System contains both facility information and 'pointers' to ther sources that contain more detail. This report contains the following FINDS databases: PCS (Permit Compliance System), AIRS (Aerometric Information Retrieval System), DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes), FURS (Federal Underground Injection Control), C-DOCKET (Criminal Docket System used to track criminal enforcement actions for all environmental statutes), FFIS (Federal Facilities Information System), STATE (State Enviromental Laws and Statutes), and PADS (PCB Activity Data System).

Elevation relative to Site	Lower
Database Review Summary	This is a school cleanup site under investigation for soil potentially contaminated with arsenic, benzene, chlordate, DDD, DDE,DDT, lead, toxaphene, TPH-diesel, and TPH-gas. No other pertinent information was available. The presence of impacted soil at this Site may be related to historical agricultural activities at this property. This property is not considered to a REC with respect to the Target Property.

Facility Name(s) and/or Address(es)	La Paloma 6651 Lone Tree Way, Brentwood, CA 94513
Approximate Location Relative to Site	0.531 miles west
EDR Map No(s).	12
Database(s)	EnviroStor, SCH, CERS
Description/ID No(s).	**EnviroStor:** The Department of Toxic Substances Control's (DTSC's) EnviroStor database identifies sites that have known contamination or sites for which there may be reasons to investigate further. The database includes the following site types: Federal Superfund sites (National Priorities List (NPL)); State Response, including Military Facilities and State Superfund; Volunatry Cleanup; and School sites. EnviroStor provides similar information to the information that was available in CalSites, and provides additional site information, including, but not limited to, identification of formerly-contaminated properties that have been released for reuse, properties where environmental deed restrictions have been recorded to prevent inapproptriate land uses, and risk characterization information that is used to assess potential impacts to public health and the envirionment at contaminated sites. **SCH:** The School Property Evaluation Program lists proposed and existing school sites that are being evaluated by DTSC for possible hazardous materials contamination. In some cases, these properties may be listed in the CalSites category depending on the level of threat to public health and safety or the environment they pose. **CERS:** The CalEPA Regulate Site Portal database combines data about environmentally regulated sites and facilities in California into a single database. It combines data from a variety of state and federal databases, and provides an overview of regulated activities across the spectrum of environmental programs for any given location in California. These activities include hazardous materials and waste, state and federal cleanups, impacted ground and surface waters, and toxic materials.
Elevation relative to Site	Higher
Database Review Summary	This site was investigated in 2004 due to suspected toxaphene-contaminated soil. No contaminants were found.

Facility Name(s) and/or Address(es)	Empire Acres LLC 2700 Empire Avenue, Brentwood, CA 94513
Approximate Location Relative to Site	0.694 miles west-northwest

EDR Map No(s).	13
Database(s)	EnviroStor, VCP, HAZNET, NPDES, CIWQS
Description/ID No(s).	**EnviroStor:** The Department of Toxic Substances Control's (DTSC's) EnviroStor database identifies sites that have known contamination or sites for which there may be reasons to investigate further. The database includes the following site types: Federal Superfund sites (National Priorities List (NPL)); State Response, including Military Facilities and State Superfund; Volunatry Cleanup; and School sites. EnviroStor provides similar information to the information that was available in CalSites, and provides additional site information, including, but not limited to, identification of formerly-contaminated properties that have been released for reuse, properties where environmental deed restrictions have been recorded to prevent inapproptriate land uses, and risk characterization information that is used to assess potential impacts to public health and the envirionment at contaminated sites. **VCP:** The VCP database contains low threat level properties with either confirmed or unconfirmed releases and the project proponents have requested that DTSC oversee investigation and/or cleanup activities and have agreed to provide coverage for DTSC's costs. **HAZNET:** The HAZNET database contains data extracted from the copies of hazardous waste manifests received each yeaer by the DTSC. This database begins in the year 1993. **NPDES:** NPDES (National Pollutant Discharge Elimination System) is a listing of NPDES permits, including groundwater. **CIWQS:** The California Integrated Water Quality System (CIWQS) is a computer system used by the State and Regional Water Quality Control Boards to track information about places of environmental interest, manage permits and other orders, track inspections, and manage violations and enforcement activities.
Elevation relative to Site	Higher
Database Review Summary	Soil sampling results showed that chlordane, hexachlor epoxide, toxaphene, and DDT exceeded unrestricted use screening levels. The contaminated soil was excavated and the site deemed suitable for unrestricted use, with no further action required as of 7/18/2018. Because the site contains no paved surfaces, drainage ditches, or surface water features, contamination is unlikely to have spread beyond the site.

Facility Name(s) and/or Address(es)	Empire Elementary School, Empire Avenue/Amber Lane, Brentwood, CA 94513
Approximate Location Relative to Site	0.821 miles west-southwest
EDR Map No(s).	14
Database(s)	EnviroStor, SCH

Description/ID No(s).	**EnviroStor:** The Department of Toxic Substances Control's (DTSC's) EnviroStor database identifies sites that have known contamination or sites for which there may be reasons to investigate further. The database includes the following site types: Federal Superfund sites (National Priorities List (NPL)); State Response, including Military Facilities and State Superfund; Volunatry Cleanup; and School sites. EnviroStor provides similar information to the information that was available in CalSites, and provides additional site information, including, but not limited to, identification of formerly-contaminated properties that have been released for reuse, properties where environmental deed restrictions have been recorded to prevent inapproptriate land uses, and risk characterization information that is used to assess potential impacts to public health and the envirionment at contaminated sites. **SCH:** The School Property Evaluation Program lists proposed and existing school sites that are being evaluated by DTSC for possible hazardous materials contamination. In some cases, these properties may be listed in the CalSites category depending on the level of threat to public health and safety or the environment they pose.
Elevation relative to Site	Higher
Database Review Summary	The site contained soil contaminated with toxaphene, DDT, and DDE. The contaminated soil was removed and all cleanup activities completed as of 6/21/2003.

Facility Name(s) and/or Address(es)	Miles-Fenell Property, 2200 Shady Willow Ln, 2301 & 2251 Empire Avenue, Brentwood, CA 94513
Approximate Location Relative to Site	0.887 miles west-southwest
EDR Map No(s).	15
Database(s)	EnviroStor, VCP
Description/ID No(s).	**EnviroStor:** The Department of Toxic Substances Control's (DTSC's) EnviroStor database identifies sites that have known contamination or sites for which there may be reasons to investigate further. The database includes the following site types: Federal Superfund sites (National Priorities List (NPL)); State Response, including Military Facilities and State Superfund; Volunatry Cleanup; and School sites. EnviroStor provides similar information to the information that was available in CalSites, and provides additional site information, including, but not limited to, identification of formerly-contaminated properties that have been released for reuse, properties where environmental deed restrictions have been recorded to prevent inapproptriate land uses, and risk characterization information that is used to assess potential impacts to public health and the envirionment at contaminated sites. **VCP:** The VCP database contains low threat level properties with either confirmed or unconfirmed releases and the project proponents have requested that DTSC oversee investigation and/or cleanup activities and have agreed to provide coverage for DTSC's costs.
Elevation relative to Site	Higher
Database Review Summary	Soil arsenic concentrations were evaluated at the site and found to be consistent with background concentrations for this area.

4.3 Previous Reports

The following geotechnical reports regarding a property adjacent to the Site on the eastern side were provided for TRC's review by Brian S. Kesler of Cyrus Land Investments, LLC:

- October 7, 2005, Geotechnical Investigation – Ipsen Restaurant/Retail Center, Prepared by Romig Engineers, Inc.
- May 19, 2014, Geotechnical Report Update, Prepared by ENGEO Incorporated

The October 7, 2005 geotechnical investigation involved review of geotechnical and geologic literature related to the site, three exploratory borings, and laboratory testing of physical properties of soil samples to provide recommendations for construction of a restauraunt and retail space. The May 19, 2014 update revised the reccommendations to be suitable for a residential development according to more recent building codes. No chemical testing was completed as part of these investigations and no recognized environmental conditions were identified in either report.

4.4 Other Environmental Record Sources

Per the ASTM standard, local or additional state records were reviewed to enhance and supplement the ASTM-required federal and state records reviewed and discussed earlier in this report. These additional records include:

- Contra Costa County Hazardous Materials Department
- Contra Costa County Environmental Health Department
- Contra Costa County Department of Conservation and Development
- Regional Water Quality Control Board
- Department of Toxic Substances Control
- California Department of Conservation – Division of Oil, Gas, and Geothermal Resources

Relevant files from the records review are included in **Appendix E**.

4.4.1 Contra Costa County Hazardous Materials Department

The Contra Costa County Hazardous Materials Department was contacted by email and a records request form submitted on May 8, 2019 for files regarding the Site. The Department responded stating that they have no records pertaining to the Site.

4.4.2 Contra Costa County Environmental Health Department

The Contra Costa County Environmental Health Department was contacted by email and a records request form submitted on May 8, 2019 for files regarding the Site. The Department responded on May 15, 2019, and provided records of a soil boring application and permit. These documents are included in **Appendix E**.

4.4.3 Contra Costa County Department of Conservation and Development

The Contra Costa County Department of Conservation and Development's ePermit online Database was accessed on May 8, 2019 to review any files pertaining to the Site. No records were listed for the Site.

4.4.4 Regional Water Quality Control Board (RWQCB)

The RWQCB's GeoTracker online database was accessed on May 8, 2019 to review any files pertaining to the site and/or adjoining and surrounding properties. No cases were listed for the Site or for the adjoining and surrounding properties.

4.4.5 Department of Toxic Substances Control (DTSC)

The DTSC's EnviroStor online database was accessed on May 10, 2019 to review any files pertaining to the Site and/or adjacent and surrounding properties. No cases were listed for the Site, however the following case was listed for an adjacent property:

- **Skipolini Property (Site no. 60002296):** Located immediately east of the Site. In 2015, soil testing at the Skipolini property by Lafferty Communities revealed lead in soil, and Lafferty Communities entered a voluntary cleanup agreement with DTSC. Ownership of the Skipolini Property has since been transferred to Cyrus Land Investments, LLC, which has entered into a new voluntary cleanup agreement dated March 13, 2019. This site is considered active by the DTSC. Based on TRC's telephone interview of the DTSC's caseworker on May 15, 2019, we understand the detected lead concentrations range from 37 to 410 mg/kg and that the DTSC is working with the owner to prepare a Removal Action Workplan to remove elevated lead in soil.

4.4.6 California Department of Conservation – Division of Oil, Gas, and Geothermal Resources (DOGGR)

DOGGR's Well Search site was accessed on May 10, 2019 to review any files pertaining to the Site and/or adjoining and surrounding properties. No oil or gas wells were listed for the Site. Sixteen records were found for wells on surrounding properties; these records are retained in TRC's files.

5.0 SITE RECONNAISSANCE

5.1 Methodology and Limiting Conditions

Mr. Glenn Young, TRC Senior Project Manager, conducted a Site reconnaissance of accessible areas on and around the Site on April 30, 2019 for the purpose of identifying potential RECs. Photographs taken during the reconnaissance are provided in **Appendix D**. A Site Plan is included as **Figure 2**.

5.2 Interior and Exterior Site Observations

Unless otherwise noted, the items listed in the table below appeared in good condition with no visual evidence of staining, deterioration or a discharge of hazardous materials; and there are no records of a release in these areas. Items where further description is warranted are discussed in the section(s) following the table.

Table 5.1 - Interior and Exterior Site Observations

Item	Present (Current/ Historic/ No)	Description
Hazardous material storage or handling areas	No	(see Section 5.2.1)
Aboveground storage tanks (ASTs) and associated piping	No	
Underground storage tanks (USTs) and associated piping	No	
Drums & containers (≥5 gallons)	No	
Odors	No	
Pools of liquid, including surface water bodies and sumps (handling hazardous substances or substances likely to be hazardous only)	No	
Polychlorinated Biphenyls (PCBs) / Transformers	No	
Stains or corrosion	No	
Drains & sumps	No	
Pits, ponds & lagoons	No	
Stressed vegetation	No	
Historic fill or any other fill material	No	
Wastewater (including storm water or any discharge into a drain, ditch, underground injection system, or stream on or adjacent to the Site)	No	
Wells (including dry wells, irrigation wells, injection wells, abandoned wells, or other wells)	No	A pump house was observed on the adjoining property to the southeast of the Site. This well is identified as USGS California Water Science Center monitoring location 001N002E02K001M in the EDR Well Report. The EDR report also indicated that 9 additional water wells and 16 oil and gas wells are present on surrounding properties. None of these wells were observed during Site reconnaissance. According to the California Department of Conservation – Division of Oil, Gas, and Geothermal Resources, these oil and gas wells have been plugged, inspected, and approved according to the requirements of the Division.
Septic systems or cesspools	No	

5.2.1 Hazardous Substances

No hazardous substances including raw materials; finished products and formulations; hazardous wastes; hazardous constituents and pollutants including intermediates and byproducts that are currently present at the Site; and no unidentified substance containers (when open or damaged, and containing unidentified substances suspected of being hazardous or petroleum products) were observed at the Site.

5.2.2 Underground Storage Tanks

TRC observed no visual evidence, including vent pipes, fill ports or dispensing equipment, of underground storage tanks (USTs) at the Site.

5.2.3 Aboveground Storage Tanks

TRC observed no aboveground storage tanks (ASTs) at the Site.

5.3 Adjoining and Surrounding Properties Reconnaissance

5.3.1 Adjoining Properties

During the Site reconnaissance, TRC viewed the adjoining properties from the Site and publicly accessible areas (e.g., public roadways, etc.). Lone Tree Way and a residential neighborhood are present to the north of the Site. A small pile of degraded asphalt debris is present between the northern border of the Site and Lone Tree Way. The lot to the west of the Site is currently vacant, but has evidence of a former building. A residence and a vacant lot are present to the south of the Site. A pump house was observed on this vacant lot. This well is identified as USGS California Water Science Center monitoring location 001N002E02K001M in the EDR Well Report. The lot to the east of the Site is undeveloped.

5.3.2 Surrounding Properties

To the north, south, and east of the Site, surrounding properties are generally residential. Land to the west is generally mixed residential and commercial, and also includes a plant nursery approximately 400 feet west of the Site. Railroad tracks are present approximately 800 feet west of the Site.

5.4 Soil Investigation

To evaluate the potential possible presence of lead, arsenic, and organochlorine pesticides at the Site, TRC completed a limited soil investigation at the Site. Soil sampling was conducted on May 29 and June 26, 2019. Sample locations are shown on **Figure 3**.

5.4.1 Sampling Activities

Sampling activities were conducted using standard industry practices regarding worker health and safety, sample collection and handling, and chain-of-custody documentation. Surface

samples were collected using a shovel, and samples from 2 feet below ground surface were collected using a hand auger. Upon completion, all holes were backfilled with excavated material to match existing grade. All samples were stored in an ice-chilled cooler pending delivery under chain-of-custody documentation to a State-certified chemical testing laboratory.

5.4.2 Chemical Testing Program

A total of 13 surface soil samples and 3 near-surface soil samples were submitted for chemical testing. Samples tested by McCampbell Analytical, a State of California-certified testing laboratory. Chemical testing included some or all of the following:

- Organochlorine Pesticides (8081) on three (3) surface samples;
- Arsenic (6020) on three (3) surface samples; and
- Lead (6020) on thirteen (13) surface and three (3) near-surface soil samples .

5.4.3 Findings

Results of analyses on soil samples collected during this investigation are summarized in **Table 1**. Copies of the laboratory reports with chain-of-custody documentation are presented in **Appendix F**. For the purposes of this report, results of analyses were compared to the Regional Water Quality Control Board (RWQCB) Environmental Screening Levels (ESLs) for residential, commercial/industrial, and construction worker scenarios.

Results of analyses detected no organchlorine pesticides exceeding respective residential ESLs in any of the three surface soil samples. Detected arsenic concentrations in three surface samples ranged from 7.1 to 9.1 mg/kg, which is consistent with regional background arsenic concentrations. Analyses detected total lead concentrations ranging from 8.7 to 150 mg/kg in sixteen surface and near-surface soil samples with only three surface soil samples exceeding the residential ESL of 80 mg/kg for lead. Using the EPA's ProUCL software, the calculated 95 percent Upper Confidence Level (UCL) for lead in surface soil at the Site 78.76 mg/kg, which is less than the residential ESL of 80 mg/kg. The ProUCL output summary is presented in **Appendix G**).

6.0 INTERVIEWS

The following persons were interviewed to obtain historically and/or environmentally-pertinent information regarding RECs associated with the Site. Interview documentation is included in **Appendix B.**

- Brian S. Kesler, Cyrus Land Investments, LLC

The information provided by each is discussed and referenced in the text or provided below. Other references and sources of information are included in **Appendix E**.

7.0 FINDINGS, OPINIONS AND CONCLUSIONS

Potential findings can include RECs, historical RECs (HRECs), controlled RECs (CRECs) and *de minimis* conditions, pursuant to the ASTM E 1527-13 standard.

RECs are defined as the presence or likely presence of any *hazardous substances* or *petroleum products* in, on, or at a *property*: (1) due to any *release* to the environment; (2) under conditions indicative of a *release* to the *environment*; or (3) under conditions that pose a *material threat* of a future *release* to the *environment*.

CRECs are defined as a REC resulting from a past *release* of *hazardous substances* or *petroleum products* that has been addressed to the satisfaction of the applicable regulatory authority (for example, as evidenced by the issuance of a no further action letter or equivalent, or meeting risk-based criteria established by regulatory authority), with *hazardous substances* or *petroleum products* allowed to remain in place subject to the implementation of required controls (for example, *property* use restrictions, *activity and use limitations*, *institutional controls*, or *engineering controls*).

HRECs are defined as a past *release* of any *hazardous substances* or *petroleum products* that has occurred in connection with the *property* and has been addressed to the satisfaction of the applicable regulatory authority or meeting unrestricted use criteria established by a regulatory authority, without subjecting the *property* to any required controls (for example, *property* use restrictions, *activity and use limitations*, *institutional controls*, or *engineering controls*).

De minimis conditions are defined as a condition that generally does not present a threat to human health or the *environment* and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies. Conditions determined to be *de minimis conditions* are not RECs nor CRECs.

TRC has performed a Phase I ESA in conformance with the scope and limitations of ASTM E 1527-13 at the property located at APN 018-080-025 on Lone Tree Way, Brentwood, Contra Costa County, California (Site), see **Appendices F and G**. Deviations from this standard are described in Sections 1.3 and 7.6 of this report.

7.1 RECs and CRECs

This assessment has revealed no evidence of RECs (including CRECs) in connection with the Site with the exception of the following:

<u>REC No. 1</u>

File review and discussion with the DTSC indicates that lead concentrations ranging from 37 to 410 mg/kg are present in soil at the adjacent property to the east (aka Skipolini property).

To evaluate potential lead impacts, soil samples were collected across the Site. Results of analyses detected no organchlorine pesticides exceeding respective residential Environmental

Screening Levels (ESLs) established by the Regional Water Quality Control Board (RWQCB) in any of the three surface soil samples tested. Detected arsenic concentrations ranged form 7.1 to 9.1 mg/kg in the three samples tested, which is consistent with background values for the Bay Area. Analyses detected total lead concentrations ranging from 8.7 to 150 mg/kg in sixteen (16) surface and near-surface soil samples with only three (3) surface soil samples exceeding the residential ESL of 80 mg/kg for lead. Using the EPA's ProUCL software, the calculated 95 percent Upper Confidence Level (UCL) for lead in the thirteen (13) surface soil at the Site 78.76 mg/kg, which is less than the residential ESL of 80 mg/kg. Accordingly, TRC recommends no additional soil investigation at this time.

7.2 HRECs

This assessment has revealed no evidence of HRECs in connection with the Site.

7.3 *De Minimis* Conditions

This assessment has revealed no evidence of *de minimis* conditions in connection with the Site.

7.4 Data Gaps

TRC has made an appropriate inquiry into the commonly known and reasonably ascertainable resources concerning the historical ownership and use of the Site back to the first development per 40 CFR Part 312.24 (*Reviews of Historical Sources of Information*). TRC identified no data gaps during this assessment.

7.5 Limiting Conditions and Deviations

7.5.1 Accuracy and Completeness

The ASTM E 1527-13 standard recognizes inherent limitations for Phase I ESAs that apply to this report, including:

- Uncertainty Not Eliminated – No Phase I ESA can wholly eliminate uncertainty regarding the potential for RECs in connection with a property. Data gaps identified during this Phase I ESA are listed in Section 7.5.

- Not Exhaustive – A Phase I ESA is not an exhaustive investigation.

- Past Uses of the Property – A review of standard historical sources at intervals less than five years is not required.

The Client is advised that the Phase I ESA conducted at the Site is a limited inquiry into a property's environmental status, cannot wholly eliminate uncertainty, and is not an exhaustive assessment to discover every potential source of environmental liability at the Site. Therefore, TRC does not make a statement i) of warranty or guarantee, express or implied for any specific use; ii) that the Site is free of RECs or environmental impairment; iii) that the Site is "clean"; or

iv) that impairments, if any, are limited to those that were discovered while TRC was performing the Phase I ESA. This limiting statement is not meant to compromise the findings of this report; rather, it is meant as a statement of limitations within the ASTM standard and intended scope of this assessment. Specific limiting conditions identified during the Site reconnaissance are described in Section 5.1. Subsurface conditions may differ from the conditions implied by surface observations, and can be evaluated more thoroughly through intrusive techniques that are beyond the scope of this assessment. Information in this report is not intended to be used as a construction document and should not be used for demolition, renovation, or other construction purposes.

This report presents TRC's site reconnaissance observations, findings, and conclusions as they existed at the time of the Site reconnaissance. TRC makes no representation or warranty that the past or current operations at the property are, or have been, in compliance with all applicable federal, state and local laws, regulations and codes. TRC makes no guarantees as to the accuracy or completeness of information obtained from others during the course of this Phase I ESA report. It is possible that information exists beyond the scope of this assessment, or that information was not provided to TRC. Additional information subsequently provided, discovered, or produced may alter findings or conclusions made in this Phase I ESA report. TRC is under no obligation to update this report to reflect such subsequent information. The findings presented in this report are based upon reasonably ascertainable information and observed Site conditions at the time of the assessment.

This report does not warrant against future operations or conditions, nor does it warrant against operations or conditions present of a type or at a location not assessed. Regardless of the findings stated in this report, TRC is not responsible for consequences or conditions arising from facts that were not fully disclosed to TRC during the assessment.

An independent data research company provided the government agency database referenced in this report. Information regarding surrounding area properties was requested for approximate minimum search distances and was assumed to be correct and complete unless obviously contradicted by TRC's observations or other credible referenced sources reviewed during the assessment.

TRC is not a professional title insurance or land surveyor firm and makes no guarantee, explicit or implied, that any land title records acquired or reviewed, or any physical descriptions or depictions of the property in this report, represent a comprehensive definition or precise delineation of property ownership or boundaries.

7.5.2 Warranties and Representations

This report does not warrant against: (1) operations or conditions which were not evident from visual observations or historical information provided; (2) conditions which could only be determined by additional physical sampling or other intrusive investigation techniques; (3) locations other than the client-provided addresses and/or legal parcel description; or (4) information regarding off-site location(s) (with possible impact to the Site) not published in publicly available records.

7.5.3 Continued Validity/User Reliance

This report is presumed to be valid, in accordance with, and subject to, the limitations specified in the ASTM E 1527-13 standard, for a period of 180 days from completion, or until the Client obtains specific information that may materially alter a finding, opinion, or conclusion in this report, or until the Client is notified by TRC that it has obtained specific information that may materially alter a finding, opinion, or conclusion in this report. Additionally, pursuant to the ASTM E 1527-13 standard, this report is presumed valid if completed less than 180 days prior to the date of acquisition of the property or (for transactions not involving an acquisition) the date of the intended transaction.

7.5.4 Significant Assumptions

During this Phase I ESA, TRC relied on database information; interviews with Site representatives, regulatory officials, and other individuals having knowledge of Site operations; and information provided by the User as requested in our authorized Scope of Work. TRC has assumed that the information provided is true and accurate. Reliance on electronic database search reports is subject to the limitations set forth in those reports. TRC did not independently verify the information provided. TRC found no reason to question the validity of the information received unless explicitly noted elsewhere in this report. If other information is discovered and/or if previous reports exist that were not provided to TRC, our conclusions may not be valid.

8.0 REFERENCES

Table 8.1 - References Information

Description/Title of Document(s) Received or Agency Contacted	Date Information Request Filled/Date of Agency Contact	Reference Source
The EDR City Directory Report	April 25, 2019	Environmental Data Resources, Inc.
The EDR Aerial Photo Decade Package	April 25, 2019	Environmental Data Resources, Inc.
The EDR Radius Map™ Report with GeoCheck®	April 25, 2019	Environmental Data Resources, Inc.
Certified Sanborn® Map Report	April 25, 2019	Environmental Data Resources, Inc.
EDR Historical Topographic Map Report	April 25, 2019	Environmental Data Resources, Inc.
Contra Costa County Hazardous Materials Department	May 8, 2019	Records request response via email
Contra Costa County Environmental Health Department	May 8, 2019	Records request response via email
Contra Costa County Department of Conservation	May 8, 2019	Records request response via email

Table 8.1 - References Information

Description/Title of Document(s) Received or Agency Contacted	Date Information Request Filled/Date of Agency Contact	Reference Source
and Development		
Regional Water Quality Control Board GeoTracker Database	May 8, 2019	Accessed via website at www.geotracker.waterboards.ca.gov
Department of Toxic Substances Control EnviroStor Database	May 10, 2019	Accessed via website at www.envirostor.dtsc.ca.gov
California Department of Conservation – Division of Oil, Gas, and Geothermal Resources	May 10, 2019	Accessed via website at www.conservation.ca.gov/dog/
Geotechnical Investigation – Ipsen Restaurant/Retail Center (Romig Engineers, Inc., October 7, 2005)	April 25, 2019	Provided by User
Geotechnical Report Update (ENGEO, May 19, 2014)	April 25, 2019	Provided by User
Preliminary Title Report (Old Republic Title Company, March 20, 2019)	April 25, 2019	Provided by User
User Questionnaire	April 25, 2019	Brian S. Kesler

SOURCE AERIAL PHOTO: Google Earth, June 2018.

LEGEND

1. alley a Nursery 7021 Lone Tree Way
2. S ipolini Property 7281 Lone Tree Way
3. Tri City Auto Pla a 935 Lone Tree Way
4. Acorn Self Storage 900 Lone Tree Way

N

APPR IMATE
SCALE (FEET)

0 00

I INIT MAP

Lone Tree Way Property
Brentwood, California

TRC | 338571.1000 | FIGURE 1

FILE NAME: Z:\Shared\CAD_DRAW\Current\Cyrus Land_Discovery Bldrs\Lone Tree Way\Fig1_ icinity Map.dwg | Layout Tab: 8x11

SOURCE AERIAL PHOTO: Google Earth, June 2018.

N

APPR IMATE SCALE (FEET)

0 100 200

SITE PLAN

Lone Tree Way Property
Brentwood, California

TRC | 338571.1000 | **FIGURE 2**

FILE NAME: Z:\Shared\CAD_DRAW\Current\Cyrus Land_Discovery Bldrs\Lone Tree Way\Fig2_Site Plan.dwg | Layout Tab: 8x11

SOURCE AERIAL PHOTO: Google Earth, June 2018.

LEGEND

Approximate location of soil sample

S1
□□ □□
2□ 1□

Lead concentration in soil (mg□□g), □une 2019

Approximate sample depth

N

APPR□□IMATE SCALE (FEET)

0 100

S□IL SAMPLE L□□ATI□NS

Lone Tree Way Property
Brentwood, California

TRC | 338571.1000 | **FIGURE □**

FILE NAME: N:\Shared\CAD_DRAW\Current\Cyrus Land_Discovery Bldrs\Lone Tree Way\Fig3_Soil Sample Locations.dwg | Layout Tab: 8x11

Table 1 - Summary of Soil Data
Lone Tree Way Property
Lone Tree Way and Gann Street
Brentwood, California

Analyte	Sample Location																Screening Levels			
	S1-0	S1-2	S2-0	S2-2	S3-0	S3-2	S4-0	S5-0	S6-0	S7-0	S8-0	S9-0	S10-0	S11-0	S12-0	S13-0	Background[b]	Residential[a]	Commercial/Industrial[a]	Construction Worker[a]
Organochlorine Pesticides																				
All Pesticides	*	--	*	--	*	--	--	--	--	--	--	--	--	--	--	--	NA	NA	NA	NA
g-Chlordane	**0.00022 P**	--	< 0.00010	--	**0.00041 P**	--	--	--	--	--	--	--	--	--	--	--	NE	NE	NE	NE
Dieldrin	**0.00037**	--	**0.00025**	--	**0.00023**	--	--	--	--	--	--	--	--	--	--	--	NE	0.037	0.16	1.1
Endosulfan I	**0.00012**	--	**0.00015 P**	--	**0.00022**	--	--	--	--	--	--	--	--	--	--	--	NE	NE	NE	NE
Endosulfan II	< 0.00010	--	**0.00017**	--	< 0.00010	--	--	--	--	--	--	--	--	--	--	--	NE	NE	NE	NE
DDD	**0.00033**	--	< 0.00010	--	< 0.00010	--	--	--	--	--	--	--	--	--	--	--	NE	2.7	12	81
DDE	**0.061**	--	**0.042**	--	**0.094**	--	--	--	--	--	--	--	--	--	--	--	NE	1.8	8.3	57
DDT	**0.0078**	--	**0.0056**	--	**0.010**	--	--	--	--	--	--	--	--	--	--	--	NE	1.9	8.5	57
Metals																				
Arsenic	**7.2**	--	**7.1**	--	**9.1**	--	--	--	--	--	--	--	--	--	--	--	11	0.067	0.31	0.98
Lead	**89**	**14**	**150**	**8.7**	**110**	**8.9**	**39**	**20**	**18**	**18**	**13**	**24**	**34**	**18**	**17**	**12**	48	80	320	160

Abbreviations
* = Not detected except for analytes listed below
-- = Not analyzed
< = Not detected above reporting limit
NA = Not applicable
NE = Not estabished
P = Agreement between quantitative confirmation results exceeds method recommended limits

Notes:
Bold values indicate detections
Yellow highlight indicates concentration exceeding screening level (corresponding screening level also highlighted)

Footnotes:
[a] Values from San Francisco Bay Regional Water Quality Control Board January 2019 Interim Final Environmental Screening Levels table Summary of Soil ESLs for direct exposure in a residential, commercial, and construction worker scenario (http://www.waterboards.ca.gov/rwqcb2/water_issues/programs/esl.shtml).
[b] Background values from the following sources:
Establishing Background Arsenic in Soil of the Urbanized San Francisco Bay Region, Master of Science in Geosciences, December 2011.
Lawrence Berkeley National Laboratory Analysis of Background Distributions of Metals in the Soil at Lawrence Berkeley National Laboratory, D. Diamond, D. Baskin, D. Brown, L. Lund, J. Najita, and I Javandel, June 2002 Revised April 2009
Bradford: Bradford, G.R., A.C. Chang, A.L. Page, D. Bakhtark, J.A. Frampton, and H. Wright 1996. Background Concentrations of Trace and Major Elements in California Soils, Kearney Foundation Special Report, Kearney Foundation of Soil Science, Division of Agriculture and Natural Resources, University of California, Riverside, 52 p.
S&B: Shacklette, H.T., and J.G. Boerngen 1984. Element Concentrations in Soils and Other Surficial Materials, Conterminous United States, U.S. Geological Survey Professional Paper 1270.

APPENDIX A:
DATABASE RADIUS REPORT

Lone Tree Way
LONE TREE WAY
BRENTWOOD, CA 94513

Inquiry Number: 5631677.2s
April 24, 2019

The EDR Radius Map™ Report with GeoCheck®

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

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Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E 1527-13), the ASTM Standard Practice for Environmental Site Assessments for Forestland or Rural Property (E 2247-16), the ASTM Standard Practice for Limited Environmental Due Diligence: Transaction Screen Process (E 1528-14) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

TARGET PROPERTY INFORMATION

ADDRESS

LONE TREE WAY
BRENTWOOD, CA 94513

COORDINATES

Latitude (North):	37.9610340 - 37˚ 57' 39.72''
Longitude (West):	121.7198920 - 121˚ 43' 11.61''
Universal Tranverse Mercator:	Zone 10
UTM X (Meters):	612454.6
UTM Y (Meters):	4202059.0
Elevation:	91 ft. above sea level

USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property Map:	5640376 BRENTWOOD, CA
Version Date:	2012

AERIAL PHOTOGRAPHY IN THIS REPORT

Portions of Photo from:	20140606
Source:	USDA

MAPPED SITES SUMMARY

Target Property Address:
LONE TREE WAY
BRENTWOOD, CA 94513

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION
1	SKIPOLINI PROPERTY	7281 LONE TREE WAY	ENVIROSTOR, VCP, HAZNET	Higher	230, 0.044, SSE
2	ACORN SELF STORAGE	6990 LONE TREE WY	CONTRA COSTA CO. SITE LIST	Higher	776, 0.147, WNW
A3	TRI CITY AUTO PLAZA	6935 LONE TREE WAY	CERS HAZ WASTE, CERS TANKS, CERS	Higher	1306, 0.247, West
A4	TRI CITY EXPRESS LUB	6935 LONE TREE WAY	RCRA NonGen / NLR	Higher	1306, 0.247, West
A5	VIZ CLEANERS INC	6935 LONE TREE WAY S	DRYCLEANERS	Higher	1306, 0.247, West
A6	TRI CITY AUTO PLAZA	6935 LONE TREE WY	EMI, CONTRA COSTA CO. SITE LIST	Higher	1306, 0.247, West
A7	VIZ CLEANERS	6935 LONE TREE WAY S	CERS HAZ WASTE, CERS	Higher	1306, 0.247, West
A8	TRI CITY AUTO PLAZA	6935 LONE TREE WAY	UST	Higher	1306, 0.247, West
A9	TRI CITY AUTO PLAZA	6935 LONE TREE WAY	AST	Higher	1306, 0.247, West
B10	DUTRA, LEROY	SMITH LN	ENVIROSTOR, SCH, SWEEPS UST, CA FID UST, CONTRA...	Lower	2425, 0.459, ESE
B11	PROPOSED FOURTH MIDD	2340 SMITH ROAD	US BROWNFIELDS, FINDS	Lower	2425, 0.459, ESE
12	LA PALOMA	6651 LONE TREE WAY	ENVIROSTOR, SCH, CERS	Higher	2707, 0.513, West
13	EMPIRE ACRES LLC	2700 EMPIRE AVENUE	ENVIROSTOR, VCP, HAZNET, NPDES, CIWQS	Higher	3665, 0.694, WNW
14	EMPIRE ELEMENTARY SC	EMPIRE AVENUE/AMBER	ENVIROSTOR, SCH	Higher	4335, 0.821, WSW
15	MILES-FENELL PROPERT	2200 SHADY WILLOW LA	ENVIROSTOR, VCP	Higher	4685, 0.887, WSW

EXECUTIVE SUMMARY

TARGET PROPERTY SEARCH RESULTS

The target property was not listed in any of the databases searched by EDR.

DATABASES WITH NO MAPPED SITES

No mapped sites were found in EDR's search of available ("reasonably ascertainable ") government records either on the target property or within the search radius around the target property for the following databases:

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

NPL ..... National Priority List
Proposed NPL ..... Proposed National Priority List Sites
NPL LIENS ..... Federal Superfund Liens

Federal Delisted NPL site list

Delisted NPL ..... National Priority List Deletions

Federal CERCLIS list

FEDERAL FACILITY ..... Federal Facility Site Information listing
SEMS ..... Superfund Enterprise Management System

Federal CERCLIS NFRAP site list

SEMS-ARCHIVE ..... Superfund Enterprise Management System Archive

Federal RCRA CORRACTS facilities list

CORRACTS ..... Corrective Action Report

Federal RCRA non-CORRACTS TSD facilities list

RCRA-TSDF ..... RCRA - Treatment, Storage and Disposal

Federal RCRA generators list

RCRA-LQG ..... RCRA - Large Quantity Generators
RCRA-SQG ..... RCRA - Small Quantity Generators
RCRA-CESQG ..... RCRA - Conditionally Exempt Small Quantity Generator

Federal institutional controls / engineering controls registries

LUCIS ..... Land Use Control Information System
US ENG CONTROLS ..... Engineering Controls Sites List

US INST CONTROL..... Sites with Institutional Controls

Federal ERNS list

ERNS..... Emergency Response Notification System

State- and tribal - equivalent NPL

RESPONSE..... State Response Sites

State and tribal landfill and/or solid waste disposal site lists

SWF/LF..... Solid Waste Information System

State and tribal leaking storage tank lists

LUST..... Geotracker's Leaking Underground Fuel Tank Report
INDIAN LUST..... Leaking Underground Storage Tanks on Indian Land
CPS-SLIC..... Statewide SLIC Cases

State and tribal registered storage tank lists

FEMA UST..... Underground Storage Tank Listing
INDIAN UST..... Underground Storage Tanks on Indian Land

State and tribal voluntary cleanup sites

INDIAN VCP..... Voluntary Cleanup Priority Listing

State and tribal Brownfields sites

BROWNFIELDS..... Considered Brownfieds Sites Listing

ADDITIONAL ENVIRONMENTAL RECORDS

Local Lists of Landfill / Solid Waste Disposal Sites

WMUDS/SWAT..... Waste Management Unit Database
SWRCY..... Recycler Database
HAULERS..... Registered Waste Tire Haulers Listing
INDIAN ODI..... Report on the Status of Open Dumps on Indian Lands
DEBRIS REGION 9..... Torres Martinez Reservation Illegal Dump Site Locations
ODI..... Open Dump Inventory
IHS OPEN DUMPS..... Open Dumps on Indian Land

Local Lists of Hazardous waste / Contaminated Sites

US HIST CDL..... Delisted National Clandestine Laboratory Register
HIST Cal-Sites..... Historical Calsites Database
SCH..... School Property Evaluation Program
CDL..... Clandestine Drug Labs
Toxic Pits..... Toxic Pits Cleanup Act Sites
US CDL..... National Clandestine Laboratory Register
PFAS..... PFAS Contamination Site Location Listing

EXECUTIVE SUMMARY

Local Lists of Registered Storage Tanks

SWEEPS UST	SWEEPS UST Listing
HIST UST	Hazardous Substance Storage Container Database
CA FID UST	Facility Inventory Database

Local Land Records

LIENS	Environmental Liens Listing
LIENS 2	CERCLA Lien Information
DEED	Deed Restriction Listing

Records of Emergency Release Reports

HMIRS	Hazardous Materials Information Reporting System
CHMIRS	California Hazardous Material Incident Report System
LDS	Land Disposal Sites Listing
MCS	Military Cleanup Sites Listing
SPILLS 90	SPILLS 90 data from FirstSearch

Other Ascertainable Records

FUDS	Formerly Used Defense Sites
DOD	Department of Defense Sites
SCRD DRYCLEANERS	State Coalition for Remediation of Drycleaners Listing
US FIN ASSUR	Financial Assurance Information
EPA WATCH LIST	EPA WATCH LIST
2020 COR ACTION	2020 Corrective Action Program List
TSCA	Toxic Substances Control Act
TRIS	Toxic Chemical Release Inventory System
SSTS	Section 7 Tracking Systems
ROD	Records Of Decision
RMP	Risk Management Plans
RAATS	RCRA Administrative Action Tracking System
PRP	Potentially Responsible Parties
PADS	PCB Activity Database System
ICIS	Integrated Compliance Information System
FTTS	FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
MLTS	Material Licensing Tracking System
COAL ASH DOE	Steam-Electric Plant Operation Data
COAL ASH EPA	Coal Combustion Residues Surface Impoundments List
PCB TRANSFORMER	PCB Transformer Registration Database
RADINFO	Radiation Information Database
HIST FTTS	FIFRA/TSCA Tracking System Administrative Case Listing
DOT OPS	Incident and Accident Data
CONSENT	Superfund (CERCLA) Consent Decrees
INDIAN RESERV	Indian Reservations
FUSRAP	Formerly Utilized Sites Remedial Action Program
UMTRA	Uranium Mill Tailings Sites
LEAD SMELTERS	Lead Smelter Sites
US AIRS	Aerometric Information Retrieval System Facility Subsystem
US MINES	Mines Master Index File
ABANDONED MINES	Abandoned Mines

EXECUTIVE SUMMARY

FINDS	Facility Index System/Facility Registry System
UXO	Unexploded Ordnance Sites
DOCKET HWC	Hazardous Waste Compliance Docket Listing
ECHO	Enforcement & Compliance History Information
FUELS PROGRAM	EPA Fuels Program Registered Listing
CA BOND EXP. PLAN	Bond Expenditure Plan
Cortese	"Cortese" Hazardous Waste & Substances Sites List
CUPA Listings	CUPA Resources List
EMI	Emissions Inventory Data
ENF	Enforcement Action Listing
Financial Assurance	Financial Assurance Information Listing
HAZNET	Facility and Manifest Data
ICE	ICE
HIST CORTESE	Hazardous Waste & Substance Site List
HWP	EnviroStor Permitted Facilities Listing
HWT	Registered Hazardous Waste Transporter Database
MINES	Mines Site Location Listing
MWMP	Medical Waste Management Program Listing
NPDES	NPDES Permits Listing
PEST LIC	Pesticide Regulation Licenses Listing
PROC	Certified Processors Database
Notify 65	Proposition 65 Records
UIC	UIC Listing
UIC GEO	UIC GEO (GEOTRACKER)
WASTEWATER PITS	Oil Wastewater Pits Listing
WDS	Waste Discharge System
MILITARY PRIV SITES	MILITARY PRIV SITES (GEOTRACKER)
PROJECT	PROJECT (GEOTRACKER)
WDR	Waste Discharge Requirements Listing
CIWQS	California Integrated Water Quality System
CERS	CERS
WIP	Well Investigation Program Case List
NON-CASE INFO	NON-CASE INFO (GEOTRACKER)
OTHER OIL GAS	OTHER OIL & GAS (GEOTRACKER)
PROD WATER PONDS	PROD WATER PONDS (GEOTRACKER)
SAMPLING POINT	SAMPLING POINT (GEOTRACKER)
WELL STIM PROJ	Well Stimulation Project (GEOTRACKER)

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP	EDR Proprietary Manufactured Gas Plants
EDR Hist Auto	EDR Exclusive Historical Auto Stations
EDR Hist Cleaner	EDR Exclusive Historical Cleaners

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

RGA LF	Recovered Government Archive Solid Waste Facilities List
RGA LUST	Recovered Government Archive Leaking Underground Storage Tank

SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified in the following databases.

EXECUTIVE SUMMARY

Elevations have been determined from the USGS Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property.
Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in ***bold italics*** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

STANDARD ENVIRONMENTAL RECORDS

State- and tribal - equivalent CERCLIS

ENVIROSTOR: The Department of Toxic Substances Control's (DTSC's) Site Mitigation and Brownfields Reuse Program's (SMBRP's) EnviroStor database identifes sites that have known contamination or sites for which there may be reasons to investigate further. The database includes the following site types: Federal Superfund sites (National Priorities List (NPL)); State Response, including Military Facilities and State Superfund; Voluntary Cleanup; and School sites. EnviroStor provides similar information to the information that was available in CalSites, and provides additional site information, including, but not limited to, identification of formerly-contaminated properties that have been released for reuse, properties where environmental deed restrictions have been recorded to prevent inappropriate land uses, and risk characterization information that is used to assess potential impacts to public health and the environment at contaminated sites.

A review of the ENVIROSTOR list, as provided by EDR, and dated 01/28/2019 has revealed that there are 6 ENVIROSTOR sites within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
SKIPOLINI PROPERTY Facility Id: 60002296 Status: Active	***7281 LONE TREE WAY***	***SSE 0 - 1/8 (0.044 mi.)***	***1***	***8***
LA PALOMA Facility Id: 7010008 Status: No Further Action	***6651 LONE TREE WAY***	***W 1/2 - 1 (0.513 mi.)***	***12***	***88***
EMPIRE ACRES LLC Facility Id: 60002665 Status: No Further Action	***2700 EMPIRE AVENUE***	***WNW 1/2 - 1 (0.694 mi.)***	***13***	***90***
EMPIRE ELEMENTARY SC Facility Id: 1010005 Status: Certified	***EMPIRE AVENUE/AMBER***	***WSW 1/2 - 1 (0.821 mi.)***	***14***	***94***
MILES-FENELL PROPERT Facility Id: 60001996 Status: No Further Action	***2200 SHADY WILLOW LA***	***WSW 1/2 - 1 (0.887 mi.)***	***15***	***96***

Lower Elevation	Address	Direction / Distance	Map ID	Page
DUTRA, LEROY Facility Id: 60000916 Status: Inactive - Action Required	***SMITH LN***	***ESE 1/4 - 1/2 (0.459 mi.)***	***B10***	***79***

State and tribal registered storage tank lists

UST: The Underground Storage Tank database contains registered USTs. USTs are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA). The data come from the State Water Resources Control Board's Hazardous Substance Storage Container Database.

A review of the UST list, as provided by EDR, has revealed that there is 1 UST site within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
TRI CITY AUTO PLAZA Database: UST, Date of Government Version: 12/10/2018 Facility Id: 07-000-773602	6935 LONE TREE WAY	W 1/8 - 1/4 (0.247 mi.)	A8	78

AST: A listing of aboveground storage tank petroleum storage tank locations.

A review of the AST list, as provided by EDR, has revealed that there is 1 AST site within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
TRI CITY AUTO PLAZA Database: AST, Date of Government Version: 07/06/2016	6935 LONE TREE WAY	W 1/8 - 1/4 (0.247 mi.)	A9	78

State and tribal voluntary cleanup sites

VCP: Contains low threat level properties with either confirmed or unconfirmed releases and the project proponents have request that DTSC oversee investigation and/or cleanup activities and have agreed to provide coverage for DTSC's costs.

A review of the VCP list, as provided by EDR, and dated 01/28/2019 has revealed that there is 1 VCP site within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
SKIPOLINI PROPERTY Status: Active Facility Id: 60002296	***7281 LONE TREE WAY***	***SSE 0 - 1/8 (0.044 mi.)***	***1***	***8***

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS: The EPA's listing of Brownfields properties from the Cleanups in My Community program, which provides information on Brownfields properties for which information is reported back to EPA, as well as areas served by Brownfields grant programs.

A review of the US BROWNFIELDS list, as provided by EDR, and dated 12/17/2018 has revealed that there

is 1 US BROWNFIELDS site within approximately 0.5 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
PROPOSED FOURTH MIDD ACRES property ID: 133703	***2340 SMITH ROAD***	***ESE 1/4 - 1/2 (0.459 mi.)***	***B11***	***85***

Local Lists of Hazardous waste / Contaminated Sites

CERS HAZ WASTE: List of sites in the California Environmental Protection Agency (CalEPA) Regulated Site Portal which fall under the Hazardous Chemical Management, Hazardous Waste Onsite Treatment, Household Hazardous Waste Collection, Hazardous Waste Generator, and RCRA LQ HW Generator programs.

A review of the CERS HAZ WASTE list, as provided by EDR, and dated 10/22/2018 has revealed that there are 2 CERS HAZ WASTE sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
TRI CITY AUTO PLAZA	***6935 LONE TREE WAY***	***W 1/8 - 1/4 (0.247 mi.)***	***A3***	***12***
VIZ CLEANERS	***6935 LONE TREE WAY S***	***W 1/8 - 1/4 (0.247 mi.)***	***A7***	***72***

Local Lists of Registered Storage Tanks

CERS TANKS: List of sites in the California Environmental Protection Agency (CalEPA) Regulated Site Portal which fall under the Aboveground Petroleum Storage and Underground Storage Tank regulatory programs.

A review of the CERS TANKS list, as provided by EDR, and dated 10/22/2018 has revealed that there is 1 CERS TANKS site within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
TRI CITY AUTO PLAZA	***6935 LONE TREE WAY***	***W 1/8 - 1/4 (0.247 mi.)***	***A3***	***12***

Other Ascertainable Records

RCRA NonGen / NLR: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

A review of the RCRA NonGen / NLR list, as provided by EDR, and dated 03/25/2019 has revealed that there is 1 RCRA NonGen / NLR site within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
TRI CITY EXPRESS LUB EPA ID:: CAL000329240	6935 LONE TREE WAY	W 1/8 - 1/4 (0.247 mi.)	A4	69

EXECUTIVE SUMMARY

DRYCLEANERS: A list of drycleaner related facilities that have EPA ID numbers. These are facilities with certain SIC codes: power laundries, family and commercial; garment pressing and cleaners' agents; linen supply; coin-operated laundries and cleaning; drycleaning plants except rugs; carpet and upholster cleaning; industrial launderers; laundry and garment services.

A review of the DRYCLEANERS list, as provided by EDR, has revealed that there is 1 DRYCLEANERS site within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
VIZ CLEANERS INC	6935 LONE TREE WAY S	W 1/8 - 1/4 (0.247 mi.)	A5	70
Database: DRYCLEANERS, Date of Government Version: 12/13/2018				
EPA Id: CAL000340540				

CONTRA COSTA CO. SITE LIST: Lists includes sites from the Underground Tank Program, Hazardous Waste Generator Program & Business Plan 12185 Program

A review of the CONTRA COSTA CO. SITE LIST list, as provided by EDR, and dated 02/14/2019 has revealed that there are 2 CONTRA COSTA CO. SITE LIST sites within approximately 0.25 miles of the target property.

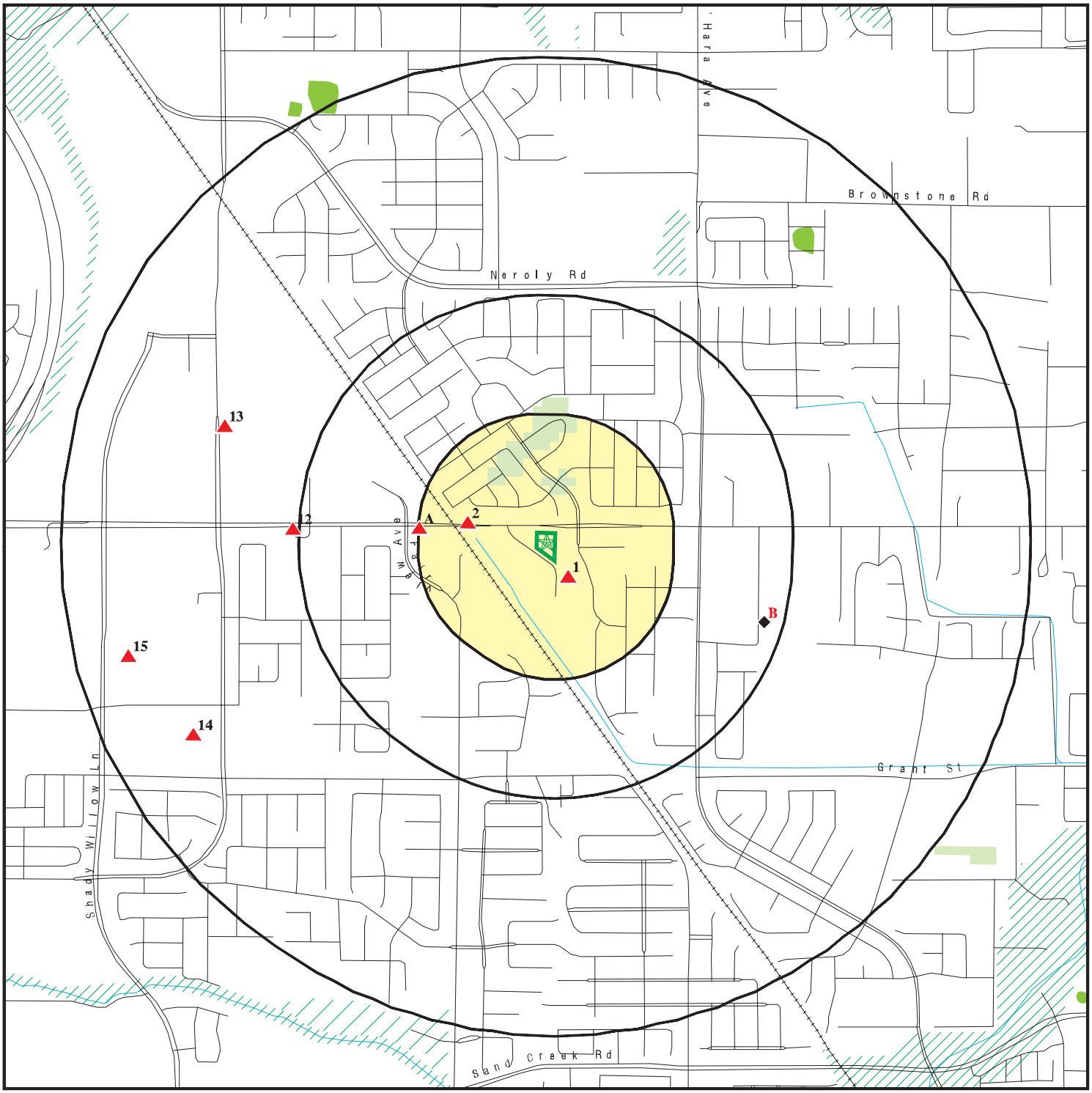
Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
ACORN SELF STORAGE	6990 LONE TREE WY	WNW 1/8 - 1/4 (0.147 mi.)	2	12
Facility Id: FA0029616				
TRI CITY AUTO PLAZA	***6935 LONE TREE WY***	***W 1/8 - 1/4 (0.247 mi.)***	***A6***	***71***
Facility Id: FA0030271				
Facility Id: FA0030602				

EXECUTIVE SUMMARY

Due to poor or inadequate address information, the following sites were not mapped. Count: 10 records.

Site Name	Database(s)
LONE TREE LANDING	CIWQS
LONE TREE WAY & HILLCREST WIDENING	CIWQS
LONE TREE WAY	CIWQS
LONE TREE TOWNE PLAZA	CIWQS
LONE TREE PLAZA	CIWQS
GOLDEN EAGLE AT LONE TREE	CIWQS
LONE TREE PLAZA	CIWQS
LONE TREE WAY INTERSECTION IMPROVE	NPDES
VENTURINI LEASE SITE (BRENTWOOD OI	CPS-SLIC
OXY USA INC. (BRENTWOOD OIL & GAS	CPS-SLIC

OVERVIEW MAP - 5631677.2S



Target Property

Sites at elevations higher than or equal to the target property

Sites at elevations lower than the target property

Manufactured Gas Plants

National Priority List Sites

Dept. Defense Sites

0 1/4 1/2 1 Miles

Indian Reservations BIA

100-year flood zone

500-year flood zone

National Wetland Inventory

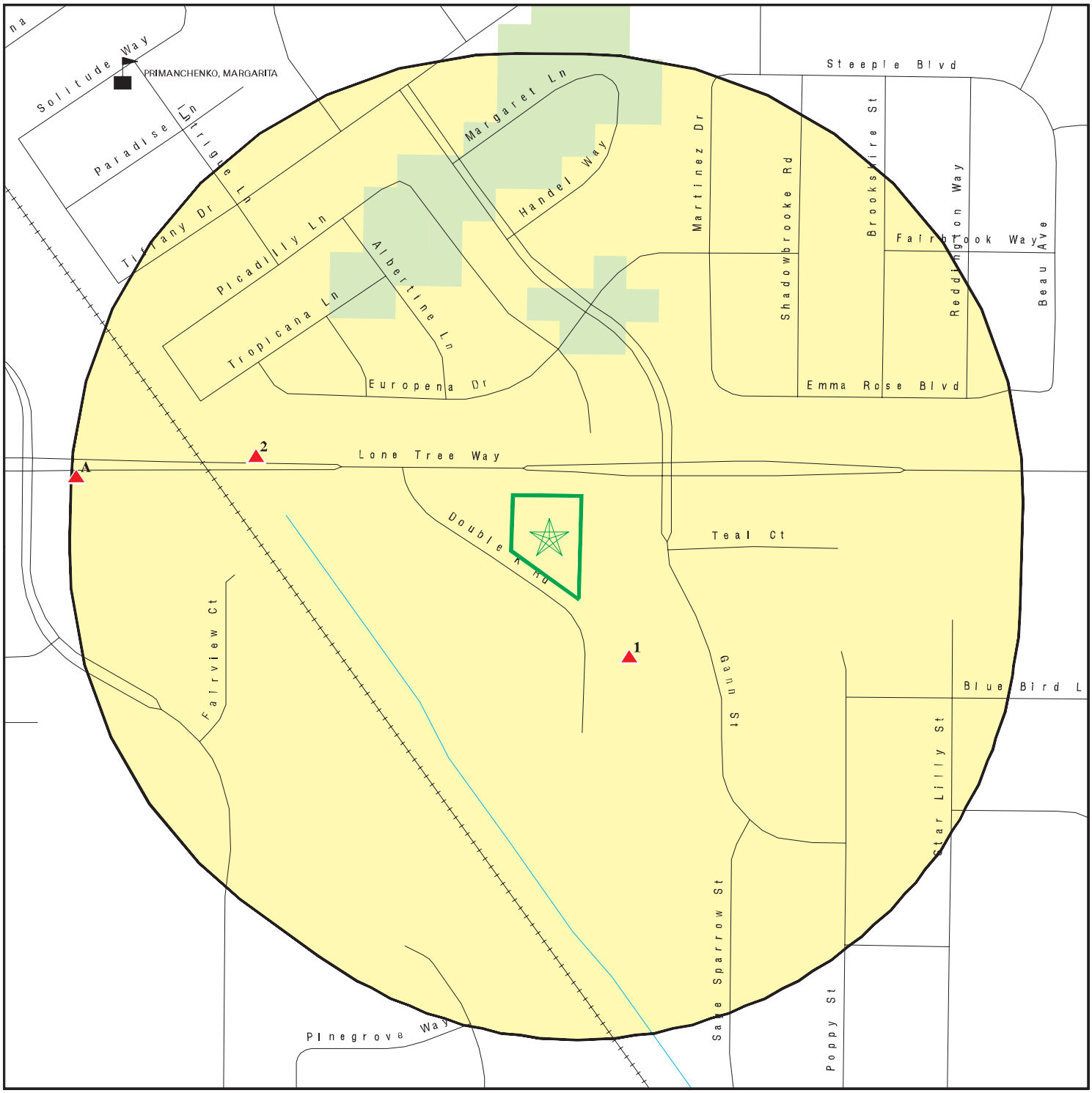
State Wetlands

Areas of Concern

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: Lone Tree Way	CLIENT: TRC
ADDRESS: LONE TREE WAY BRENTWOOD CA 94513	CONTACT: Glenn Young
LAT/LONG: 37.961034 / 121.719892	INQUIRY #: 5631677.2s DATE: April 24, 2019 6:46 pm

DETAIL MAP - 5631677.2S



Target Property

Sites at elevations higher than or equal to the target property

Sites at elevations lower than the target property

Manufactured Gas Plants

Sensitive Receptors

National Priority List Sites

Dept. Defense Sites

0 1/16 1/8 1/4 Miles

Indian Reservations BIA

100-year flood zone

500-year flood zone

National Wetland Inventory

State Wetlands

Areas of Concern

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: Lone Tree Way	CLIENT: TRC
ADDRESS: LONE TREE WAY BRENTWOOD CA 94513	CONTACT: Glenn Young
LAT/LONG: 37.961034 / 121.719892	INQUIRY #: 5631677.2s DATE: April 24, 2019 6:48 pm

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
STANDARD ENVIRONMENTAL RECORDS								
Federal NPL site list								
NPL	1.000		0	0	0	0	NR	0
Proposed NPL	1.000		0	0	0	0	NR	0
NPL LIENS	0.001		0	NR	NR	NR	NR	0
Federal Delisted NPL site list								
Delisted NPL	1.000		0	0	0	0	NR	0
Federal CERCLIS list								
FEDERAL FACILITY	0.500		0	0	0	NR	NR	0
SEMS	0.500		0	0	0	NR	NR	0
Federal CERCLIS NFRAP site list								
SEMS-ARCHIVE	0.500		0	0	0	NR	NR	0
Federal RCRA CORRACTS facilities list								
CORRACTS	1.000		0	0	0	0	NR	0
Federal RCRA non-CORRACTS TSD facilities list								
RCRA-TSDF	0.500		0	0	0	NR	NR	0
Federal RCRA generators list								
RCRA-LQG	0.250		0	0	NR	NR	NR	0
RCRA-SQG	0.250		0	0	NR	NR	NR	0
RCRA-CESQG	0.250		0	0	NR	NR	NR	0
Federal institutional controls / engineering controls registries								
LUCIS	0.500		0	0	0	NR	NR	0
US ENG CONTROLS	0.500		0	0	0	NR	NR	0
US INST CONTROL	0.500		0	0	0	NR	NR	0
Federal ERNS list								
ERNS	0.001		0	NR	NR	NR	NR	0
State- and tribal - equivalent NPL								
RESPONSE	1.000		0	0	0	0	NR	0
State- and tribal - equivalent CERCLIS								
ENVIROSTOR	1.000		1	0	1	4	NR	6
State and tribal landfill and/or solid waste disposal site lists								
SWF/LF	0.500		0	0	0	NR	NR	0
State and tribal leaking storage tank lists								
LUST	0.500		0	0	0	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
INDIAN LUST	0.500		0	0	0	NR	NR	0
CPS-SLIC	0.500		0	0	0	NR	NR	0
State and tribal registered storage tank lists								
FEMA UST	0.250		0	0	NR	NR	NR	0
UST	0.250		0	1	NR	NR	NR	1
AST	0.250		0	1	NR	NR	NR	1
INDIAN UST	0.250		0	0	NR	NR	NR	0
State and tribal voluntary cleanup sites								
INDIAN VCP	0.500		0	0	0	NR	NR	0
VCP	0.500		1	0	0	NR	NR	1
State and tribal Brownfields sites								
BROWNFIELDS	0.500		0	0	0	NR	NR	0
ADDITIONAL ENVIRONMENTAL RECORDS								
Local Brownfield lists								
US BROWNFIELDS	0.500		0	0	1	NR	NR	1
Local Lists of Landfill / Solid Waste Disposal Sites								
WMUDS/SWAT	0.500		0	0	0	NR	NR	0
SWRCY	0.500		0	0	0	NR	NR	0
HAULERS	0.001		0	NR	NR	NR	NR	0
INDIAN ODI	0.500		0	0	0	NR	NR	0
DEBRIS REGION 9	0.500		0	0	0	NR	NR	0
ODI	0.500		0	0	0	NR	NR	0
IHS OPEN DUMPS	0.500		0	0	0	NR	NR	0
Local Lists of Hazardous waste / Contaminated Sites								
US HIST CDL	0.001		0	NR	NR	NR	NR	0
HIST Cal-Sites	1.000		0	0	0	0	NR	0
SCH	0.250		0	0	NR	NR	NR	0
CDL	0.001		0	NR	NR	NR	NR	0
CERS HAZ WASTE	0.250		0	2	NR	NR	NR	2
Toxic Pits	1.000		0	0	0	0	NR	0
US CDL	0.001		0	NR	NR	NR	NR	0
PFAS	0.001		0	NR	NR	NR	NR	0
Local Lists of Registered Storage Tanks								
SWEEPS UST	0.250		0	0	NR	NR	NR	0
HIST UST	0.250		0	0	NR	NR	NR	0
CERS TANKS	0.250		0	1	NR	NR	NR	1
CA FID UST	0.250		0	0	NR	NR	NR	0
Local Land Records								
LIENS	0.001		0	NR	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
LIENS 2	0.001		0	NR	NR	NR	NR	0
DEED	0.500		0	0	0	NR	NR	0
Records of Emergency Release Reports								
HMIRS	0.001		0	NR	NR	NR	NR	0
CHMIRS	0.001		0	NR	NR	NR	NR	0
LDS	0.001		0	NR	NR	NR	NR	0
MCS	0.001		0	NR	NR	NR	NR	0
SPILLS 90	0.001		0	NR	NR	NR	NR	0
Other Ascertainable Records								
RCRA NonGen / NLR	0.250		0	1	NR	NR	NR	1
FUDS	1.000		0	0	0	0	NR	0
DOD	1.000		0	0	0	0	NR	0
SCRD DRYCLEANERS	0.500		0	0	0	NR	NR	0
US FIN ASSUR	0.001		0	NR	NR	NR	NR	0
EPA WATCH LIST	0.001		0	NR	NR	NR	NR	0
2020 COR ACTION	0.250		0	0	NR	NR	NR	0
TSCA	0.001		0	NR	NR	NR	NR	0
TRIS	0.001		0	NR	NR	NR	NR	0
SSTS	0.001		0	NR	NR	NR	NR	0
ROD	1.000		0	0	0	0	NR	0
RMP	0.001		0	NR	NR	NR	NR	0
RAATS	0.001		0	NR	NR	NR	NR	0
PRP	0.001		0	NR	NR	NR	NR	0
PADS	0.001		0	NR	NR	NR	NR	0
ICIS	0.001		0	NR	NR	NR	NR	0
FTTS	0.001		0	NR	NR	NR	NR	0
MLTS	0.001		0	NR	NR	NR	NR	0
COAL ASH DOE	0.001		0	NR	NR	NR	NR	0
COAL ASH EPA	0.500		0	0	0	NR	NR	0
PCB TRANSFORMER	0.001		0	NR	NR	NR	NR	0
RADINFO	0.001		0	NR	NR	NR	NR	0
HIST FTTS	0.001		0	NR	NR	NR	NR	0
DOT OPS	0.001		0	NR	NR	NR	NR	0
CONSENT	1.000		0	0	0	0	NR	0
INDIAN RESERV	0.001		0	NR	NR	NR	NR	0
FUSRAP	1.000		0	0	0	0	NR	0
UMTRA	0.500		0	0	0	NR	NR	0
LEAD SMELTERS	0.001		0	NR	NR	NR	NR	0
US AIRS	0.001		0	NR	NR	NR	NR	0
US MINES	0.250		0	0	NR	NR	NR	0
ABANDONED MINES	0.001		0	NR	NR	NR	NR	0
FINDS	0.001		0	NR	NR	NR	NR	0
UXO	1.000		0	0	0	0	NR	0
DOCKET HWC	0.001		0	NR	NR	NR	NR	0
ECHO	0.001		0	NR	NR	NR	NR	0
FUELS PROGRAM	0.250		0	0	NR	NR	NR	0
CA BOND EXP. PLAN	1.000		0	0	0	0	NR	0
Cortese	0.500		0	0	0	NR	NR	0
CUPA Listings	0.250		0	0	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
DRYCLEANERS	0.250		0	1	NR	NR	NR	1
EMI	0.001		0	NR	NR	NR	NR	0
ENF	0.001		0	NR	NR	NR	NR	0
Financial Assurance	0.001		0	NR	NR	NR	NR	0
HAZNET	0.001		0	NR	NR	NR	NR	0
ICE	0.001		0	NR	NR	NR	NR	0
HIST CORTESE	0.500		0	0	0	NR	NR	0
HWP	1.000		0	0	0	0	NR	0
HWT	0.250		0	0	NR	NR	NR	0
MINES	0.001		0	NR	NR	NR	NR	0
MWMP	0.250		0	0	NR	NR	NR	0
NPDES	0.001		0	NR	NR	NR	NR	0
PEST LIC	0.001		0	NR	NR	NR	NR	0
PROC	0.500		0	0	0	NR	NR	0
Notify 65	1.000		0	0	0	0	NR	0
CONTRA COSTA CO. SITE LIST	0.250		0	2	NR	NR	NR	2
UIC	0.001		0	NR	NR	NR	NR	0
UIC GEO	0.001		0	NR	NR	NR	NR	0
WASTEWATER PITS	0.500		0	0	0	NR	NR	0
WDS	0.001		0	NR	NR	NR	NR	0
MILITARY PRIV SITES	0.001		0	NR	NR	NR	NR	0
PROJECT	0.001		0	NR	NR	NR	NR	0
WDR	0.001		0	NR	NR	NR	NR	0
CIWQS	0.001		0	NR	NR	NR	NR	0
CERS	0.001		0	NR	NR	NR	NR	0
WIP	0.250		0	0	NR	NR	NR	0
NON-CASE INFO	0.001		0	NR	NR	NR	NR	0
OTHER OIL GAS	0.001		0	NR	NR	NR	NR	0
PROD WATER PONDS	0.001		0	NR	NR	NR	NR	0
SAMPLING POINT	0.001		0	NR	NR	NR	NR	0
WELL STIM PROJ	0.001		0	NR	NR	NR	NR	0
EDR HIGH RISK HISTORICAL RECORDS								
EDR Exclusive Records								
EDR MGP	1.000		0	0	0	0	NR	0
EDR Hist Auto	0.125		0	NR	NR	NR	NR	0
EDR Hist Cleaner	0.125		0	NR	NR	NR	NR	0
EDR RECOVERED GOVERNMENT ARCHIVES								
Exclusive Recovered Govt. Archives								
RGA LF	0.001		0	NR	NR	NR	NR	0
RGA LUST	0.001		0	NR	NR	NR	NR	0
- Totals --		0	2	9	2	4	0	17

NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

1 SSE < 1/8 0.044 mi. 230 ft. | **SKIPOLINI PROPERTY 7281 LONE TREE WAY BRENTWOOD, CA 94513** | **ENVIROSTOR VCP HAZNET** | **S112931201 N/A**

Relative: Higher

Actual: 92 ft.

ENVIROSTOR:

Facility ID:	60002296
Status:	Active
Status Date:	01/01/2016
Site Code:	202227
Site Type:	Voluntary Cleanup
Site Type Detailed:	Voluntary Cleanup
Acres:	1.72
NPL:	NO
Regulatory Agencies:	SMBRP
Lead Agency:	SMBRP
Program Manager:	Hongbo Zhu
Supervisor:	Daniel Murphy
Division Branch:	Cleanup Berkeley
Assembly:	, 11
Senate:	, 07
Special Program:	Not reported
Restricted Use:	NO
Site Mgmt Req:	NONE SPECIFIED
Funding:	Responsible Party
Latitude:	37.96159
Longitude:	-121.7193
APN:	018-080-022, 018080022
Past Use:	AGRICULTURAL - ORCHARD, RESIDENTIAL AREA
Potential COC:	Lead
Confirmed COC:	Lead
Potential Description:	SOIL
Alias Name:	018-080-022
Alias Type:	APN
Alias Name:	018080022
Alias Type:	APN
Alias Name:	202078
Alias Type:	Project Code (Site Code)
Alias Name:	202078
Alias Type:	Project Code (Site Code)
Alias Name:	202227
Alias Type:	Project Code (Site Code)
Alias Name:	60002296
Alias Type:	Envirostor ID Number

Completed Info:

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Annual Oversight Cost Estimate
Completed Date:	10/13/2016
Comments:	Not reported
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Application
Completed Date:	01/27/2016
Comments:	DTSC is the lead Agency. This project was assigned in Jan 2016
Completed Area Name:	PROJECT WIDE

SKIPOLINI PROPERTY (Continued) **S112931201**

Completed Sub Area Name: Not reported
Completed Document Type: Voluntary Cleanup Agreement Termination Notification
Completed Date: 03/21/2018
Comments: Date added to complete activity.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Annual Oversight Cost Estimate
Completed Date: 09/21/2017
Comments: FY 2017/2018 COST ESTIMATE FOR OVERSIGHT OF RESPONSE WORK COMPLETED.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Voluntary Cleanup Agreement
Completed Date: 07/08/2016
Comments: Not reported

Future Area Name: PROJECT WIDE
Future Sub Area Name: Not reported
Future Document Type: Certification
Future Due Date: 2020
Future Area Name: PROJECT WIDE
Future Sub Area Name: Not reported
Future Document Type: Public Notice
Future Due Date: 2019
Future Area Name: PROJECT WIDE
Future Sub Area Name: Not reported
Future Document Type: Removal Action Completion Report
Future Due Date: 2019
Future Area Name: PROJECT WIDE
Future Sub Area Name: Not reported
Future Document Type: CEQA - Notice of Exemption
Future Due Date: 2019
Schedule Area Name: PROJECT WIDE
Schedule Sub Area Name: Not reported
Schedule Document Type: Removal Action Workplan
Schedule Due Date: 01/04/2019
Schedule Revised Date: 04/07/2019
Schedule Area Name: PROJECT WIDE
Schedule Sub Area Name: Not reported
Schedule Document Type: Fact Sheets
Schedule Due Date: 11/07/2018
Schedule Revised Date: Not reported
Schedule Area Name: PROJECT WIDE
Schedule Sub Area Name: Not reported
Schedule Document Type: Community Profile
Schedule Due Date: 10/17/2018
Schedule Revised Date: Not reported

VCP:
Facility ID: 60002296
Site Type: Voluntary Cleanup
Site Type Detail: Voluntary Cleanup
Site Mgmt. Req.: NONE SPECIFIED
Acres: 1.72
National Priorities List: NO
Cleanup Oversight Agencies: SMBRP

SKIPOLINI PROPERTY (Continued) **S112931201**

Lead Agency:	SMBRP
Lead Agency Description:	DTSC - Site Cleanup Program
Project Manager:	Hongbo Zhu
Supervisor:	Daniel Murphy
Division Branch:	Cleanup Berkeley
Site Code:	202227
Assembly:	, 11
Senate:	, 07
Special Programs Code:	Not reported
Status:	Active
Status Date:	01/01/2016
Restricted Use:	NO
Funding:	Responsible Party
Lat/Long:	37.96159 / -121.7193
APN:	018-080-022, 018080022
Past Use:	AGRICULTURAL - ORCHARD, RESIDENTIAL AREA
Potential COC:	30013
Confirmed COC:	30013
Potential Description:	SOIL
Alias Name:	018-080-022
Alias Type:	APN
Alias Name:	018080022
Alias Type:	APN
Alias Name:	202078
Alias Type:	Project Code (Site Code)
Alias Name:	202078
Alias Type:	Project Code (Site Code)
Alias Name:	202227
Alias Type:	Project Code (Site Code)
Alias Name:	60002296
Alias Type:	Envirostor ID Number

Completed Info:

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Annual Oversight Cost Estimate
Completed Date:	10/13/2016
Comments:	Not reported
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Application
Completed Date:	01/27/2016
Comments:	DTSC is the lead Agency. This project was assigned in Jan 2016
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Voluntary Cleanup Agreement Termination Notification
Completed Date:	03/21/2018
Comments:	Date added to complete activity.
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Annual Oversight Cost Estimate
Completed Date:	09/21/2017
Comments:	FY 2017/2018 COST ESTIMATE FOR OVERSIGHT OF RESPONSE WORK COMPLETED.
Completed Area Name:	PROJECT WIDE

SKIPOLINI PROPERTY (Continued) **S112931201**

Completed Sub Area Name:	Not reported
Completed Document Type:	Voluntary Cleanup Agreement
Completed Date:	07/08/2016
Comments:	Not reported
Future Area Name:	PROJECT WIDE
Future Sub Area Name:	Not reported
Future Document Type:	Certification
Future Due Date:	2020
Future Area Name:	PROJECT WIDE
Future Sub Area Name:	Not reported
Future Document Type:	Public Notice
Future Due Date:	2019
Future Area Name:	PROJECT WIDE
Future Sub Area Name:	Not reported
Future Document Type:	Removal Action Completion Report
Future Due Date:	2019
Future Area Name:	PROJECT WIDE
Future Sub Area Name:	Not reported
Future Document Type:	CEQA - Notice of Exemption
Future Due Date:	2019
Schedule Area Name:	PROJECT WIDE
Schedule Sub Area Name:	Not reported
Schedule Document Type:	Removal Action Workplan
Schedule Due Date:	01/04/2019
Schedule Revised Date:	04/07/2019
Schedule Area Name:	PROJECT WIDE
Schedule Sub Area Name:	Not reported
Schedule Document Type:	Fact Sheets
Schedule Due Date:	11/07/2018
Schedule Revised Date:	Not reported
Schedule Area Name:	PROJECT WIDE
Schedule Sub Area Name:	Not reported
Schedule Document Type:	Community Profile
Schedule Due Date:	10/17/2018
Schedule Revised Date:	Not reported

HAZNET:

Facility Name:	MERITAGE HOMES OF NORTHERN CALIFORNIA INC
envid:	S112931201
Year:	2003
GEPAID:	CAC002567472
Contact:	JOAN SYLVIA/MGR
Telephone:	9252883033
Mailing Name:	Not reported
Mailing Address:	1800 SUTTER ST #500
Mailing City,St,Zip:	CONCORD, CA 94520
Gen County:	Not reported
TSD EPA ID:	CAD982042475
TSD County:	Not reported
Waste Category:	Asbestos containing waste
Disposal Method:	Disposal, Land Fill
Tons:	5.05
Cat Decode:	Not reported
Method Decode:	Not reported
Facility County:	Contra Costa

2 WNW 1/8-1/4 0.147 mi. 776 ft. | **ACORN SELF STORAGE**
6990 LONE TREE WY
BRENTWOOD, CA 94513 | **CONTRA COSTA CO. SITE LIST** | **S104532785**
N/A

Relative: Higher
Actual: 98 ft.

CONTRA COSTA CO. SITE LIST:

Facility ID:	FA0029616
Billing Status:	INACTIVE, NON-BILLABLE
Program Status:	CONTRA COSTA CO. SITE LIST
Program/Elements:	HMBP GENERAL
Region:	CONTRA COSTA
Cupa Number:	772943

Facility ID:	FA0029616
Billing Status:	INACTIVE, NON-BILLABLE
Program Status:	CONTRA COSTA CO. SITE LIST
Program/Elements:	HWG GENERAL
Region:	CONTRA COSTA
Cupa Number:	772943

A3 West 1/8-1/4 0.247 mi. 1306 ft. | **TRI CITY AUTO PLAZA INC**
6935 LONE TREE WAY
BRENTWOOD, CA 94513 | **CERS HAZ WASTE**
CERS TANKS
CERS | **S121748583**
N/A

Site 1 of 7 in cluster A

Relative: Higher
Actual: 99 ft.

CERS HAZ WASTE:

Site ID:	163317
CERS ID:	10018531
CERS Description:	Hazardous Waste Generator

Violations:

Site ID:	163317
Site Name:	TRI CITY AUTO PLAZA INC
Violation Date:	04-20-2017
Citation:	HSC 6.5 Multiple - California Health and Safety Code, Chapter 6.5, Section(s) Multiple
Violation Description:	Hazardous Waste Generator Program - Operations/Maintenance - General
Violation Notes:	Returned to compliance on 05/26/2017.
Violation Division:	Contra Costa County Health Services Department
Violation Program:	HW
Violation Source:	CERS

Site ID:	163317
Site Name:	TRI CITY AUTO PLAZA INC
Violation Date:	05-04-2018
Citation:	HSC 6.7 25290.1(e) - California Health and Safety Code, Chapter 6.7, Section(s) 25290.1(e)
Violation Description:	Failure to maintain the interstitial space such that a breach in the primary or secondary containment is detected before the liquid or vapor phase of the hazardous substance stored in the UST tank is released into the environment, i.e., vapor, pressure, hydrostatic (VPH) monitoring.
Violation Notes:	OBSERVATION: Owner/Operator did not maintain the interstitial space under constant vacuum, pressure, or hydrostatic monitoring such that a breach in the primary or secondary containment is detected before the liquid or vapor phase of the hazardous substance stored in the UST tank is released into the environment. The facility has active L10 (diesel STP - brine) and S9 (diesel-91 vac annular) alarms. Diesel STP

TRI CITY AUTO PLAZA INC (Continued) **S121748583**

sump was reported to be empty of brine by UST technician who performed monitoring certification on 4/19/18. CORRECTIVE ACTION: Maintain the interstitial space so that constant vacuum, pressure, or hydrostatic monitoring occurs. Obtain a permit and perform required repairs. Submit verification.

Violation Division: Contra Costa County Health Services Department
Violation Program: UST
Violation Source: CERS

Site ID: 163317
Site Name: TRI CITY AUTO PLAZA INC
Violation Date: 04-20-2015
Citation: HSC 6.95 Multiple - California Health and Safety Code, Chapter 6.95, Section(s) Multiple
Violation Description: Business Plan Program - Administration/Documentation - General
Violation Notes: Returned to compliance on 04/20/2015.
Violation Division: Contra Costa County Health Services Department
Violation Program: HMRRP
Violation Source: CERS

Site ID: 163317
Site Name: TRI CITY AUTO PLAZA INC
Violation Date: 04-20-2017
Citation: HSC 6.95 Multiple - California Health and Safety Code, Chapter 6.95, Section(s) Multiple
Violation Description: Business Plan Program - Training - General
Violation Notes: Returned to compliance on 05/26/2017. OBSERVATION: Gas station employees have not received training on carbon dioxide and propane. Express Lube employees have not received annual documented training on hazardous materials/emergency response. CORRECTIVE ACTION: Train employees and submit documentation to CCHS HMP.
Violation Division: Contra Costa County Health Services Department
Violation Program: HMRRP
Violation Source: CERS

Site ID: 163317
Site Name: TRI CITY AUTO PLAZA INC
Violation Date: 07-19-2018
Citation: HSC 6.7 25284 - California Health and Safety Code, Chapter 6.7, Section(s) 25284
Violation Description: Failure to obtain a valid permit to operate from the UPA including but not limited to unpaid permit fees.
Violation Notes: Not reported
Violation Division: Contra Costa County Health Services Department
Violation Program: UST
Violation Source: CERS

Site ID: 163317
Site Name: TRI CITY AUTO PLAZA INC
Violation Date: 04-16-2014
Citation: HSC 6.7 Multiple Sections - California Health and Safety Code, Chapter 6.7, Section(s) Multiple Sections
Violation Description: UST Program - Operations/Maintenance - General
Violation Notes: Returned to compliance on 06/06/2014.
Violation Division: Contra Costa County Health Services Department
Violation Program: UST
Violation Source: CERS

TRI CITY AUTO PLAZA INC (Continued) **S121748583**

Site ID:	163317
Site Name:	TRI CITY AUTO PLAZA INC
Violation Date:	04-20-2015
Citation:	HSC 6.67 Multiple - California Health and Safety Code, Chapter 6.67, Section(s) Multiple
Violation Description:	APSA Program - Administration/Documentation - General
Violation Notes:	Returned to compliance on 06/29/2015.
Violation Division:	Contra Costa County Health Services Department
Violation Program:	APSA
Violation Source:	CERS

Site ID:	163317
Site Name:	TRI CITY AUTO PLAZA INC
Violation Date:	09-01-2017
Citation:	HSC 6.7 Multiple - California Health and Safety Code, Chapter 6.7, Section(s) Multiple
Violation Description:	UST Program - Administration/Documentation - General - Must include violation description, proper statute and regulation citation in the "comment" section.
Violation Notes:	Not reported
Violation Division:	Contra Costa County Health Services Department
Violation Program:	UST
Violation Source:	CERS

Site ID:	163317
Site Name:	TRI CITY AUTO PLAZA INC
Violation Date:	04-20-2017
Citation:	HSC 6.95 Multiple - California Health and Safety Code, Chapter 6.95, Section(s) Multiple
Violation Description:	Business Plan Program - Administration/Documentation - General
Violation Notes:	Returned to compliance on 05/24/2017. OBSERVATION: The site map is missing required elements including spill response equipment (fire extinguishers, spill absorbent), oil changer hazardous materials storage areas, evacuation area, loading area, propane and carbon dioxide locations. CORRECTIVE ACTION: Upload updated site map to CERS.
Violation Division:	Contra Costa County Health Services Department
Violation Program:	HMRRP
Violation Source:	CERS

Site ID:	163317
Site Name:	TRI CITY AUTO PLAZA INC
Violation Date:	04-20-2015
Citation:	Un-Specified
Violation Description:	UST Program - Operations/Maintenance - For use of Local Ordinance only.
Violation Notes:	Returned to compliance on 08/13/2015.
Violation Division:	Contra Costa County Health Services Department
Violation Program:	UST
Violation Source:	CERS

Site ID:	163317
Site Name:	TRI CITY AUTO PLAZA INC
Violation Date:	04-24-2013
Citation:	HSC 6.7 Multiple Sections - California Health and Safety Code, Chapter 6.7, Section(s) Multiple Sections
Violation Description:	UST Program - Administration/Documentation - General
Violation Notes:	Returned to compliance on 06/04/2013.

TRI CITY AUTO PLAZA INC (Continued) **S121748583**

Violation Division:	Contra Costa County Health Services Department
Violation Program:	UST
Violation Source:	CERS
Site ID:	163317
Site Name:	TRI CITY AUTO PLAZA INC
Violation Date:	04-19-2016
Citation:	Un-Specified
Violation Description:	UST Program - Operations/Maintenance - For use of Local Ordinance only.
Violation Notes:	Returned to compliance on 05/05/2016.
Violation Division:	Contra Costa County Health Services Department
Violation Program:	UST
Violation Source:	CERS
Site ID:	163317
Site Name:	TRI CITY AUTO PLAZA INC
Violation Date:	04-20-2017
Citation:	HSC 6.7 Multiple - California Health and Safety Code, Chapter 6.7, Section(s) Multiple
Violation Description:	UST Program - Administration/Documentation - General - Must include violation description, proper statute and regulation citation in the "comment" section.
Violation Notes:	Returned to compliance on 10/12/2017.
Violation Division:	Contra Costa County Health Services Department
Violation Program:	UST
Violation Source:	CERS
Site ID:	163317
Site Name:	TRI CITY AUTO PLAZA INC
Violation Date:	09-01-2017
Citation:	23 CCR 16 2712(i) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2712(i)
Violation Description:	Failure to retain a copy of the permit to operate at the facility.
Violation Notes:	Returned to compliance on 10/12/2017.
Violation Division:	Contra Costa County Health Services Department
Violation Program:	UST
Violation Source:	CERS
Site ID:	163317
Site Name:	TRI CITY AUTO PLAZA INC
Violation Date:	06-25-2015
Citation:	Un-Specified
Violation Description:	UST Program - Operations/Maintenance - For use of Local Ordinance only.
Violation Notes:	Returned to compliance on 08/13/2015.
Violation Division:	Contra Costa County Health Services Department
Violation Program:	UST
Violation Source:	CERS
Site ID:	163317
Site Name:	TRI CITY AUTO PLAZA INC
Violation Date:	05-01-2015
Citation:	Un-Specified
Violation Description:	UST Program - Administration/Documentation - For use of Local Ordinance only
Violation Notes:	Returned to compliance on 05/19/2015.

TRI CITY AUTO PLAZA INC (Continued) **S121748583**

Violation Division: Contra Costa County Health Services Department
Violation Program: UST
Violation Source: CERS

Site ID: 163317
Site Name: TRI CITY AUTO PLAZA INC
Violation Date: 04-20-2017
Citation: HSC 6.5 Multiple - California Health and Safety Code, Chapter 6.5, Section(s) Multiple
Violation Description: Hazardous Waste Generator Program - Operations/Maintenance - General
Violation Notes: Returned to compliance on 04/28/2017.
Violation Division: Contra Costa County Health Services Department
Violation Program: HW
Violation Source: CERS

Site ID: 163317
Site Name: TRI CITY AUTO PLAZA INC
Violation Date: 04-20-2017
Citation: HSC 6.5 Multiple - California Health and Safety Code, Chapter 6.5, Section(s) Multiple
Violation Description: Hazardous Waste Generator Program - Operations/Maintenance - General
Violation Notes: Returned to compliance on 09/21/2018.
Violation Division: Contra Costa County Health Services Department
Violation Program: HW
Violation Source: CERS

Site ID: 163317
Site Name: TRI CITY AUTO PLAZA INC
Violation Date: 04-19-2016
Citation: Un-Specified
Violation Description: UST Program - Administration/Documentation - For use of Local Ordinance only
Violation Notes: Returned to compliance on 04/19/2016.
Violation Division: Contra Costa County Health Services Department
Violation Program: UST
Violation Source: CERS

Evaluation:
Eval General Type: Compliance Evaluation Inspection
Eval Date: 04-20-2015
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Contra Costa County Health Services Department
Eval Program: UST
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 04-20-2017
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Contra Costa County Health Services Department
Eval Program: HMRRP
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection

TRI CITY AUTO PLAZA INC (Continued) **S121748583**

Eval Date:	04-20-2017
Violations Found:	Yes
Eval Type:	Routine done by local agency
Eval Notes:	Not reported
Eval Division:	Contra Costa County Health Services Department
Eval Program:	HW
Eval Source:	CERS

Eval General Type:	Compliance Evaluation Inspection
Eval Date:	05-04-2018
Violations Found:	Yes
Eval Type:	Routine done by local agency
Eval Notes:	Not reported
Eval Division:	Contra Costa County Health Services Department
Eval Program:	UST
Eval Source:	CERS

Eval General Type:	Other/Unknown
Eval Date:	05-30-2017
Violations Found:	No
Eval Type:	Other, not routine, done by local agency
Eval Notes:	Not reported
Eval Division:	Contra Costa County Health Services Department
Eval Program:	HW
Eval Source:	CERS

Eval General Type:	Compliance Evaluation Inspection
Eval Date:	04-16-2014
Violations Found:	No
Eval Type:	Routine done by local agency
Eval Notes:	Not reported
Eval Division:	Contra Costa County Health Services Department
Eval Program:	HW
Eval Source:	CERS

Eval General Type:	Compliance Evaluation Inspection
Eval Date:	04-19-2016
Violations Found:	Yes
Eval Type:	Routine done by local agency
Eval Notes:	Not reported
Eval Division:	Contra Costa County Health Services Department
Eval Program:	UST
Eval Source:	CERS

Eval General Type:	Compliance Evaluation Inspection
Eval Date:	04-20-2015
Violations Found:	Yes
Eval Type:	Routine done by local agency
Eval Notes:	Not reported
Eval Division:	Contra Costa County Health Services Department
Eval Program:	APSA
Eval Source:	CERS

Eval General Type:	Compliance Evaluation Inspection
Eval Date:	04-20-2017
Violations Found:	No
Eval Type:	Routine done by local agency

TRI CITY AUTO PLAZA INC (Continued) **S121748583**

Eval Notes:	Not reported
Eval Division:	Contra Costa County Health Services Department
Eval Program:	APSA
Eval Source:	CERS

Eval General Type:	Compliance Evaluation Inspection
Eval Date:	04-24-2013
Violations Found:	Yes
Eval Type:	Routine done by local agency
Eval Notes:	Not reported
Eval Division:	Contra Costa County Health Services Department
Eval Program:	UST
Eval Source:	CERS

Eval General Type:	Other/Unknown
Eval Date:	05-01-2015
Violations Found:	Yes
Eval Type:	Other, not routine, done by local agency
Eval Notes:	Not reported
Eval Division:	Contra Costa County Health Services Department
Eval Program:	UST
Eval Source:	CERS

Eval General Type:	Other/Unknown
Eval Date:	06-25-2015
Violations Found:	No
Eval Type:	Other, not routine, done by local agency
Eval Notes:	Not reported
Eval Division:	Contra Costa County Health Services Department
Eval Program:	HMRRP
Eval Source:	CERS

Eval General Type:	Other/Unknown
Eval Date:	06-25-2015
Violations Found:	Yes
Eval Type:	Other, not routine, done by local agency
Eval Notes:	Not reported
Eval Division:	Contra Costa County Health Services Department
Eval Program:	UST
Eval Source:	CERS

Eval General Type:	Other/Unknown
Eval Date:	07-19-2018
Violations Found:	Yes
Eval Type:	Other, not routine, done by local agency
Eval Notes:	Not reported
Eval Division:	Contra Costa County Health Services Department
Eval Program:	UST
Eval Source:	CERS

Eval General Type:	Other/Unknown
Eval Date:	09-01-2017
Violations Found:	Yes
Eval Type:	Other, not routine, done by local agency
Eval Notes:	Not reported
Eval Division:	Contra Costa County Health Services Department
Eval Program:	UST

TRI CITY AUTO PLAZA INC (Continued) **S121748583**

Eval Source: CERS

Eval General Type: Other/Unknown
Eval Date: 01-25-2018
Violations Found: No
Eval Type: Other, not routine, done by local agency
Eval Notes: Not reported
Eval Division: Contra Costa County Health Services Department
Eval Program: UST
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 04-16-2014
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Contra Costa County Health Services Department
Eval Program: UST
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 04-20-2015
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Contra Costa County Health Services Department
Eval Program: HMRRP
Eval Source: CERS

Eval General Type: Other/Unknown
Eval Date: 05-06-2016
Violations Found: No
Eval Type: Other, not routine, done by local agency
Eval Notes: Not reported
Eval Division: Contra Costa County Health Services Department
Eval Program: UST
Eval Source: CERS

Eval General Type: Other/Unknown
Eval Date: 05-30-2017
Violations Found: No
Eval Type: Other, not routine, done by local agency
Eval Notes: Not reported
Eval Division: Contra Costa County Health Services Department
Eval Program: HMRRP
Eval Source: CERS

Eval General Type: Other/Unknown
Eval Date: 06-25-2015
Violations Found: No
Eval Type: Other, not routine, done by local agency
Eval Notes: Not reported
Eval Division: Contra Costa County Health Services Department
Eval Program: APSA
Eval Source: CERS

Eval General Type: Other/Unknown

TRI CITY AUTO PLAZA INC (Continued) **S121748583**

Eval Date:	09-24-2018
Violations Found:	No
Eval Type:	Other, not routine, done by local agency
Eval Notes:	Not reported
Eval Division:	Contra Costa County Health Services Department
Eval Program:	HW
Eval Source:	CERS

Eval General Type:	Compliance Evaluation Inspection
Eval Date:	04-16-2014
Violations Found:	No
Eval Type:	Routine done by local agency
Eval Notes:	Not reported
Eval Division:	Contra Costa County Health Services Department
Eval Program:	HMRRP
Eval Source:	CERS

Eval General Type:	Compliance Evaluation Inspection
Eval Date:	04-20-2015
Violations Found:	No
Eval Type:	Routine done by local agency
Eval Notes:	Not reported
Eval Division:	Contra Costa County Health Services Department
Eval Program:	HW
Eval Source:	CERS

Eval General Type:	Compliance Evaluation Inspection
Eval Date:	04-20-2017
Violations Found:	Yes
Eval Type:	Routine done by local agency
Eval Notes:	Not reported
Eval Division:	Contra Costa County Health Services Department
Eval Program:	UST
Eval Source:	CERS

Eval General Type:	Other/Unknown
Eval Date:	06-24-2014
Violations Found:	No
Eval Type:	Other, not routine, done by local agency
Eval Notes:	Not reported
Eval Division:	Contra Costa County Health Services Department
Eval Program:	UST
Eval Source:	CERS

Eval General Type:	Other/Unknown
Eval Date:	08-13-2015
Violations Found:	No
Eval Type:	Other, not routine, done by local agency
Eval Notes:	Not reported
Eval Division:	Contra Costa County Health Services Department
Eval Program:	UST
Eval Source:	CERS

Enforcement Action:

Site ID:	163317
Site Name:	TRI CITY AUTO PLAZA INC
Site Address:	6935 LONE TREE WAY

TRI CITY AUTO PLAZA INC (Continued) **S121748583**

Site City:	BRENTWOOD
Site Zip:	94513
Enf Action Date:	04-16-2014
Enf Action Type:	Notice of Violation (Unified Program)
Enf Action Description:	Notice of Violation Issued by the Inspector at the Time of Inspection
Enf Action Notes:	Not reported
Enf Action Division:	Contra Costa County Health Services Department
Enf Action Program:	UST
Enf Action Source:	CERS

Site ID:	163317
Site Name:	TRI CITY AUTO PLAZA INC
Site Address:	6935 LONE TREE WAY
Site City:	BRENTWOOD
Site Zip:	94513
Enf Action Date:	04-19-2016
Enf Action Type:	Notice of Violation (Unified Program)
Enf Action Description:	Notice of Violation Issued by the Inspector at the Time of Inspection
Enf Action Notes:	Not reported
Enf Action Division:	Contra Costa County Health Services Department
Enf Action Program:	UST
Enf Action Source:	CERS

Site ID:	163317
Site Name:	TRI CITY AUTO PLAZA INC
Site Address:	6935 LONE TREE WAY
Site City:	BRENTWOOD
Site Zip:	94513
Enf Action Date:	04-20-2015
Enf Action Type:	Notice of Violation (Unified Program)
Enf Action Description:	Notice of Violation Issued by the Inspector at the Time of Inspection
Enf Action Notes:	Not reported
Enf Action Division:	Contra Costa County Health Services Department
Enf Action Program:	APSA
Enf Action Source:	CERS

Site ID:	163317
Site Name:	TRI CITY AUTO PLAZA INC
Site Address:	6935 LONE TREE WAY
Site City:	BRENTWOOD
Site Zip:	94513
Enf Action Date:	04-20-2015
Enf Action Type:	Notice of Violation (Unified Program)
Enf Action Description:	Notice of Violation Issued by the Inspector at the Time of Inspection
Enf Action Notes:	Not reported
Enf Action Division:	Contra Costa County Health Services Department
Enf Action Program:	HMRRP
Enf Action Source:	CERS

Site ID:	163317
Site Name:	TRI CITY AUTO PLAZA INC
Site Address:	6935 LONE TREE WAY
Site City:	BRENTWOOD
Site Zip:	94513
Enf Action Date:	04-20-2015
Enf Action Type:	Notice of Violation (Unified Program)
Enf Action Description:	Notice of Violation Issued by the Inspector at the Time of Inspection

TRI CITY AUTO PLAZA INC (Continued) **S121748583**

Enf Action Notes:	Not reported
Enf Action Division:	Contra Costa County Health Services Department
Enf Action Program:	UST
Enf Action Source:	CERS

Site ID:	163317
Site Name:	TRI CITY AUTO PLAZA INC
Site Address:	6935 LONE TREE WAY
Site City:	BRENTWOOD
Site Zip:	94513
Enf Action Date:	04-20-2017
Enf Action Type:	Notice of Violation (Unified Program)
Enf Action Description:	Notice of Violation Issued by the Inspector at the Time of Inspection
Enf Action Notes:	Not reported
Enf Action Division:	Contra Costa County Health Services Department
Enf Action Program:	HMRRP
Enf Action Source:	CERS

Site ID:	163317
Site Name:	TRI CITY AUTO PLAZA INC
Site Address:	6935 LONE TREE WAY
Site City:	BRENTWOOD
Site Zip:	94513
Enf Action Date:	04-20-2017
Enf Action Type:	Notice of Violation (Unified Program)
Enf Action Description:	Notice of Violation Issued by the Inspector at the Time of Inspection
Enf Action Notes:	Not reported
Enf Action Division:	Contra Costa County Health Services Department
Enf Action Program:	HW
Enf Action Source:	CERS

Site ID:	163317
Site Name:	TRI CITY AUTO PLAZA INC
Site Address:	6935 LONE TREE WAY
Site City:	BRENTWOOD
Site Zip:	94513
Enf Action Date:	04-20-2017
Enf Action Type:	Notice of Violation (Unified Program)
Enf Action Description:	Notice of Violation Issued by the Inspector at the Time of Inspection
Enf Action Notes:	Not reported
Enf Action Division:	Contra Costa County Health Services Department
Enf Action Program:	UST
Enf Action Source:	CERS

Site ID:	163317
Site Name:	TRI CITY AUTO PLAZA INC
Site Address:	6935 LONE TREE WAY
Site City:	BRENTWOOD
Site Zip:	94513
Enf Action Date:	04-24-2013
Enf Action Type:	Notice of Violation (Unified Program)
Enf Action Description:	Notice of Violation Issued by the Inspector at the Time of Inspection
Enf Action Notes:	Not reported
Enf Action Division:	Contra Costa County Health Services Department
Enf Action Program:	UST
Enf Action Source:	CERS

TRI CITY AUTO PLAZA INC (Continued) **S121748583**

Site ID:	163317
Site Name:	TRI CITY AUTO PLAZA INC
Site Address:	6935 LONE TREE WAY
Site City:	BRENTWOOD
Site Zip:	94513
Enf Action Date:	05-01-2015
Enf Action Type:	Notice of Violation (Unified Program)
Enf Action Description:	Notice of Violation Issued by the Inspector at the Time of Inspection
Enf Action Notes:	Not reported
Enf Action Division:	Contra Costa County Health Services Department
Enf Action Program:	UST
Enf Action Source:	CERS

Site ID:	163317
Site Name:	TRI CITY AUTO PLAZA INC
Site Address:	6935 LONE TREE WAY
Site City:	BRENTWOOD
Site Zip:	94513
Enf Action Date:	05-04-2018
Enf Action Type:	Notice of Violation (Unified Program)
Enf Action Description:	Notice of Violation Issued by the Inspector at the Time of Inspection
Enf Action Notes:	Not reported
Enf Action Division:	Contra Costa County Health Services Department
Enf Action Program:	UST
Enf Action Source:	CERS

Site ID:	163317
Site Name:	TRI CITY AUTO PLAZA INC
Site Address:	6935 LONE TREE WAY
Site City:	BRENTWOOD
Site Zip:	94513
Enf Action Date:	06-25-2015
Enf Action Type:	Notice of Violation (Unified Program)
Enf Action Description:	Notice of Violation Issued by the Inspector at the Time of Inspection
Enf Action Notes:	Not reported
Enf Action Division:	Contra Costa County Health Services Department
Enf Action Program:	UST
Enf Action Source:	CERS

Site ID:	163317
Site Name:	TRI CITY AUTO PLAZA INC
Site Address:	6935 LONE TREE WAY
Site City:	BRENTWOOD
Site Zip:	94513
Enf Action Date:	07-19-2018
Enf Action Type:	Notice of Violation (Unified Program)
Enf Action Description:	Notice of Violation Issued by the Inspector at the Time of Inspection
Enf Action Notes:	Not reported
Enf Action Division:	Contra Costa County Health Services Department
Enf Action Program:	UST
Enf Action Source:	CERS

Site ID:	163317
Site Name:	TRI CITY AUTO PLAZA INC
Site Address:	6935 LONE TREE WAY
Site City:	BRENTWOOD
Site Zip:	94513

TRI CITY AUTO PLAZA INC (Continued) **S121748583**

Enf Action Date:	09-01-2017
Enf Action Type:	Notice of Violation (Unified Program)
Enf Action Description:	Notice of Violation Issued by the Inspector at the Time of Inspection
Enf Action Notes:	Not reported
Enf Action Division:	Contra Costa County Health Services Department
Enf Action Program:	UST
Enf Action Source:	CERS

Coordinates:

Site ID:	163317
Facility Name:	TRI CITY AUTO PLAZA INC
Env Int Type Code:	HWG
Program ID:	10018531
Coord Name:	Not reported
Ref Point Type Desc:	Unknown
Latitude:	37.961565
Longitude:	-121.724755

Affiliation:

Affiliation Type Desc:	CUPA District
Entity Name:	Contra Costa County Health Services Department
Entity Title:	Not reported
Affiliation Address:	4585 Pacheco BlvdSuite 100
Affiliation City:	Martinez
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	94553
Affiliation Phone:	(925) 335-3200

Affiliation Type Desc:	Facility Mailing Address
Entity Name:	Mailing Address
Entity Title:	Not reported
Affiliation Address:	6935 Lone tree way
Affiliation City:	Brentwood, CA
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	94513
Affiliation Phone:	Not reported

Affiliation Type Desc:	Identification Signer
Entity Name:	Monang gorlorwulu
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	Not reported

Affiliation Type Desc:	Legal Owner
Entity Name:	Igor Pashover
Entity Title:	Not reported
Affiliation Address:	6935 Lone Tree way
Affiliation City:	Brentwood
Affiliation State:	CA
Affiliation Country:	United States

TRI CITY AUTO PLAZA INC (Continued) **S121748583**

Affiliation Zip:	94513
Affiliation Phone:	(925) 513-7305
Affiliation Type Desc:	Parent Corporation
Entity Name:	Chevron Extra Mile
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	Not reported
Affiliation Type Desc:	Property Owner
Entity Name:	Igor Pashover
Entity Title:	Not reported
Affiliation Address:	6935 Lone tree way
Affiliation City:	Brentwood,
Affiliation State:	CA
Affiliation Country:	United States
Affiliation Zip:	94513
Affiliation Phone:	(925) 513-7305
Affiliation Type Desc:	UST Tank Operator
Entity Name:	IGOR PASKHOVER
Entity Title:	Not reported
Affiliation Address:	6935 lone tree way
Affiliation City:	brentwood
Affiliation State:	CA
Affiliation Country:	United States
Affiliation Zip:	94513
Affiliation Phone:	(925) 513-7305
Affiliation Type Desc:	Document Preparer
Entity Name:	Monang gorlorwulu
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	Not reported
Affiliation Type Desc:	UST Permit Applicant
Entity Name:	igor paskhover
Entity Title:	owner
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	(925) 513-7305
Affiliation Type Desc:	UST Tank Owner
Entity Name:	IGOR PASKHOVER
Entity Title:	Not reported
Affiliation Address:	6935 lone tree way

TRI CITY AUTO PLAZA INC (Continued) **S121748583**

Affiliation City:	brentwood
Affiliation State:	CA
Affiliation Country:	United States
Affiliation Zip:	94513
Affiliation Phone:	(925) 513-7305
Affiliation Type Desc:	Environmental Contact
Entity Name:	Monang Gorlorwulu
Entity Title:	Not reported
Affiliation Address:	6935 Lone tree way
Affiliation City:	Brentwood,
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	94513
Affiliation Phone:	(925) 513-7305
Affiliation Type Desc:	Operator
Entity Name:	Tri city Auto Plaza inc
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	(925) 513-7305
Affiliation Type Desc:	UST Property Owner Name
Entity Name:	Igor Paskhover
Entity Title:	Not reported
Affiliation Address:	6935 lone tree way
Affiliation City:	brentwood
Affiliation State:	CA
Affiliation Country:	United States
Affiliation Zip:	94513
Affiliation Phone:	(925) 513-7305

CERS TANKS:

Site ID:	163317
CERS ID:	10018531
CERS Description:	Aboveground Petroleum Storage

Violations:

Site ID:	163317
Site Name:	TRI CITY AUTO PLAZA INC
Violation Date:	04-20-2017
Citation:	HSC 6.5 Multiple - California Health and Safety Code, Chapter 6.5, Section(s) Multiple
Violation Description:	Hazardous Waste Generator Program - Operations/Maintenance - General
Violation Notes:	Returned to compliance on 05/26/2017.
Violation Division:	Contra Costa County Health Services Department
Violation Program:	HW
Violation Source:	CERS
Site ID:	163317
Site Name:	TRI CITY AUTO PLAZA INC
Violation Date:	05-04-2018

TRI CITY AUTO PLAZA INC (Continued) **S121748583**

Citation:	HSC 6.7 25290.1(e) - California Health and Safety Code, Chapter 6.7, Section(s) 25290.1(e)
Violation Description:	Failure to maintain the interstitial space such that a breach in the primary or secondary containment is detected before the liquid or vapor phase of the hazardous substance stored in the UST tank is released into the environment, i.e., vapor, pressure, hydrostatic (VPH) monitoring.
Violation Notes:	OBSERVATION: Owner/Operator did not maintain the interstitial space under constant vacuum, pressure, or hydrostatic monitoring such that a breach in the primary or secondary containment is detected before the liquid or vapor phase of the hazardous substance stored in the UST tank is released into the environment. The facility has active L10 (diesel STP - brine) and S9 (diesel-91 vac annular) alarms. Diesel STP sump was reported to be empty of brine by UST technician who performed monitoring certification on 4/19/18. CORRECTIVE ACTION: Maintain the interstitial space so that constant vacuum, pressure, or hydrostatic monitoring occurs. Obtain a permit and perform required repairs. Submit verification.
Violation Division:	Contra Costa County Health Services Department
Violation Program:	UST
Violation Source:	CERS

Site ID:	163317
Site Name:	TRI CITY AUTO PLAZA INC
Violation Date:	04-20-2015
Citation:	HSC 6.95 Multiple - California Health and Safety Code, Chapter 6.95, Section(s) Multiple
Violation Description:	Business Plan Program - Administration/Documentation - General
Violation Notes:	Returned to compliance on 04/20/2015.
Violation Division:	Contra Costa County Health Services Department
Violation Program:	HMRRP
Violation Source:	CERS

Site ID:	163317
Site Name:	TRI CITY AUTO PLAZA INC
Violation Date:	04-20-2017
Citation:	HSC 6.95 Multiple - California Health and Safety Code, Chapter 6.95, Section(s) Multiple
Violation Description:	Business Plan Program - Training - General
Violation Notes:	Returned to compliance on 05/26/2017. OBSERVATION: Gas station employees have not received training on carbon dioxide and propane. Express Lube employees have not received annual documented training on hazardous materials/emergency response. CORRECTIVE ACTION: Train employees and submit documentation to CCHS HMP.
Violation Division:	Contra Costa County Health Services Department
Violation Program:	HMRRP
Violation Source:	CERS

Site ID:	163317
Site Name:	TRI CITY AUTO PLAZA INC
Violation Date:	07-19-2018
Citation:	HSC 6.7 25284 - California Health and Safety Code, Chapter 6.7, Section(s) 25284
Violation Description:	Failure to obtain a valid permit to operate from the UPA including but not limited to unpaid permit fees.
Violation Notes:	Not reported
Violation Division:	Contra Costa County Health Services Department

TRI CITY AUTO PLAZA INC (Continued) **S121748583**

Violation Program:	UST
Violation Source:	CERS
Site ID:	163317
Site Name:	TRI CITY AUTO PLAZA INC
Violation Date:	04-16-2014
Citation:	HSC 6.7 Multiple Sections - California Health and Safety Code, Chapter 6.7, Section(s) Multiple Sections
Violation Description:	UST Program - Operations/Maintenance - General
Violation Notes:	Returned to compliance on 06/06/2014.
Violation Division:	Contra Costa County Health Services Department
Violation Program:	UST
Violation Source:	CERS
Site ID:	163317
Site Name:	TRI CITY AUTO PLAZA INC
Violation Date:	04-20-2015
Citation:	HSC 6.67 Multiple - California Health and Safety Code, Chapter 6.67, Section(s) Multiple
Violation Description:	APSA Program - Administration/Documentation - General
Violation Notes:	Returned to compliance on 06/29/2015.
Violation Division:	Contra Costa County Health Services Department
Violation Program:	APSA
Violation Source:	CERS
Site ID:	163317
Site Name:	TRI CITY AUTO PLAZA INC
Violation Date:	09-01-2017
Citation:	HSC 6.7 Multiple - California Health and Safety Code, Chapter 6.7, Section(s) Multiple
Violation Description:	UST Program - Administration/Documentation - General - Must include violation description, proper statute and regulation citation in the "comment" section.
Violation Notes:	Not reported
Violation Division:	Contra Costa County Health Services Department
Violation Program:	UST
Violation Source:	CERS
Site ID:	163317
Site Name:	TRI CITY AUTO PLAZA INC
Violation Date:	04-20-2017
Citation:	HSC 6.95 Multiple - California Health and Safety Code, Chapter 6.95, Section(s) Multiple
Violation Description:	Business Plan Program - Administration/Documentation - General
Violation Notes:	Returned to compliance on 05/24/2017. OBSERVATION: The site map is missing required elements including spill response equipment (fire extinguishers, spill absorbent), oil changer hazardous materials storage areas, evacuation area, loading area, propane and carbon dioxide locations. CORRECTIVE ACTION: Upload updated site map to CERS.
Violation Division:	Contra Costa County Health Services Department
Violation Program:	HMRRP
Violation Source:	CERS
Site ID:	163317
Site Name:	TRI CITY AUTO PLAZA INC
Violation Date:	04-20-2015
Citation:	Un-Specified

TRI CITY AUTO PLAZA INC (Continued) **S121748583**

Violation Description:	UST Program - Operations/Maintenance - For use of Local Ordinance only.
Violation Notes:	Returned to compliance on 08/13/2015.
Violation Division:	Contra Costa County Health Services Department
Violation Program:	UST
Violation Source:	CERS

Site ID:	163317
Site Name:	TRI CITY AUTO PLAZA INC
Violation Date:	04-24-2013
Citation:	HSC 6.7 Multiple Sections - California Health and Safety Code, Chapter 6.7, Section(s) Multiple Sections
Violation Description:	UST Program - Administration/Documentation - General
Violation Notes:	Returned to compliance on 06/04/2013.
Violation Division:	Contra Costa County Health Services Department
Violation Program:	UST
Violation Source:	CERS

Site ID:	163317
Site Name:	TRI CITY AUTO PLAZA INC
Violation Date:	04-19-2016
Citation:	Un-Specified
Violation Description:	UST Program - Operations/Maintenance - For use of Local Ordinance only.
Violation Notes:	Returned to compliance on 05/05/2016.
Violation Division:	Contra Costa County Health Services Department
Violation Program:	UST
Violation Source:	CERS

Site ID:	163317
Site Name:	TRI CITY AUTO PLAZA INC
Violation Date:	04-20-2017
Citation:	HSC 6.7 Multiple - California Health and Safety Code, Chapter 6.7, Section(s) Multiple
Violation Description:	UST Program - Administration/Documentation - General - Must include violation description, proper statute and regulation citation in the "comment" section.
Violation Notes:	Returned to compliance on 10/12/2017.
Violation Division:	Contra Costa County Health Services Department
Violation Program:	UST
Violation Source:	CERS

Site ID:	163317
Site Name:	TRI CITY AUTO PLAZA INC
Violation Date:	09-01-2017
Citation:	23 CCR 16 2712(i) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2712(i)
Violation Description:	Failure to retain a copy of the permit to operate at the facility.
Violation Notes:	Returned to compliance on 10/12/2017.
Violation Division:	Contra Costa County Health Services Department
Violation Program:	UST
Violation Source:	CERS

Site ID:	163317
Site Name:	TRI CITY AUTO PLAZA INC
Violation Date:	06-25-2015
Citation:	Un-Specified

TRI CITY AUTO PLAZA INC (Continued) **S121748583**

Violation Description: UST Program - Operations/Maintenance - For use of Local Ordinance only.
Violation Notes: Returned to compliance on 08/13/2015.
Violation Division: Contra Costa County Health Services Department
Violation Program: UST
Violation Source: CERS

Site ID: 163317
Site Name: TRI CITY AUTO PLAZA INC
Violation Date: 05-01-2015
Citation: Un-Specified
Violation Description: UST Program - Administration/Documentation - For use of Local Ordinance only
Violation Notes: Returned to compliance on 05/19/2015.
Violation Division: Contra Costa County Health Services Department
Violation Program: UST
Violation Source: CERS

Site ID: 163317
Site Name: TRI CITY AUTO PLAZA INC
Violation Date: 04-20-2017
Citation: HSC 6.5 Multiple - California Health and Safety Code, Chapter 6.5, Section(s) Multiple
Violation Description: Hazardous Waste Generator Program - Operations/Maintenance - General
Violation Notes: Returned to compliance on 04/28/2017.
Violation Division: Contra Costa County Health Services Department
Violation Program: HW
Violation Source: CERS

Site ID: 163317
Site Name: TRI CITY AUTO PLAZA INC
Violation Date: 04-20-2017
Citation: HSC 6.5 Multiple - California Health and Safety Code, Chapter 6.5, Section(s) Multiple
Violation Description: Hazardous Waste Generator Program - Operations/Maintenance - General
Violation Notes: Returned to compliance on 09/21/2018.
Violation Division: Contra Costa County Health Services Department
Violation Program: HW
Violation Source: CERS

Site ID: 163317
Site Name: TRI CITY AUTO PLAZA INC
Violation Date: 04-19-2016
Citation: Un-Specified
Violation Description: UST Program - Administration/Documentation - For use of Local Ordinance only
Violation Notes: Returned to compliance on 04/19/2016.
Violation Division: Contra Costa County Health Services Department
Violation Program: UST
Violation Source: CERS

Evaluation:
Eval General Type: Compliance Evaluation Inspection
Eval Date: 04-20-2015
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Not reported

TRI CITY AUTO PLAZA INC (Continued) **S121748583**

Eval Division:	Contra Costa County Health Services Department
Eval Program:	UST
Eval Source:	CERS

Eval General Type:	Compliance Evaluation Inspection
Eval Date:	04-20-2017
Violations Found:	Yes
Eval Type:	Routine done by local agency
Eval Notes:	Not reported
Eval Division:	Contra Costa County Health Services Department
Eval Program:	HMRRP
Eval Source:	CERS

Eval General Type:	Compliance Evaluation Inspection
Eval Date:	04-20-2017
Violations Found:	Yes
Eval Type:	Routine done by local agency
Eval Notes:	Not reported
Eval Division:	Contra Costa County Health Services Department
Eval Program:	HW
Eval Source:	CERS

Eval General Type:	Compliance Evaluation Inspection
Eval Date:	05-04-2018
Violations Found:	Yes
Eval Type:	Routine done by local agency
Eval Notes:	Not reported
Eval Division:	Contra Costa County Health Services Department
Eval Program:	UST
Eval Source:	CERS

Eval General Type:	Other/Unknown
Eval Date:	05-30-2017
Violations Found:	No
Eval Type:	Other, not routine, done by local agency
Eval Notes:	Not reported
Eval Division:	Contra Costa County Health Services Department
Eval Program:	HW
Eval Source:	CERS

Eval General Type:	Compliance Evaluation Inspection
Eval Date:	04-16-2014
Violations Found:	No
Eval Type:	Routine done by local agency
Eval Notes:	Not reported
Eval Division:	Contra Costa County Health Services Department
Eval Program:	HW
Eval Source:	CERS

Eval General Type:	Compliance Evaluation Inspection
Eval Date:	04-19-2016
Violations Found:	Yes
Eval Type:	Routine done by local agency
Eval Notes:	Not reported
Eval Division:	Contra Costa County Health Services Department
Eval Program:	UST
Eval Source:	CERS

TRI CITY AUTO PLAZA INC (Continued) **S121748583**

Eval General Type:	Compliance Evaluation Inspection
Eval Date:	04-20-2015
Violations Found:	Yes
Eval Type:	Routine done by local agency
Eval Notes:	Not reported
Eval Division:	Contra Costa County Health Services Department
Eval Program:	APSA
Eval Source:	CERS

Eval General Type:	Compliance Evaluation Inspection
Eval Date:	04-20-2017
Violations Found:	No
Eval Type:	Routine done by local agency
Eval Notes:	Not reported
Eval Division:	Contra Costa County Health Services Department
Eval Program:	APSA
Eval Source:	CERS

Eval General Type:	Compliance Evaluation Inspection
Eval Date:	04-24-2013
Violations Found:	Yes
Eval Type:	Routine done by local agency
Eval Notes:	Not reported
Eval Division:	Contra Costa County Health Services Department
Eval Program:	UST
Eval Source:	CERS

Eval General Type:	Other/Unknown
Eval Date:	05-01-2015
Violations Found:	Yes
Eval Type:	Other, not routine, done by local agency
Eval Notes:	Not reported
Eval Division:	Contra Costa County Health Services Department
Eval Program:	UST
Eval Source:	CERS

Eval General Type:	Other/Unknown
Eval Date:	06-25-2015
Violations Found:	No
Eval Type:	Other, not routine, done by local agency
Eval Notes:	Not reported
Eval Division:	Contra Costa County Health Services Department
Eval Program:	HMRRP
Eval Source:	CERS

Eval General Type:	Other/Unknown
Eval Date:	06-25-2015
Violations Found:	Yes
Eval Type:	Other, not routine, done by local agency
Eval Notes:	Not reported
Eval Division:	Contra Costa County Health Services Department
Eval Program:	UST
Eval Source:	CERS

Eval General Type:	Other/Unknown
Eval Date:	07-19-2018
Violations Found:	Yes

TRI CITY AUTO PLAZA INC (Continued) **S121748583**

Eval Type:	Other, not routine, done by local agency
Eval Notes:	Not reported
Eval Division:	Contra Costa County Health Services Department
Eval Program:	UST
Eval Source:	CERS

Eval General Type:	Other/Unknown
Eval Date:	09-01-2017
Violations Found:	Yes
Eval Type:	Other, not routine, done by local agency
Eval Notes:	Not reported
Eval Division:	Contra Costa County Health Services Department
Eval Program:	UST
Eval Source:	CERS

Eval General Type:	Other/Unknown
Eval Date:	01-25-2018
Violations Found:	No
Eval Type:	Other, not routine, done by local agency
Eval Notes:	Not reported
Eval Division:	Contra Costa County Health Services Department
Eval Program:	UST
Eval Source:	CERS

Eval General Type:	Compliance Evaluation Inspection
Eval Date:	04-16-2014
Violations Found:	Yes
Eval Type:	Routine done by local agency
Eval Notes:	Not reported
Eval Division:	Contra Costa County Health Services Department
Eval Program:	UST
Eval Source:	CERS

Eval General Type:	Compliance Evaluation Inspection
Eval Date:	04-20-2015
Violations Found:	Yes
Eval Type:	Routine done by local agency
Eval Notes:	Not reported
Eval Division:	Contra Costa County Health Services Department
Eval Program:	HMRRP
Eval Source:	CERS

Eval General Type:	Other/Unknown
Eval Date:	05-06-2016
Violations Found:	No
Eval Type:	Other, not routine, done by local agency
Eval Notes:	Not reported
Eval Division:	Contra Costa County Health Services Department
Eval Program:	UST
Eval Source:	CERS

Eval General Type:	Other/Unknown
Eval Date:	05-30-2017
Violations Found:	No
Eval Type:	Other, not routine, done by local agency
Eval Notes:	Not reported
Eval Division:	Contra Costa County Health Services Department

TRI CITY AUTO PLAZA INC (Continued) **S121748583**

Eval Program:	HMRRP
Eval Source:	CERS
Eval General Type:	Other/Unknown
Eval Date:	06-25-2015
Violations Found:	No
Eval Type:	Other, not routine, done by local agency
Eval Notes:	Not reported
Eval Division:	Contra Costa County Health Services Department
Eval Program:	APSA
Eval Source:	CERS
Eval General Type:	Other/Unknown
Eval Date:	09-24-2018
Violations Found:	No
Eval Type:	Other, not routine, done by local agency
Eval Notes:	Not reported
Eval Division:	Contra Costa County Health Services Department
Eval Program:	HW
Eval Source:	CERS
Eval General Type:	Compliance Evaluation Inspection
Eval Date:	04-16-2014
Violations Found:	No
Eval Type:	Routine done by local agency
Eval Notes:	Not reported
Eval Division:	Contra Costa County Health Services Department
Eval Program:	HMRRP
Eval Source:	CERS
Eval General Type:	Compliance Evaluation Inspection
Eval Date:	04-20-2015
Violations Found:	No
Eval Type:	Routine done by local agency
Eval Notes:	Not reported
Eval Division:	Contra Costa County Health Services Department
Eval Program:	HW
Eval Source:	CERS
Eval General Type:	Compliance Evaluation Inspection
Eval Date:	04-20-2017
Violations Found:	Yes
Eval Type:	Routine done by local agency
Eval Notes:	Not reported
Eval Division:	Contra Costa County Health Services Department
Eval Program:	UST
Eval Source:	CERS
Eval General Type:	Other/Unknown
Eval Date:	06-24-2014
Violations Found:	No
Eval Type:	Other, not routine, done by local agency
Eval Notes:	Not reported
Eval Division:	Contra Costa County Health Services Department
Eval Program:	UST
Eval Source:	CERS

TRI CITY AUTO PLAZA INC (Continued) **S121748583**

Eval General Type:	Other/Unknown
Eval Date:	08-13-2015
Violations Found:	No
Eval Type:	Other, not routine, done by local agency
Eval Notes:	Not reported
Eval Division:	Contra Costa County Health Services Department
Eval Program:	UST
Eval Source:	CERS

Enforcement Action:

Site ID:	163317
Site Name:	TRI CITY AUTO PLAZA INC
Site Address:	6935 LONE TREE WAY
Site City:	BRENTWOOD
Site Zip:	94513
Enf Action Date:	04-16-2014
Enf Action Type:	Notice of Violation (Unified Program)
Enf Action Description:	Notice of Violation Issued by the Inspector at the Time of Inspection
Enf Action Notes:	Not reported
Enf Action Division:	Contra Costa County Health Services Department
Enf Action Program:	UST
Enf Action Source:	CERS

Site ID:	163317
Site Name:	TRI CITY AUTO PLAZA INC
Site Address:	6935 LONE TREE WAY
Site City:	BRENTWOOD
Site Zip:	94513
Enf Action Date:	04-19-2016
Enf Action Type:	Notice of Violation (Unified Program)
Enf Action Description:	Notice of Violation Issued by the Inspector at the Time of Inspection
Enf Action Notes:	Not reported
Enf Action Division:	Contra Costa County Health Services Department
Enf Action Program:	UST
Enf Action Source:	CERS

Site ID:	163317
Site Name:	TRI CITY AUTO PLAZA INC
Site Address:	6935 LONE TREE WAY
Site City:	BRENTWOOD
Site Zip:	94513
Enf Action Date:	04-20-2015
Enf Action Type:	Notice of Violation (Unified Program)
Enf Action Description:	Notice of Violation Issued by the Inspector at the Time of Inspection
Enf Action Notes:	Not reported
Enf Action Division:	Contra Costa County Health Services Department
Enf Action Program:	APSA
Enf Action Source:	CERS

Site ID:	163317
Site Name:	TRI CITY AUTO PLAZA INC
Site Address:	6935 LONE TREE WAY
Site City:	BRENTWOOD
Site Zip:	94513
Enf Action Date:	04-20-2015
Enf Action Type:	Notice of Violation (Unified Program)
Enf Action Description:	Notice of Violation Issued by the Inspector at the Time of Inspection

TRI CITY AUTO PLAZA INC (Continued) **S121748583**

Enf Action Notes:	Not reported
Enf Action Division:	Contra Costa County Health Services Department
Enf Action Program:	HMRRP
Enf Action Source:	CERS

Site ID:	163317
Site Name:	TRI CITY AUTO PLAZA INC
Site Address:	6935 LONE TREE WAY
Site City:	BRENTWOOD
Site Zip:	94513
Enf Action Date:	04-20-2015
Enf Action Type:	Notice of Violation (Unified Program)
Enf Action Description:	Notice of Violation Issued by the Inspector at the Time of Inspection
Enf Action Notes:	Not reported
Enf Action Division:	Contra Costa County Health Services Department
Enf Action Program:	UST
Enf Action Source:	CERS

Site ID:	163317
Site Name:	TRI CITY AUTO PLAZA INC
Site Address:	6935 LONE TREE WAY
Site City:	BRENTWOOD
Site Zip:	94513
Enf Action Date:	04-20-2017
Enf Action Type:	Notice of Violation (Unified Program)
Enf Action Description:	Notice of Violation Issued by the Inspector at the Time of Inspection
Enf Action Notes:	Not reported
Enf Action Division:	Contra Costa County Health Services Department
Enf Action Program:	HMRRP
Enf Action Source:	CERS

Site ID:	163317
Site Name:	TRI CITY AUTO PLAZA INC
Site Address:	6935 LONE TREE WAY
Site City:	BRENTWOOD
Site Zip:	94513
Enf Action Date:	04-20-2017
Enf Action Type:	Notice of Violation (Unified Program)
Enf Action Description:	Notice of Violation Issued by the Inspector at the Time of Inspection
Enf Action Notes:	Not reported
Enf Action Division:	Contra Costa County Health Services Department
Enf Action Program:	HW
Enf Action Source:	CERS

Site ID:	163317
Site Name:	TRI CITY AUTO PLAZA INC
Site Address:	6935 LONE TREE WAY
Site City:	BRENTWOOD
Site Zip:	94513
Enf Action Date:	04-20-2017
Enf Action Type:	Notice of Violation (Unified Program)
Enf Action Description:	Notice of Violation Issued by the Inspector at the Time of Inspection
Enf Action Notes:	Not reported
Enf Action Division:	Contra Costa County Health Services Department
Enf Action Program:	UST
Enf Action Source:	CERS

TRI CITY AUTO PLAZA INC (Continued) **S121748583**

Site ID:	163317
Site Name:	TRI CITY AUTO PLAZA INC
Site Address:	6935 LONE TREE WAY
Site City:	BRENTWOOD
Site Zip:	94513
Enf Action Date:	04-24-2013
Enf Action Type:	Notice of Violation (Unified Program)
Enf Action Description:	Notice of Violation Issued by the Inspector at the Time of Inspection
Enf Action Notes:	Not reported
Enf Action Division:	Contra Costa County Health Services Department
Enf Action Program:	UST
Enf Action Source:	CERS

Site ID:	163317
Site Name:	TRI CITY AUTO PLAZA INC
Site Address:	6935 LONE TREE WAY
Site City:	BRENTWOOD
Site Zip:	94513
Enf Action Date:	05-01-2015
Enf Action Type:	Notice of Violation (Unified Program)
Enf Action Description:	Notice of Violation Issued by the Inspector at the Time of Inspection
Enf Action Notes:	Not reported
Enf Action Division:	Contra Costa County Health Services Department
Enf Action Program:	UST
Enf Action Source:	CERS

Site ID:	163317
Site Name:	TRI CITY AUTO PLAZA INC
Site Address:	6935 LONE TREE WAY
Site City:	BRENTWOOD
Site Zip:	94513
Enf Action Date:	05-04-2018
Enf Action Type:	Notice of Violation (Unified Program)
Enf Action Description:	Notice of Violation Issued by the Inspector at the Time of Inspection
Enf Action Notes:	Not reported
Enf Action Division:	Contra Costa County Health Services Department
Enf Action Program:	UST
Enf Action Source:	CERS

Site ID:	163317
Site Name:	TRI CITY AUTO PLAZA INC
Site Address:	6935 LONE TREE WAY
Site City:	BRENTWOOD
Site Zip:	94513
Enf Action Date:	06-25-2015
Enf Action Type:	Notice of Violation (Unified Program)
Enf Action Description:	Notice of Violation Issued by the Inspector at the Time of Inspection
Enf Action Notes:	Not reported
Enf Action Division:	Contra Costa County Health Services Department
Enf Action Program:	UST
Enf Action Source:	CERS

Site ID:	163317
Site Name:	TRI CITY AUTO PLAZA INC
Site Address:	6935 LONE TREE WAY
Site City:	BRENTWOOD
Site Zip:	94513

TRI CITY AUTO PLAZA INC (Continued) **S121748583**

Enf Action Date:	07-19-2018
Enf Action Type:	Notice of Violation (Unified Program)
Enf Action Description:	Notice of Violation Issued by the Inspector at the Time of Inspection
Enf Action Notes:	Not reported
Enf Action Division:	Contra Costa County Health Services Department
Enf Action Program:	UST
Enf Action Source:	CERS

Site ID:	163317
Site Name:	TRI CITY AUTO PLAZA INC
Site Address:	6935 LONE TREE WAY
Site City:	BRENTWOOD
Site Zip:	94513
Enf Action Date:	09-01-2017
Enf Action Type:	Notice of Violation (Unified Program)
Enf Action Description:	Notice of Violation Issued by the Inspector at the Time of Inspection
Enf Action Notes:	Not reported
Enf Action Division:	Contra Costa County Health Services Department
Enf Action Program:	UST
Enf Action Source:	CERS

Coordinates:

Site ID:	163317
Facility Name:	TRI CITY AUTO PLAZA INC
Env Int Type Code:	HWG
Program ID:	10018531
Coord Name:	Not reported
Ref Point Type Desc:	Unknown
Latitude:	37.961565
Longitude:	-121.724755

Affiliation:

Affiliation Type Desc:	CUPA District
Entity Name:	Contra Costa County Health Services Department
Entity Title:	Not reported
Affiliation Address:	4585 Pacheco BlvdSuite 100
Affiliation City:	Martinez
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	94553
Affiliation Phone:	(925) 335-3200

Affiliation Type Desc:	Facility Mailing Address
Entity Name:	Mailing Address
Entity Title:	Not reported
Affiliation Address:	6935 Lone tree way
Affiliation City:	Brentwood, CA
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	94513
Affiliation Phone:	Not reported

Affiliation Type Desc:	Identification Signer
Entity Name:	Monang gorlorwulu
Entity Title:	Not reported
Affiliation Address:	Not reported

TRI CITY AUTO PLAZA INC (Continued) **S121748583**

Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	Not reported

Affiliation Type Desc:	Legal Owner
Entity Name:	Igor Pashover
Entity Title:	Not reported
Affiliation Address:	6935 Lone Tree way
Affiliation City:	Brentwood
Affiliation State:	CA
Affiliation Country:	United States
Affiliation Zip:	94513
Affiliation Phone:	(925) 513-7305

Affiliation Type Desc:	Parent Corporation
Entity Name:	Chevron Extra Mile
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	Not reported

Affiliation Type Desc:	Property Owner
Entity Name:	Igor Pashover
Entity Title:	Not reported
Affiliation Address:	6935 Lone tree way
Affiliation City:	Brentwood,
Affiliation State:	CA
Affiliation Country:	United States
Affiliation Zip:	94513
Affiliation Phone:	(925) 513-7305

Affiliation Type Desc:	UST Tank Operator
Entity Name:	IGOR PASKHOVER
Entity Title:	Not reported
Affiliation Address:	6935 lone tree way
Affiliation City:	brentwood
Affiliation State:	CA
Affiliation Country:	United States
Affiliation Zip:	94513
Affiliation Phone:	(925) 513-7305

Affiliation Type Desc:	Document Preparer
Entity Name:	Monang gorlorwulu
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	Not reported

Affiliation Type Desc:	UST Permit Applicant

TRI CITY AUTO PLAZA INC (Continued) **S121748583**

Entity Name:	igor paskhover
Entity Title:	owner
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	(925) 513-7305

Affiliation Type Desc:	UST Tank Owner
Entity Name:	IGOR PASKHOVER
Entity Title:	Not reported
Affiliation Address:	6935 lone tree way
Affiliation City:	brentwood
Affiliation State:	CA
Affiliation Country:	United States
Affiliation Zip:	94513
Affiliation Phone:	(925) 513-7305

Affiliation Type Desc:	Environmental Contact
Entity Name:	Monang Gorlorwulu
Entity Title:	Not reported
Affiliation Address:	6935 Lone tree way
Affiliation City:	Brentwood,
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	94513
Affiliation Phone:	(925) 513-7305

Affiliation Type Desc:	Operator
Entity Name:	Tri city Auto Plaza inc
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	(925) 513-7305

Affiliation Type Desc:	UST Property Owner Name
Entity Name:	Igor Paskhover
Entity Title:	Not reported
Affiliation Address:	6935 lone tree way
Affiliation City:	brentwood
Affiliation State:	CA
Affiliation Country:	United States
Affiliation Zip:	94513
Affiliation Phone:	(925) 513-7305

Site ID:	163317
CERS ID:	10018531
CERS Description:	Underground Storage Tank

Violations:

Site ID:	163317
Site Name:	TRI CITY AUTO PLAZA INC
Violation Date:	04-20-2017

TRI CITY AUTO PLAZA INC (Continued) **S121748583**

Citation:	HSC 6.5 Multiple - California Health and Safety Code, Chapter 6.5, Section(s) Multiple
Violation Description:	Hazardous Waste Generator Program - Operations/Maintenance - General
Violation Notes:	Returned to compliance on 05/26/2017.
Violation Division:	Contra Costa County Health Services Department
Violation Program:	HW
Violation Source:	CERS

Site ID:	163317
Site Name:	TRI CITY AUTO PLAZA INC
Violation Date:	05-04-2018
Citation:	HSC 6.7 25290.1(e) - California Health and Safety Code, Chapter 6.7, Section(s) 25290.1(e)
Violation Description:	Failure to maintain the interstitial space such that a breach in the primary or secondary containment is detected before the liquid or vapor phase of the hazardous substance stored in the UST tank is released into the environment, i.e., vapor, pressure, hydrostatic (VPH) monitoring.
Violation Notes:	OBSERVATION: Owner/Operator did not maintain the interstitial space under constant vacuum, pressure, or hydrostatic monitoring such that a breach in the primary or secondary containment is detected before the liquid or vapor phase of the hazardous substance stored in the UST tank is released into the environment. The facility has active L10 (diesel STP - brine) and S9 (diesel-91 vac annular) alarms. Diesel STP sump was reported to be empty of brine by UST technician who performed monitoring certification on 4/19/18. CORRECTIVE ACTION: Maintain the interstitial space so that constant vacuum, pressure, or hydrostatic monitoring occurs. Obtain a permit and perform required repairs. Submit verification.
Violation Division:	Contra Costa County Health Services Department
Violation Program:	UST
Violation Source:	CERS

Site ID:	163317
Site Name:	TRI CITY AUTO PLAZA INC
Violation Date:	04-20-2015
Citation:	HSC 6.95 Multiple - California Health and Safety Code, Chapter 6.95, Section(s) Multiple
Violation Description:	Business Plan Program - Administration/Documentation - General
Violation Notes:	Returned to compliance on 04/20/2015.
Violation Division:	Contra Costa County Health Services Department
Violation Program:	HMRRP
Violation Source:	CERS

Site ID:	163317
Site Name:	TRI CITY AUTO PLAZA INC
Violation Date:	04-20-2017
Citation:	HSC 6.95 Multiple - California Health and Safety Code, Chapter 6.95, Section(s) Multiple
Violation Description:	Business Plan Program - Training - General
Violation Notes:	Returned to compliance on 05/26/2017. OBSERVATION: Gas station employees have not received training on carbon dioxide and propane. Express Lube employees have not received annual documented training on hazardous materials/emergency response. CORRECTIVE ACTION: Train employees and submit documentation to CCHS HMP.
Violation Division:	Contra Costa County Health Services Department
Violation Program:	HMRRP

TRI CITY AUTO PLAZA INC (Continued) **S121748583**

Violation Source: CERS

Site ID: 163317
Site Name: TRI CITY AUTO PLAZA INC
Violation Date: 07-19-2018
Citation: HSC 6.7 25284 - California Health and Safety Code, Chapter 6.7, Section(s) 25284
Violation Description: Failure to obtain a valid permit to operate from the UPA including but not limited to unpaid permit fees.
Violation Notes: Not reported
Violation Division: Contra Costa County Health Services Department
Violation Program: UST
Violation Source: CERS

Site ID: 163317
Site Name: TRI CITY AUTO PLAZA INC
Violation Date: 04-16-2014
Citation: HSC 6.7 Multiple Sections - California Health and Safety Code, Chapter 6.7, Section(s) Multiple Sections
Violation Description: UST Program - Operations/Maintenance - General
Violation Notes: Returned to compliance on 06/06/2014.
Violation Division: Contra Costa County Health Services Department
Violation Program: UST
Violation Source: CERS

Site ID: 163317
Site Name: TRI CITY AUTO PLAZA INC
Violation Date: 04-20-2015
Citation: HSC 6.67 Multiple - California Health and Safety Code, Chapter 6.67, Section(s) Multiple
Violation Description: APSA Program - Administration/Documentation - General
Violation Notes: Returned to compliance on 06/29/2015.
Violation Division: Contra Costa County Health Services Department
Violation Program: APSA
Violation Source: CERS

Site ID: 163317
Site Name: TRI CITY AUTO PLAZA INC
Violation Date: 09-01-2017
Citation: HSC 6.7 Multiple - California Health and Safety Code, Chapter 6.7, Section(s) Multiple
Violation Description: UST Program - Administration/Documentation - General - Must include violation description, proper statute and regulation citation in the "comment" section.
Violation Notes: Not reported
Violation Division: Contra Costa County Health Services Department
Violation Program: UST
Violation Source: CERS

Site ID: 163317
Site Name: TRI CITY AUTO PLAZA INC
Violation Date: 04-20-2017
Citation: HSC 6.95 Multiple - California Health and Safety Code, Chapter 6.95, Section(s) Multiple
Violation Description: Business Plan Program - Administration/Documentation - General
Violation Notes: Returned to compliance on 05/24/2017. OBSERVATION: The site map is missing required elements including spill response equipment (fire

TRI CITY AUTO PLAZA INC (Continued) **S121748583**

extinguishers, spill absorbent), oil changer hazardous materials storage areas, evacuation area, loading area, propane and carbon dioxide locations. CORRECTIVE ACTION: Upload updated site map to CERS.

Violation Division: Contra Costa County Health Services Department
Violation Program: HMRRP
Violation Source: CERS

Site ID: 163317
Site Name: TRI CITY AUTO PLAZA INC
Violation Date: 04-20-2015
Citation: Un-Specified
Violation Description: UST Program - Operations/Maintenance - For use of Local Ordinance only.
Violation Notes: Returned to compliance on 08/13/2015.
Violation Division: Contra Costa County Health Services Department
Violation Program: UST
Violation Source: CERS

Site ID: 163317
Site Name: TRI CITY AUTO PLAZA INC
Violation Date: 04-24-2013
Citation: HSC 6.7 Multiple Sections - California Health and Safety Code, Chapter 6.7, Section(s) Multiple Sections
Violation Description: UST Program - Administration/Documentation - General
Violation Notes: Returned to compliance on 06/04/2013.
Violation Division: Contra Costa County Health Services Department
Violation Program: UST
Violation Source: CERS

Site ID: 163317
Site Name: TRI CITY AUTO PLAZA INC
Violation Date: 04-19-2016
Citation: Un-Specified
Violation Description: UST Program - Operations/Maintenance - For use of Local Ordinance only.
Violation Notes: Returned to compliance on 05/05/2016.
Violation Division: Contra Costa County Health Services Department
Violation Program: UST
Violation Source: CERS

Site ID: 163317
Site Name: TRI CITY AUTO PLAZA INC
Violation Date: 04-20-2017
Citation: HSC 6.7 Multiple - California Health and Safety Code, Chapter 6.7, Section(s) Multiple
Violation Description: UST Program - Administration/Documentation - General - Must include violation description, proper statute and regulation citation in the "comment" section.
Violation Notes: Returned to compliance on 10/12/2017.
Violation Division: Contra Costa County Health Services Department
Violation Program: UST
Violation Source: CERS

Site ID: 163317
Site Name: TRI CITY AUTO PLAZA INC
Violation Date: 09-01-2017
Citation: 23 CCR 16 2712(i) - California Code of Regulations, Title 23, Chapter

TRI CITY AUTO PLAZA INC (Continued) **S121748583**

	16, Section(s) 2712(i)
Violation Description:	Failure to retain a copy of the permit to operate at the facility.
Violation Notes:	Returned to compliance on 10/12/2017.
Violation Division:	Contra Costa County Health Services Department
Violation Program:	UST
Violation Source:	CERS

Site ID:	163317
Site Name:	TRI CITY AUTO PLAZA INC
Violation Date:	06-25-2015
Citation:	Un-Specified
Violation Description:	UST Program - Operations/Maintenance - For use of Local Ordinance only.
Violation Notes:	Returned to compliance on 08/13/2015.
Violation Division:	Contra Costa County Health Services Department
Violation Program:	UST
Violation Source:	CERS

Site ID:	163317
Site Name:	TRI CITY AUTO PLAZA INC
Violation Date:	05-01-2015
Citation:	Un-Specified
Violation Description:	UST Program - Administration/Documentation - For use of Local Ordinance only
Violation Notes:	Returned to compliance on 05/19/2015.
Violation Division:	Contra Costa County Health Services Department
Violation Program:	UST
Violation Source:	CERS

Site ID:	163317
Site Name:	TRI CITY AUTO PLAZA INC
Violation Date:	04-20-2017
Citation:	HSC 6.5 Multiple - California Health and Safety Code, Chapter 6.5, Section(s) Multiple
Violation Description:	Hazardous Waste Generator Program - Operations/Maintenance - General
Violation Notes:	Returned to compliance on 04/28/2017.
Violation Division:	Contra Costa County Health Services Department
Violation Program:	HW
Violation Source:	CERS

Site ID:	163317
Site Name:	TRI CITY AUTO PLAZA INC
Violation Date:	04-20-2017
Citation:	HSC 6.5 Multiple - California Health and Safety Code, Chapter 6.5, Section(s) Multiple
Violation Description:	Hazardous Waste Generator Program - Operations/Maintenance - General
Violation Notes:	Returned to compliance on 09/21/2018.
Violation Division:	Contra Costa County Health Services Department
Violation Program:	HW
Violation Source:	CERS

Site ID:	163317
Site Name:	TRI CITY AUTO PLAZA INC
Violation Date:	04-19-2016
Citation:	Un-Specified
Violation Description:	UST Program - Administration/Documentation - For use of Local Ordinance only

TRI CITY AUTO PLAZA INC (Continued) **S121748583**

Violation Notes: Returned to compliance on 04/19/2016.
Violation Division: Contra Costa County Health Services Department
Violation Program: UST
Violation Source: CERS

Evaluation:
Eval General Type: Compliance Evaluation Inspection
Eval Date: 04-20-2015
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Contra Costa County Health Services Department
Eval Program: UST
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 04-20-2017
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Contra Costa County Health Services Department
Eval Program: HMRRP
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 04-20-2017
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Contra Costa County Health Services Department
Eval Program: HW
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 05-04-2018
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Contra Costa County Health Services Department
Eval Program: UST
Eval Source: CERS

Eval General Type: Other/Unknown
Eval Date: 05-30-2017
Violations Found: No
Eval Type: Other, not routine, done by local agency
Eval Notes: Not reported
Eval Division: Contra Costa County Health Services Department
Eval Program: HW
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 04-16-2014
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Contra Costa County Health Services Department

TRI CITY AUTO PLAZA INC (Continued) **S121748583**

Eval Program: HW
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 04-19-2016
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Contra Costa County Health Services Department
Eval Program: UST
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 04-20-2015
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Contra Costa County Health Services Department
Eval Program: APSA
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 04-20-2017
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Contra Costa County Health Services Department
Eval Program: APSA
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 04-24-2013
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Contra Costa County Health Services Department
Eval Program: UST
Eval Source: CERS

Eval General Type: Other/Unknown
Eval Date: 05-01-2015
Violations Found: Yes
Eval Type: Other, not routine, done by local agency
Eval Notes: Not reported
Eval Division: Contra Costa County Health Services Department
Eval Program: UST
Eval Source: CERS

Eval General Type: Other/Unknown
Eval Date: 06-25-2015
Violations Found: No
Eval Type: Other, not routine, done by local agency
Eval Notes: Not reported
Eval Division: Contra Costa County Health Services Department
Eval Program: HMRRP
Eval Source: CERS

TRI CITY AUTO PLAZA INC (Continued) **S121748583**

Eval General Type:	Other/Unknown
Eval Date:	06-25-2015
Violations Found:	Yes
Eval Type:	Other, not routine, done by local agency
Eval Notes:	Not reported
Eval Division:	Contra Costa County Health Services Department
Eval Program:	UST
Eval Source:	CERS

Eval General Type:	Other/Unknown
Eval Date:	07-19-2018
Violations Found:	Yes
Eval Type:	Other, not routine, done by local agency
Eval Notes:	Not reported
Eval Division:	Contra Costa County Health Services Department
Eval Program:	UST
Eval Source:	CERS

Eval General Type:	Other/Unknown
Eval Date:	09-01-2017
Violations Found:	Yes
Eval Type:	Other, not routine, done by local agency
Eval Notes:	Not reported
Eval Division:	Contra Costa County Health Services Department
Eval Program:	UST
Eval Source:	CERS

Eval General Type:	Other/Unknown
Eval Date:	01-25-2018
Violations Found:	No
Eval Type:	Other, not routine, done by local agency
Eval Notes:	Not reported
Eval Division:	Contra Costa County Health Services Department
Eval Program:	UST
Eval Source:	CERS

Eval General Type:	Compliance Evaluation Inspection
Eval Date:	04-16-2014
Violations Found:	Yes
Eval Type:	Routine done by local agency
Eval Notes:	Not reported
Eval Division:	Contra Costa County Health Services Department
Eval Program:	UST
Eval Source:	CERS

Eval General Type:	Compliance Evaluation Inspection
Eval Date:	04-20-2015
Violations Found:	Yes
Eval Type:	Routine done by local agency
Eval Notes:	Not reported
Eval Division:	Contra Costa County Health Services Department
Eval Program:	HMRRP
Eval Source:	CERS

Eval General Type:	Other/Unknown
Eval Date:	05-06-2016
Violations Found:	No

TRI CITY AUTO PLAZA INC (Continued) **S121748583**

Eval Type:	Other, not routine, done by local agency
Eval Notes:	Not reported
Eval Division:	Contra Costa County Health Services Department
Eval Program:	UST
Eval Source:	CERS

Eval General Type:	Other/Unknown
Eval Date:	05-30-2017
Violations Found:	No
Eval Type:	Other, not routine, done by local agency
Eval Notes:	Not reported
Eval Division:	Contra Costa County Health Services Department
Eval Program:	HMRRP
Eval Source:	CERS

Eval General Type:	Other/Unknown
Eval Date:	06-25-2015
Violations Found:	No
Eval Type:	Other, not routine, done by local agency
Eval Notes:	Not reported
Eval Division:	Contra Costa County Health Services Department
Eval Program:	APSA
Eval Source:	CERS

Eval General Type:	Other/Unknown
Eval Date:	09-24-2018
Violations Found:	No
Eval Type:	Other, not routine, done by local agency
Eval Notes:	Not reported
Eval Division:	Contra Costa County Health Services Department
Eval Program:	HW
Eval Source:	CERS

Eval General Type:	Compliance Evaluation Inspection
Eval Date:	04-16-2014
Violations Found:	No
Eval Type:	Routine done by local agency
Eval Notes:	Not reported
Eval Division:	Contra Costa County Health Services Department
Eval Program:	HMRRP
Eval Source:	CERS

Eval General Type:	Compliance Evaluation Inspection
Eval Date:	04-20-2015
Violations Found:	No
Eval Type:	Routine done by local agency
Eval Notes:	Not reported
Eval Division:	Contra Costa County Health Services Department
Eval Program:	HW
Eval Source:	CERS

Eval General Type:	Compliance Evaluation Inspection
Eval Date:	04-20-2017
Violations Found:	Yes
Eval Type:	Routine done by local agency
Eval Notes:	Not reported
Eval Division:	Contra Costa County Health Services Department

TRI CITY AUTO PLAZA INC (Continued) **S121748583**

Eval Program:	UST
Eval Source:	CERS
Eval General Type:	Other/Unknown
Eval Date:	06-24-2014
Violations Found:	No
Eval Type:	Other, not routine, done by local agency
Eval Notes:	Not reported
Eval Division:	Contra Costa County Health Services Department
Eval Program:	UST
Eval Source:	CERS
Eval General Type:	Other/Unknown
Eval Date:	08-13-2015
Violations Found:	No
Eval Type:	Other, not routine, done by local agency
Eval Notes:	Not reported
Eval Division:	Contra Costa County Health Services Department
Eval Program:	UST
Eval Source:	CERS

Enforcement Action:

Site ID:	163317
Site Name:	TRI CITY AUTO PLAZA INC
Site Address:	6935 LONE TREE WAY
Site City:	BRENTWOOD
Site Zip:	94513
Enf Action Date:	04-16-2014
Enf Action Type:	Notice of Violation (Unified Program)
Enf Action Description:	Notice of Violation Issued by the Inspector at the Time of Inspection
Enf Action Notes:	Not reported
Enf Action Division:	Contra Costa County Health Services Department
Enf Action Program:	UST
Enf Action Source:	CERS
Site ID:	163317
Site Name:	TRI CITY AUTO PLAZA INC
Site Address:	6935 LONE TREE WAY
Site City:	BRENTWOOD
Site Zip:	94513
Enf Action Date:	04-19-2016
Enf Action Type:	Notice of Violation (Unified Program)
Enf Action Description:	Notice of Violation Issued by the Inspector at the Time of Inspection
Enf Action Notes:	Not reported
Enf Action Division:	Contra Costa County Health Services Department
Enf Action Program:	UST
Enf Action Source:	CERS
Site ID:	163317
Site Name:	TRI CITY AUTO PLAZA INC
Site Address:	6935 LONE TREE WAY
Site City:	BRENTWOOD
Site Zip:	94513
Enf Action Date:	04-20-2015
Enf Action Type:	Notice of Violation (Unified Program)
Enf Action Description:	Notice of Violation Issued by the Inspector at the Time of Inspection
Enf Action Notes:	Not reported

TRI CITY AUTO PLAZA INC (Continued) **S121748583**

Enf Action Division:	Contra Costa County Health Services Department
Enf Action Program:	APSA
Enf Action Source:	CERS

Site ID:	163317
Site Name:	TRI CITY AUTO PLAZA INC
Site Address:	6935 LONE TREE WAY
Site City:	BRENTWOOD
Site Zip:	94513
Enf Action Date:	04-20-2015
Enf Action Type:	Notice of Violation (Unified Program)
Enf Action Description:	Notice of Violation Issued by the Inspector at the Time of Inspection
Enf Action Notes:	Not reported
Enf Action Division:	Contra Costa County Health Services Department
Enf Action Program:	HMRRP
Enf Action Source:	CERS

Site ID:	163317
Site Name:	TRI CITY AUTO PLAZA INC
Site Address:	6935 LONE TREE WAY
Site City:	BRENTWOOD
Site Zip:	94513
Enf Action Date:	04-20-2015
Enf Action Type:	Notice of Violation (Unified Program)
Enf Action Description:	Notice of Violation Issued by the Inspector at the Time of Inspection
Enf Action Notes:	Not reported
Enf Action Division:	Contra Costa County Health Services Department
Enf Action Program:	UST
Enf Action Source:	CERS

Site ID:	163317
Site Name:	TRI CITY AUTO PLAZA INC
Site Address:	6935 LONE TREE WAY
Site City:	BRENTWOOD
Site Zip:	94513
Enf Action Date:	04-20-2017
Enf Action Type:	Notice of Violation (Unified Program)
Enf Action Description:	Notice of Violation Issued by the Inspector at the Time of Inspection
Enf Action Notes:	Not reported
Enf Action Division:	Contra Costa County Health Services Department
Enf Action Program:	HMRRP
Enf Action Source:	CERS

Site ID:	163317
Site Name:	TRI CITY AUTO PLAZA INC
Site Address:	6935 LONE TREE WAY
Site City:	BRENTWOOD
Site Zip:	94513
Enf Action Date:	04-20-2017
Enf Action Type:	Notice of Violation (Unified Program)
Enf Action Description:	Notice of Violation Issued by the Inspector at the Time of Inspection
Enf Action Notes:	Not reported
Enf Action Division:	Contra Costa County Health Services Department
Enf Action Program:	HW
Enf Action Source:	CERS

Site ID:	163317

TRI CITY AUTO PLAZA INC (Continued) **S121748583**

Site Name:	TRI CITY AUTO PLAZA INC
Site Address:	6935 LONE TREE WAY
Site City:	BRENTWOOD
Site Zip:	94513
Enf Action Date:	04-20-2017
Enf Action Type:	Notice of Violation (Unified Program)
Enf Action Description:	Notice of Violation Issued by the Inspector at the Time of Inspection
Enf Action Notes:	Not reported
Enf Action Division:	Contra Costa County Health Services Department
Enf Action Program:	UST
Enf Action Source:	CERS

Site ID:	163317
Site Name:	TRI CITY AUTO PLAZA INC
Site Address:	6935 LONE TREE WAY
Site City:	BRENTWOOD
Site Zip:	94513
Enf Action Date:	04-24-2013
Enf Action Type:	Notice of Violation (Unified Program)
Enf Action Description:	Notice of Violation Issued by the Inspector at the Time of Inspection
Enf Action Notes:	Not reported
Enf Action Division:	Contra Costa County Health Services Department
Enf Action Program:	UST
Enf Action Source:	CERS

Site ID:	163317
Site Name:	TRI CITY AUTO PLAZA INC
Site Address:	6935 LONE TREE WAY
Site City:	BRENTWOOD
Site Zip:	94513
Enf Action Date:	05-01-2015
Enf Action Type:	Notice of Violation (Unified Program)
Enf Action Description:	Notice of Violation Issued by the Inspector at the Time of Inspection
Enf Action Notes:	Not reported
Enf Action Division:	Contra Costa County Health Services Department
Enf Action Program:	UST
Enf Action Source:	CERS

Site ID:	163317
Site Name:	TRI CITY AUTO PLAZA INC
Site Address:	6935 LONE TREE WAY
Site City:	BRENTWOOD
Site Zip:	94513
Enf Action Date:	05-04-2018
Enf Action Type:	Notice of Violation (Unified Program)
Enf Action Description:	Notice of Violation Issued by the Inspector at the Time of Inspection
Enf Action Notes:	Not reported
Enf Action Division:	Contra Costa County Health Services Department
Enf Action Program:	UST
Enf Action Source:	CERS

Site ID:	163317
Site Name:	TRI CITY AUTO PLAZA INC
Site Address:	6935 LONE TREE WAY
Site City:	BRENTWOOD
Site Zip:	94513
Enf Action Date:	06-25-2015

TRI CITY AUTO PLAZA INC (Continued) **S121748583**

Enf Action Type:	Notice of Violation (Unified Program)
Enf Action Description:	Notice of Violation Issued by the Inspector at the Time of Inspection
Enf Action Notes:	Not reported
Enf Action Division:	Contra Costa County Health Services Department
Enf Action Program:	UST
Enf Action Source:	CERS

Site ID:	163317
Site Name:	TRI CITY AUTO PLAZA INC
Site Address:	6935 LONE TREE WAY
Site City:	BRENTWOOD
Site Zip:	94513
Enf Action Date:	07-19-2018
Enf Action Type:	Notice of Violation (Unified Program)
Enf Action Description:	Notice of Violation Issued by the Inspector at the Time of Inspection
Enf Action Notes:	Not reported
Enf Action Division:	Contra Costa County Health Services Department
Enf Action Program:	UST
Enf Action Source:	CERS

Site ID:	163317
Site Name:	TRI CITY AUTO PLAZA INC
Site Address:	6935 LONE TREE WAY
Site City:	BRENTWOOD
Site Zip:	94513
Enf Action Date:	09-01-2017
Enf Action Type:	Notice of Violation (Unified Program)
Enf Action Description:	Notice of Violation Issued by the Inspector at the Time of Inspection
Enf Action Notes:	Not reported
Enf Action Division:	Contra Costa County Health Services Department
Enf Action Program:	UST
Enf Action Source:	CERS

Coordinates:

Site ID:	163317
Facility Name:	TRI CITY AUTO PLAZA INC
Env Int Type Code:	HWG
Program ID:	10018531
Coord Name:	Not reported
Ref Point Type Desc:	Unknown
Latitude:	37.961565
Longitude:	-121.724755

Affiliation:

Affiliation Type Desc:	CUPA District
Entity Name:	Contra Costa County Health Services Department
Entity Title:	Not reported
Affiliation Address:	4585 Pacheco BlvdSuite 100
Affiliation City:	Martinez
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	94553
Affiliation Phone:	(925) 335-3200

Affiliation Type Desc:	Facility Mailing Address
Entity Name:	Mailing Address

TRI CITY AUTO PLAZA INC (Continued) **S121748583**

Entity Title:	Not reported
Affiliation Address:	6935 Lone tree way
Affiliation City:	Brentwood, CA
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	94513
Affiliation Phone:	Not reported

Affiliation Type Desc:	Identification Signer
Entity Name:	Monang gorlorwulu
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	Not reported

Affiliation Type Desc:	Legal Owner
Entity Name:	Igor Pashover
Entity Title:	Not reported
Affiliation Address:	6935 Lone Tree way
Affiliation City:	Brentwood
Affiliation State:	CA
Affiliation Country:	United States
Affiliation Zip:	94513
Affiliation Phone:	(925) 513-7305

Affiliation Type Desc:	Parent Corporation
Entity Name:	Chevron Extra Mile
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	Not reported

Affiliation Type Desc:	Property Owner
Entity Name:	Igor Pashover
Entity Title:	Not reported
Affiliation Address:	6935 Lone tree way
Affiliation City:	Brentwood,
Affiliation State:	CA
Affiliation Country:	United States
Affiliation Zip:	94513
Affiliation Phone:	(925) 513-7305

Affiliation Type Desc:	UST Tank Operator
Entity Name:	IGOR PASKHOVER
Entity Title:	Not reported
Affiliation Address:	6935 lone tree way
Affiliation City:	brentwood
Affiliation State:	CA
Affiliation Country:	United States
Affiliation Zip:	94513
Affiliation Phone:	(925) 513-7305

TRI CITY AUTO PLAZA INC (Continued) **S121748583**

Affiliation Type Desc:	Document Preparer
Entity Name:	Monang gorlorwulu
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	Not reported

Affiliation Type Desc:	UST Permit Applicant
Entity Name:	igor paskhover
Entity Title:	owner
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	(925) 513-7305

Affiliation Type Desc:	UST Tank Owner
Entity Name:	IGOR PASKHOVER
Entity Title:	Not reported
Affiliation Address:	6935 lone tree way
Affiliation City:	brentwood
Affiliation State:	CA
Affiliation Country:	United States
Affiliation Zip:	94513
Affiliation Phone:	(925) 513-7305

Affiliation Type Desc:	Environmental Contact
Entity Name:	Monang Gorlorwulu
Entity Title:	Not reported
Affiliation Address:	6935 Lone tree way
Affiliation City:	Brentwood,
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	94513
Affiliation Phone:	(925) 513-7305

Affiliation Type Desc:	Operator
Entity Name:	Tri city Auto Plaza inc
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	(925) 513-7305

Affiliation Type Desc:	UST Property Owner Name
Entity Name:	Igor Paskhover
Entity Title:	Not reported
Affiliation Address:	6935 lone tree way
Affiliation City:	brentwood
Affiliation State:	CA
Affiliation Country:	United States

TRI CITY AUTO PLAZA INC (Continued) **S121748583**

Affiliation Zip: 94513
Affiliation Phone: (925) 513-7305

CERS TANKS:
Site ID: 163317
CERS ID: 10018531
CERS Description: Chemical Storage Facilities

Violations:
Site ID: 163317
Site Name: TRI CITY AUTO PLAZA INC
Violation Date: 04-20-2017
Citation: HSC 6.5 Multiple - California Health and Safety Code, Chapter 6.5, Section(s) Multiple
Violation Description: Hazardous Waste Generator Program - Operations/Maintenance - General
Violation Notes: Returned to compliance on 05/26/2017.
Violation Division: Contra Costa County Health Services Department
Violation Program: HW
Violation Source: CERS

Site ID: 163317
Site Name: TRI CITY AUTO PLAZA INC
Violation Date: 05-04-2018
Citation: HSC 6.7 25290.1(e) - California Health and Safety Code, Chapter 6.7, Section(s) 25290.1(e)
Violation Description: Failure to maintain the interstitial space such that a breach in the primary or secondary containment is detected before the liquid or vapor phase of the hazardous substance stored in the UST tank is released into the environment, i.e., vapor, pressure, hydrostatic (VPH) monitoring.
Violation Notes: OBSERVATION: Owner/Operator did not maintain the interstitial space under constant vacuum, pressure, or hydrostatic monitoring such that a breach in the primary or secondary containment is detected before the liquid or vapor phase of the hazardous substance stored in the UST tank is released into the environment. The facility has active L10 (diesel STP - brine) and S9 (diesel-91 vac annular) alarms. Diesel STP sump was reported to be empty of brine by UST technician who performed monitoring certification on 4/19/18. CORRECTIVE ACTION: Maintain the interstitial space so that constant vacuum, pressure, or hydrostatic monitoring occurs. Obtain a permit and perform required repairs. Submit verification.
Violation Division: Contra Costa County Health Services Department
Violation Program: UST
Violation Source: CERS

Site ID: 163317
Site Name: TRI CITY AUTO PLAZA INC
Violation Date: 04-20-2015
Citation: HSC 6.95 Multiple - California Health and Safety Code, Chapter 6.95, Section(s) Multiple
Violation Description: Business Plan Program - Administration/Documentation - General
Violation Notes: Returned to compliance on 04/20/2015.
Violation Division: Contra Costa County Health Services Department
Violation Program: HMRRP
Violation Source: CERS

TRI CITY AUTO PLAZA INC (Continued) **S121748583**

Site ID:	163317
Site Name:	TRI CITY AUTO PLAZA INC
Violation Date:	04-20-2017
Citation:	HSC 6.95 Multiple - California Health and Safety Code, Chapter 6.95, Section(s) Multiple
Violation Description:	Business Plan Program - Training - General
Violation Notes:	Returned to compliance on 05/26/2017. OBSERVATION: Gas station employees have not received training on carbon dioxide and propane. Express Lube employees have not received annual documented training on hazardous materials/emergency response. CORRECTIVE ACTION: Train employees and submit documentation to CCHS HMP.
Violation Division:	Contra Costa County Health Services Department
Violation Program:	HMRRP
Violation Source:	CERS

Site ID:	163317
Site Name:	TRI CITY AUTO PLAZA INC
Violation Date:	07-19-2018
Citation:	HSC 6.7 25284 - California Health and Safety Code, Chapter 6.7, Section(s) 25284
Violation Description:	Failure to obtain a valid permit to operate from the UPA including but not limited to unpaid permit fees.
Violation Notes:	Not reported
Violation Division:	Contra Costa County Health Services Department
Violation Program:	UST
Violation Source:	CERS

Site ID:	163317
Site Name:	TRI CITY AUTO PLAZA INC
Violation Date:	04-16-2014
Citation:	HSC 6.7 Multiple Sections - California Health and Safety Code, Chapter 6.7, Section(s) Multiple Sections
Violation Description:	UST Program - Operations/Maintenance - General
Violation Notes:	Returned to compliance on 06/06/2014.
Violation Division:	Contra Costa County Health Services Department
Violation Program:	UST
Violation Source:	CERS

Site ID:	163317
Site Name:	TRI CITY AUTO PLAZA INC
Violation Date:	04-20-2015
Citation:	HSC 6.67 Multiple - California Health and Safety Code, Chapter 6.67, Section(s) Multiple
Violation Description:	APSA Program - Administration/Documentation - General
Violation Notes:	Returned to compliance on 06/29/2015.
Violation Division:	Contra Costa County Health Services Department
Violation Program:	APSA
Violation Source:	CERS

Site ID:	163317
Site Name:	TRI CITY AUTO PLAZA INC
Violation Date:	09-01-2017
Citation:	HSC 6.7 Multiple - California Health and Safety Code, Chapter 6.7, Section(s) Multiple
Violation Description:	UST Program - Administration/Documentation - General - Must include violation description, proper statute and regulation citation in the "comment" section.

TRI CITY AUTO PLAZA INC (Continued) **S121748583**

Violation Notes: Not reported
Violation Division: Contra Costa County Health Services Department
Violation Program: UST
Violation Source: CERS

Site ID: 163317
Site Name: TRI CITY AUTO PLAZA INC
Violation Date: 04-20-2017
Citation: HSC 6.95 Multiple - California Health and Safety Code, Chapter 6.95, Section(s) Multiple
Violation Description: Business Plan Program - Administration/Documentation - General
Violation Notes: Returned to compliance on 05/24/2017. OBSERVATION: The site map is missing required elements including spill response equipment (fire extinguishers, spill absorbent), oil changer hazardous materials storage areas, evacuation area, loading area, propane and carbon dioxide locations. CORRECTIVE ACTION: Upload updated site map to CERS.
Violation Division: Contra Costa County Health Services Department
Violation Program: HMRRP
Violation Source: CERS

Site ID: 163317
Site Name: TRI CITY AUTO PLAZA INC
Violation Date: 04-20-2015
Citation: Un-Specified
Violation Description: UST Program - Operations/Maintenance - For use of Local Ordinance only.
Violation Notes: Returned to compliance on 08/13/2015.
Violation Division: Contra Costa County Health Services Department
Violation Program: UST
Violation Source: CERS

Site ID: 163317
Site Name: TRI CITY AUTO PLAZA INC
Violation Date: 04-24-2013
Citation: HSC 6.7 Multiple Sections - California Health and Safety Code, Chapter 6.7, Section(s) Multiple Sections
Violation Description: UST Program - Administration/Documentation - General
Violation Notes: Returned to compliance on 06/04/2013.
Violation Division: Contra Costa County Health Services Department
Violation Program: UST
Violation Source: CERS

Site ID: 163317
Site Name: TRI CITY AUTO PLAZA INC
Violation Date: 04-19-2016
Citation: Un-Specified
Violation Description: UST Program - Operations/Maintenance - For use of Local Ordinance only.
Violation Notes: Returned to compliance on 05/05/2016.
Violation Division: Contra Costa County Health Services Department
Violation Program: UST
Violation Source: CERS

Site ID: 163317
Site Name: TRI CITY AUTO PLAZA INC
Violation Date: 04-20-2017
Citation: HSC 6.7 Multiple - California Health and Safety Code, Chapter 6.7,

TRI CITY AUTO PLAZA INC (Continued) **S121748583**

	Section(s) Multiple
Violation Description:	UST Program - Administration/Documentation - General - Must include violation description, proper statute and regulation citation in the "comment" section.
Violation Notes:	Returned to compliance on 10/12/2017.
Violation Division:	Contra Costa County Health Services Department
Violation Program:	UST
Violation Source:	CERS
Site ID:	163317
Site Name:	TRI CITY AUTO PLAZA INC
Violation Date:	09-01-2017
Citation:	23 CCR 16 2712(i) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2712(i)
Violation Description:	Failure to retain a copy of the permit to operate at the facility.
Violation Notes:	Returned to compliance on 10/12/2017.
Violation Division:	Contra Costa County Health Services Department
Violation Program:	UST
Violation Source:	CERS
Site ID:	163317
Site Name:	TRI CITY AUTO PLAZA INC
Violation Date:	06-25-2015
Citation:	Un-Specified
Violation Description:	UST Program - Operations/Maintenance - For use of Local Ordinance only.
Violation Notes:	Returned to compliance on 08/13/2015.
Violation Division:	Contra Costa County Health Services Department
Violation Program:	UST
Violation Source:	CERS
Site ID:	163317
Site Name:	TRI CITY AUTO PLAZA INC
Violation Date:	05-01-2015
Citation:	Un-Specified
Violation Description:	UST Program - Administration/Documentation - For use of Local Ordinance only
Violation Notes:	Returned to compliance on 05/19/2015.
Violation Division:	Contra Costa County Health Services Department
Violation Program:	UST
Violation Source:	CERS
Site ID:	163317
Site Name:	TRI CITY AUTO PLAZA INC
Violation Date:	04-20-2017
Citation:	HSC 6.5 Multiple - California Health and Safety Code, Chapter 6.5, Section(s) Multiple
Violation Description:	Hazardous Waste Generator Program - Operations/Maintenance - General
Violation Notes:	Returned to compliance on 04/28/2017.
Violation Division:	Contra Costa County Health Services Department
Violation Program:	HW
Violation Source:	CERS
Site ID:	163317
Site Name:	TRI CITY AUTO PLAZA INC
Violation Date:	04-20-2017
Citation:	HSC 6.5 Multiple - California Health and Safety Code, Chapter 6.5,

TRI CITY AUTO PLAZA INC (Continued) **S121748583**

	Section(s) Multiple
Violation Description:	Hazardous Waste Generator Program - Operations/Maintenance - General
Violation Notes:	Returned to compliance on 09/21/2018.
Violation Division:	Contra Costa County Health Services Department
Violation Program:	HW
Violation Source:	CERS
Site ID:	163317
Site Name:	TRI CITY AUTO PLAZA INC
Violation Date:	04-19-2016
Citation:	Un-Specified
Violation Description:	UST Program - Administration/Documentation - For use of Local Ordinance only
Violation Notes:	Returned to compliance on 04/19/2016.
Violation Division:	Contra Costa County Health Services Department
Violation Program:	UST
Violation Source:	CERS

Evaluation:

Eval General Type:	Compliance Evaluation Inspection
Eval Date:	04-20-2015
Violations Found:	Yes
Eval Type:	Routine done by local agency
Eval Notes:	Not reported
Eval Division:	Contra Costa County Health Services Department
Eval Program:	UST
Eval Source:	CERS
Eval General Type:	Compliance Evaluation Inspection
Eval Date:	04-20-2017
Violations Found:	Yes
Eval Type:	Routine done by local agency
Eval Notes:	Not reported
Eval Division:	Contra Costa County Health Services Department
Eval Program:	HMRRP
Eval Source:	CERS
Eval General Type:	Compliance Evaluation Inspection
Eval Date:	04-20-2017
Violations Found:	Yes
Eval Type:	Routine done by local agency
Eval Notes:	Not reported
Eval Division:	Contra Costa County Health Services Department
Eval Program:	HW
Eval Source:	CERS
Eval General Type:	Compliance Evaluation Inspection
Eval Date:	05-04-2018
Violations Found:	Yes
Eval Type:	Routine done by local agency
Eval Notes:	Not reported
Eval Division:	Contra Costa County Health Services Department
Eval Program:	UST
Eval Source:	CERS
Eval General Type:	Other/Unknown
Eval Date:	05-30-2017

TRI CITY AUTO PLAZA INC (Continued) **S121748583**

Violations Found:	No
Eval Type:	Other, not routine, done by local agency
Eval Notes:	Not reported
Eval Division:	Contra Costa County Health Services Department
Eval Program:	HW
Eval Source:	CERS

Eval General Type:	Compliance Evaluation Inspection
Eval Date:	04-16-2014
Violations Found:	No
Eval Type:	Routine done by local agency
Eval Notes:	Not reported
Eval Division:	Contra Costa County Health Services Department
Eval Program:	HW
Eval Source:	CERS

Eval General Type:	Compliance Evaluation Inspection
Eval Date:	04-19-2016
Violations Found:	Yes
Eval Type:	Routine done by local agency
Eval Notes:	Not reported
Eval Division:	Contra Costa County Health Services Department
Eval Program:	UST
Eval Source:	CERS

Eval General Type:	Compliance Evaluation Inspection
Eval Date:	04-20-2015
Violations Found:	Yes
Eval Type:	Routine done by local agency
Eval Notes:	Not reported
Eval Division:	Contra Costa County Health Services Department
Eval Program:	APSA
Eval Source:	CERS

Eval General Type:	Compliance Evaluation Inspection
Eval Date:	04-20-2017
Violations Found:	No
Eval Type:	Routine done by local agency
Eval Notes:	Not reported
Eval Division:	Contra Costa County Health Services Department
Eval Program:	APSA
Eval Source:	CERS

Eval General Type:	Compliance Evaluation Inspection
Eval Date:	04-24-2013
Violations Found:	Yes
Eval Type:	Routine done by local agency
Eval Notes:	Not reported
Eval Division:	Contra Costa County Health Services Department
Eval Program:	UST
Eval Source:	CERS

Eval General Type:	Other/Unknown
Eval Date:	05-01-2015
Violations Found:	Yes
Eval Type:	Other, not routine, done by local agency
Eval Notes:	Not reported

TRI CITY AUTO PLAZA INC (Continued) **S121748583**

Eval Division:	Contra Costa County Health Services Department
Eval Program:	UST
Eval Source:	CERS

Eval General Type:	Other/Unknown
Eval Date:	06-25-2015
Violations Found:	No
Eval Type:	Other, not routine, done by local agency
Eval Notes:	Not reported
Eval Division:	Contra Costa County Health Services Department
Eval Program:	HMRRP
Eval Source:	CERS

Eval General Type:	Other/Unknown
Eval Date:	06-25-2015
Violations Found:	Yes
Eval Type:	Other, not routine, done by local agency
Eval Notes:	Not reported
Eval Division:	Contra Costa County Health Services Department
Eval Program:	UST
Eval Source:	CERS

Eval General Type:	Other/Unknown
Eval Date:	07-19-2018
Violations Found:	Yes
Eval Type:	Other, not routine, done by local agency
Eval Notes:	Not reported
Eval Division:	Contra Costa County Health Services Department
Eval Program:	UST
Eval Source:	CERS

Eval General Type:	Other/Unknown
Eval Date:	09-01-2017
Violations Found:	Yes
Eval Type:	Other, not routine, done by local agency
Eval Notes:	Not reported
Eval Division:	Contra Costa County Health Services Department
Eval Program:	UST
Eval Source:	CERS

Eval General Type:	Other/Unknown
Eval Date:	01-25-2018
Violations Found:	No
Eval Type:	Other, not routine, done by local agency
Eval Notes:	Not reported
Eval Division:	Contra Costa County Health Services Department
Eval Program:	UST
Eval Source:	CERS

Eval General Type:	Compliance Evaluation Inspection
Eval Date:	04-16-2014
Violations Found:	Yes
Eval Type:	Routine done by local agency
Eval Notes:	Not reported
Eval Division:	Contra Costa County Health Services Department
Eval Program:	UST
Eval Source:	CERS

TRI CITY AUTO PLAZA INC (Continued) **S121748583**

Eval General Type:	Compliance Evaluation Inspection
Eval Date:	04-20-2015
Violations Found:	Yes
Eval Type:	Routine done by local agency
Eval Notes:	Not reported
Eval Division:	Contra Costa County Health Services Department
Eval Program:	HMRRP
Eval Source:	CERS

Eval General Type:	Other/Unknown
Eval Date:	05-06-2016
Violations Found:	No
Eval Type:	Other, not routine, done by local agency
Eval Notes:	Not reported
Eval Division:	Contra Costa County Health Services Department
Eval Program:	UST
Eval Source:	CERS

Eval General Type:	Other/Unknown
Eval Date:	05-30-2017
Violations Found:	No
Eval Type:	Other, not routine, done by local agency
Eval Notes:	Not reported
Eval Division:	Contra Costa County Health Services Department
Eval Program:	HMRRP
Eval Source:	CERS

Eval General Type:	Other/Unknown
Eval Date:	06-25-2015
Violations Found:	No
Eval Type:	Other, not routine, done by local agency
Eval Notes:	Not reported
Eval Division:	Contra Costa County Health Services Department
Eval Program:	APSA
Eval Source:	CERS

Eval General Type:	Other/Unknown
Eval Date:	09-24-2018
Violations Found:	No
Eval Type:	Other, not routine, done by local agency
Eval Notes:	Not reported
Eval Division:	Contra Costa County Health Services Department
Eval Program:	HW
Eval Source:	CERS

Eval General Type:	Compliance Evaluation Inspection
Eval Date:	04-16-2014
Violations Found:	No
Eval Type:	Routine done by local agency
Eval Notes:	Not reported
Eval Division:	Contra Costa County Health Services Department
Eval Program:	HMRRP
Eval Source:	CERS

Eval General Type:	Compliance Evaluation Inspection
Eval Date:	04-20-2015
Violations Found:	No

TRI CITY AUTO PLAZA INC (Continued) **S121748583**

Eval Type:	Routine done by local agency
Eval Notes:	Not reported
Eval Division:	Contra Costa County Health Services Department
Eval Program:	HW
Eval Source:	CERS
Eval General Type:	Compliance Evaluation Inspection
Eval Date:	04-20-2017
Violations Found:	Yes
Eval Type:	Routine done by local agency
Eval Notes:	Not reported
Eval Division:	Contra Costa County Health Services Department
Eval Program:	UST
Eval Source:	CERS
Eval General Type:	Other/Unknown
Eval Date:	06-24-2014
Violations Found:	No
Eval Type:	Other, not routine, done by local agency
Eval Notes:	Not reported
Eval Division:	Contra Costa County Health Services Department
Eval Program:	UST
Eval Source:	CERS
Eval General Type:	Other/Unknown
Eval Date:	08-13-2015
Violations Found:	No
Eval Type:	Other, not routine, done by local agency
Eval Notes:	Not reported
Eval Division:	Contra Costa County Health Services Department
Eval Program:	UST
Eval Source:	CERS

Enforcement Action:

Site ID:	163317
Site Name:	TRI CITY AUTO PLAZA INC
Site Address:	6935 LONE TREE WAY
Site City:	BRENTWOOD
Site Zip:	94513
Enf Action Date:	04-16-2014
Enf Action Type:	Notice of Violation (Unified Program)
Enf Action Description:	Notice of Violation Issued by the Inspector at the Time of Inspection
Enf Action Notes:	Not reported
Enf Action Division:	Contra Costa County Health Services Department
Enf Action Program:	UST
Enf Action Source:	CERS
Site ID:	163317
Site Name:	TRI CITY AUTO PLAZA INC
Site Address:	6935 LONE TREE WAY
Site City:	BRENTWOOD
Site Zip:	94513
Enf Action Date:	04-19-2016
Enf Action Type:	Notice of Violation (Unified Program)
Enf Action Description:	Notice of Violation Issued by the Inspector at the Time of Inspection
Enf Action Notes:	Not reported
Enf Action Division:	Contra Costa County Health Services Department

TRI CITY AUTO PLAZA INC (Continued) **S121748583**

Enf Action Program:	UST
Enf Action Source:	CERS
Site ID:	163317
Site Name:	TRI CITY AUTO PLAZA INC
Site Address:	6935 LONE TREE WAY
Site City:	BRENTWOOD
Site Zip:	94513
Enf Action Date:	04-20-2015
Enf Action Type:	Notice of Violation (Unified Program)
Enf Action Description:	Notice of Violation Issued by the Inspector at the Time of Inspection
Enf Action Notes:	Not reported
Enf Action Division:	Contra Costa County Health Services Department
Enf Action Program:	APSA
Enf Action Source:	CERS
Site ID:	163317
Site Name:	TRI CITY AUTO PLAZA INC
Site Address:	6935 LONE TREE WAY
Site City:	BRENTWOOD
Site Zip:	94513
Enf Action Date:	04-20-2015
Enf Action Type:	Notice of Violation (Unified Program)
Enf Action Description:	Notice of Violation Issued by the Inspector at the Time of Inspection
Enf Action Notes:	Not reported
Enf Action Division:	Contra Costa County Health Services Department
Enf Action Program:	HMRRP
Enf Action Source:	CERS
Site ID:	163317
Site Name:	TRI CITY AUTO PLAZA INC
Site Address:	6935 LONE TREE WAY
Site City:	BRENTWOOD
Site Zip:	94513
Enf Action Date:	04-20-2015
Enf Action Type:	Notice of Violation (Unified Program)
Enf Action Description:	Notice of Violation Issued by the Inspector at the Time of Inspection
Enf Action Notes:	Not reported
Enf Action Division:	Contra Costa County Health Services Department
Enf Action Program:	UST
Enf Action Source:	CERS
Site ID:	163317
Site Name:	TRI CITY AUTO PLAZA INC
Site Address:	6935 LONE TREE WAY
Site City:	BRENTWOOD
Site Zip:	94513
Enf Action Date:	04-20-2017
Enf Action Type:	Notice of Violation (Unified Program)
Enf Action Description:	Notice of Violation Issued by the Inspector at the Time of Inspection
Enf Action Notes:	Not reported
Enf Action Division:	Contra Costa County Health Services Department
Enf Action Program:	HMRRP
Enf Action Source:	CERS
Site ID:	163317
Site Name:	TRI CITY AUTO PLAZA INC

TRI CITY AUTO PLAZA INC (Continued) **S121748583**

Site Address:	6935 LONE TREE WAY
Site City:	BRENTWOOD
Site Zip:	94513
Enf Action Date:	04-20-2017
Enf Action Type:	Notice of Violation (Unified Program)
Enf Action Description:	Notice of Violation Issued by the Inspector at the Time of Inspection
Enf Action Notes:	Not reported
Enf Action Division:	Contra Costa County Health Services Department
Enf Action Program:	HW
Enf Action Source:	CERS

Site ID:	163317
Site Name:	TRI CITY AUTO PLAZA INC
Site Address:	6935 LONE TREE WAY
Site City:	BRENTWOOD
Site Zip:	94513
Enf Action Date:	04-20-2017
Enf Action Type:	Notice of Violation (Unified Program)
Enf Action Description:	Notice of Violation Issued by the Inspector at the Time of Inspection
Enf Action Notes:	Not reported
Enf Action Division:	Contra Costa County Health Services Department
Enf Action Program:	UST
Enf Action Source:	CERS

Site ID:	163317
Site Name:	TRI CITY AUTO PLAZA INC
Site Address:	6935 LONE TREE WAY
Site City:	BRENTWOOD
Site Zip:	94513
Enf Action Date:	04-24-2013
Enf Action Type:	Notice of Violation (Unified Program)
Enf Action Description:	Notice of Violation Issued by the Inspector at the Time of Inspection
Enf Action Notes:	Not reported
Enf Action Division:	Contra Costa County Health Services Department
Enf Action Program:	UST
Enf Action Source:	CERS

Site ID:	163317
Site Name:	TRI CITY AUTO PLAZA INC
Site Address:	6935 LONE TREE WAY
Site City:	BRENTWOOD
Site Zip:	94513
Enf Action Date:	05-01-2015
Enf Action Type:	Notice of Violation (Unified Program)
Enf Action Description:	Notice of Violation Issued by the Inspector at the Time of Inspection
Enf Action Notes:	Not reported
Enf Action Division:	Contra Costa County Health Services Department
Enf Action Program:	UST
Enf Action Source:	CERS

Site ID:	163317
Site Name:	TRI CITY AUTO PLAZA INC
Site Address:	6935 LONE TREE WAY
Site City:	BRENTWOOD
Site Zip:	94513
Enf Action Date:	05-04-2018
Enf Action Type:	Notice of Violation (Unified Program)

TRI CITY AUTO PLAZA INC (Continued) **S121748583**

Enf Action Description:	Notice of Violation Issued by the Inspector at the Time of Inspection
Enf Action Notes:	Not reported
Enf Action Division:	Contra Costa County Health Services Department
Enf Action Program:	UST
Enf Action Source:	CERS

Site ID:	163317
Site Name:	TRI CITY AUTO PLAZA INC
Site Address:	6935 LONE TREE WAY
Site City:	BRENTWOOD
Site Zip:	94513
Enf Action Date:	06-25-2015
Enf Action Type:	Notice of Violation (Unified Program)
Enf Action Description:	Notice of Violation Issued by the Inspector at the Time of Inspection
Enf Action Notes:	Not reported
Enf Action Division:	Contra Costa County Health Services Department
Enf Action Program:	UST
Enf Action Source:	CERS

Site ID:	163317
Site Name:	TRI CITY AUTO PLAZA INC
Site Address:	6935 LONE TREE WAY
Site City:	BRENTWOOD
Site Zip:	94513
Enf Action Date:	07-19-2018
Enf Action Type:	Notice of Violation (Unified Program)
Enf Action Description:	Notice of Violation Issued by the Inspector at the Time of Inspection
Enf Action Notes:	Not reported
Enf Action Division:	Contra Costa County Health Services Department
Enf Action Program:	UST
Enf Action Source:	CERS

Site ID:	163317
Site Name:	TRI CITY AUTO PLAZA INC
Site Address:	6935 LONE TREE WAY
Site City:	BRENTWOOD
Site Zip:	94513
Enf Action Date:	09-01-2017
Enf Action Type:	Notice of Violation (Unified Program)
Enf Action Description:	Notice of Violation Issued by the Inspector at the Time of Inspection
Enf Action Notes:	Not reported
Enf Action Division:	Contra Costa County Health Services Department
Enf Action Program:	UST
Enf Action Source:	CERS

Coordinates:

Site ID:	163317
Facility Name:	TRI CITY AUTO PLAZA INC
Env Int Type Code:	HWG
Program ID:	10018531
Coord Name:	Not reported
Ref Point Type Desc:	Unknown
Latitude:	37.961565
Longitude:	-121.724755

Affiliation:

TRI CITY AUTO PLAZA INC (Continued) **S121748583**

Affiliation Type Desc:	CUPA District
Entity Name:	Contra Costa County Health Services Department
Entity Title:	Not reported
Affiliation Address:	4585 Pacheco BlvdSuite 100
Affiliation City:	Martinez
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	94553
Affiliation Phone:	(925) 335-3200

Affiliation Type Desc:	Facility Mailing Address
Entity Name:	Mailing Address
Entity Title:	Not reported
Affiliation Address:	6935 Lone tree way
Affiliation City:	Brentwood, CA
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	94513
Affiliation Phone:	Not reported

Affiliation Type Desc:	Identification Signer
Entity Name:	Monang gorlorwulu
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	Not reported

Affiliation Type Desc:	Legal Owner
Entity Name:	Igor Pashover
Entity Title:	Not reported
Affiliation Address:	6935 Lone Tree way
Affiliation City:	Brentwood
Affiliation State:	CA
Affiliation Country:	United States
Affiliation Zip:	94513
Affiliation Phone:	(925) 513-7305

Affiliation Type Desc:	Parent Corporation
Entity Name:	Chevron Extra Mile
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	Not reported

Affiliation Type Desc:	Property Owner
Entity Name:	Igor Pashover
Entity Title:	Not reported
Affiliation Address:	6935 Lone tree way
Affiliation City:	Brentwood,
Affiliation State:	CA
Affiliation Country:	United States

TRI CITY AUTO PLAZA INC (Continued) **S121748583**

Affiliation Zip:	94513
Affiliation Phone:	(925) 513-7305
Affiliation Type Desc:	UST Tank Operator
Entity Name:	IGOR PASKHOVER
Entity Title:	Not reported
Affiliation Address:	6935 lone tree way
Affiliation City:	brentwood
Affiliation State:	CA
Affiliation Country:	United States
Affiliation Zip:	94513
Affiliation Phone:	(925) 513-7305
Affiliation Type Desc:	Document Preparer
Entity Name:	Monang gorlorwulu
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	Not reported
Affiliation Type Desc:	UST Permit Applicant
Entity Name:	igor paskhover
Entity Title:	owner
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	(925) 513-7305
Affiliation Type Desc:	UST Tank Owner
Entity Name:	IGOR PASKHOVER
Entity Title:	Not reported
Affiliation Address:	6935 lone tree way
Affiliation City:	brentwood
Affiliation State:	CA
Affiliation Country:	United States
Affiliation Zip:	94513
Affiliation Phone:	(925) 513-7305
Affiliation Type Desc:	Environmental Contact
Entity Name:	Monang Gorlorwulu
Entity Title:	Not reported
Affiliation Address:	6935 Lone tree way
Affiliation City:	Brentwood,
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	94513
Affiliation Phone:	(925) 513-7305
Affiliation Type Desc:	Operator
Entity Name:	Tri city Auto Plaza inc
Entity Title:	Not reported
Affiliation Address:	Not reported

TRI CITY AUTO PLAZA INC (Continued) **S121748583**

Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	(925) 513-7305
Affiliation Type Desc:	UST Property Owner Name
Entity Name:	Igor Paskhover
Entity Title:	Not reported
Affiliation Address:	6935 lone tree way
Affiliation City:	brentwood
Affiliation State:	CA
Affiliation Country:	United States
Affiliation Zip:	94513
Affiliation Phone:	(925) 513-7305

A4 West 1/8-1/4 0.247 mi. 1306 ft. **TRI CITY EXPRESS LUBE** **RCRA NonGen / NLR** **1024819373**
6935 LONE TREE WAY **CAL000329240**
BRENTWOOD, CA 94513

Site 2 of 7 in cluster A

Relative: Higher

Actual: 99 ft.

RCRA NonGen / NLR:

Date form received by agency:	01/31/2008
Facility name:	TRI CITY EXPRESS LUBE
Facility address:	6935 LONE TREE WAY BRENTWOOD, CA 94513-5403
EPA ID:	CAL000329240
Contact:	MARC HETRICK GENERAL MANAGER
Contact address:	6945 LONE TREE WAY RD BRENTWOOD, CA 94513
Contact country:	Not reported
Contact telephone:	925-513-7610
Contact email:	AUTOSPAINC@SBCGLOBAL.NET
EPA Region:	09
Classification:	Non-Generator
Description:	Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:

Owner/operator name:	MARC HETRICK GENERAL MANAGER
Owner/operator address:	6945 LONE TREE WAY RD BRENTWOOD, CA 94513
Owner/operator country:	Not reported
Owner/operator telephone:	925-513-7610
Owner/operator email:	Not reported
Owner/operator fax:	Not reported
Owner/operator extension:	Not reported
Legal status:	Other
Owner/Operator Type:	Operator
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported
Owner/operator name:	BRENTWOOD AUTO SPA INC
Owner/operator address:	6935 LONE TREE WAY BRENTWOOD, CA 94513
Owner/operator country:	Not reported

TRI CITY EXPRESS LUBE (Continued) **1024819373**

Owner/operator telephone:	925-513-7610
Owner/operator email:	Not reported
Owner/operator fax:	Not reported
Owner/operator extension:	Not reported
Legal status:	Other
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	Yes
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

Violation Status: No violations found

A5
West
1/8-1/4
0.247 mi.
1306 ft.

VIZ CLEANERS INC **DRYCLEANERS** **S109520981**
6935 LONE TREE WAY STE C **N/A**
BRENTWOOD, CA 94513

Site 3 of 7 in cluster A

Relative:
Higher

Actual:
99 ft.

DRYCLEANERS:

EPA Id:	CAL000340540
NAICS Code:	81232
NAICS Description:	Drycleaning and Laundry Services (except Coin-Operated)
SIC Code:	7211
SIC Description:	Power Laundries, Family and Commercial
Create Date:	02/13/2009
Facility Active:	Yes
Inactive Date:	Not reported
Facility Addr2:	Not reported
Owner Name:	ZALMAN EZROS
Owner Address:	1560 CRISPIN DR
Owner Address 2:	Not reported
Owner Telephone:	9253548709
Contact Name:	ZALMAN EZROS
Contact Address:	1560 CRISPIN DR
Contact Address 2:	Not reported
Contact Telephone:	9253548709
Mailing Name:	Not reported
Mailing Address 1:	6835 LONE TREE WAY #C
Mailing Address 2:	Not reported
Mailing City:	BRENTWOOD
Mailing State:	CA
Mailing Zip:	945130000

VIZ CLEANERS INC (Continued) **S109520981**

Owner Fax: Not reported
Region Code: 3

A6 West 1/8-1/4 0.247 mi. 1306 ft. **TRI CITY AUTO PLAZA INC**
6935 LONE TREE WY
BRENTWOOD, CA 94513
EMI **S107591789**
CONTRA COSTA CO. SITE LIST **N/A**

Site 4 of 7 in cluster A

Relative: Higher
Actual: 99 ft.

EMI:

Year:	2008
County Code:	7
Air Basin:	SF
Facility ID:	19015
Air District Name:	BA
SIC Code:	7216
Air District Name:	BAY AREA AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	.32
Reactive Organic Gases Tons/Yr:	.128
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers and Smllr Tons/Yr:	0

Year:	2009
County Code:	7
Air Basin:	SF
Facility ID:	19015
Air District Name:	BA
SIC Code:	7216
Air District Name:	BAY AREA AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	0.32000000000000001
Reactive Organic Gases Tons/Yr:	0.128
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers and Smllr Tons/Yr:	0

Year:	2010
County Code:	7
Air Basin:	SF
Facility ID:	19015
Air District Name:	BA
SIC Code:	7216
Air District Name:	BAY AREA AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	0.32000000000000001
Reactive Organic Gases Tons/Yr:	0.128
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0

TRI CITY AUTO PLAZA INC (Continued) **S107591789**

Particulate Matter Tons/Yr: 0
Part. Matter 10 Micrometers and Smllr Tons/Yr:0

CONTRA COSTA CO. SITE LIST:

Facility ID: FA0030271
Billing Status: ACTIVE, BILLABLE
Program Status: CONTRA COSTA CO. SITE LIST
Program/Elements: APSA: <10K GALLONS
Region: CONTRA COSTA
Cupa Number: 773602

Facility ID: FA0030271
Billing Status: ACTIVE, BILLABLE
Program Status: CONTRA COSTA CO. SITE LIST
Program/Elements: HMBP: >250K-500K LBS, 0-19 EMPLOYEES
Region: CONTRA COSTA
Cupa Number: 773602

Facility ID: FA0030271
Billing Status: ACTIVE, BILLABLE
Program Status: CONTRA COSTA CO. SITE LIST
Program/Elements: HWG: 50 - <250 TONS/YEAR
Region: CONTRA COSTA
Cupa Number: 773602

Facility ID: FA0030271
Billing Status: ACTIVE, BILLABLE
Program Status: CONTRA COSTA CO. SITE LIST
Program/Elements: UNDERGROUND STORAGE TANK SITE
Region: CONTRA COSTA
Cupa Number: 773602

Facility ID: FA0030602
Billing Status: ACTIVE, BILLABLE
Program Status: CONTRA COSTA CO. SITE LIST
Program/Elements: HMBP: LESS THAN 1000 LBS
Region: CONTRA COSTA
Cupa Number: 773933

Facility ID: FA0030602
Billing Status: ACTIVE, BILLABLE
Program Status: CONTRA COSTA CO. SITE LIST
Program/Elements: HWG: REPORTED ZERO
Region: CONTRA COSTA
Cupa Number: 773933

A7 **VIZ CLEANERS** **CERS HAZ WASTE** **S121749524**
West **6935 LONE TREE WAY SUITE C** **CERS** **N/A**
1/8-1/4 **BRENTWOOD, CA 94513**
0.247 mi.
1306 ft. **Site 5 of 7 in cluster A**

Relative:
Higher

Actual:
99 ft.

CERS HAZ WASTE:
Site ID: 169514
CERS ID: 10019524
CERS Description: Hazardous Waste Generator

VIZ CLEANERS (Continued) **S121749524**

Violations:

Site ID:	169514
Site Name:	VIZ CLEANERS
Violation Date:	05-20-2014
Citation:	HSC 6.95 Multiple - California Health and Safety Code, Chapter 6.95, Section(s) Multiple
Violation Description:	Business Plan Program - Administration/Documentation - General
Violation Notes:	Returned to compliance on 05/20/2014.
Violation Division:	Contra Costa County Health Services Department
Violation Program:	HMRRP
Violation Source:	CERS

Evaluation:

Eval General Type:	Compliance Evaluation Inspection
Eval Date:	05-20-2014
Violations Found:	Yes
Eval Type:	Routine done by local agency
Eval Notes:	Not reported
Eval Division:	Contra Costa County Health Services Department
Eval Program:	HMRRP
Eval Source:	CERS

Eval General Type:	Compliance Evaluation Inspection
Eval Date:	05-20-2014
Violations Found:	No
Eval Type:	Routine done by local agency
Eval Notes:	Not reported
Eval Division:	Contra Costa County Health Services Department
Eval Program:	HW
Eval Source:	CERS

Eval General Type:	Compliance Evaluation Inspection
Eval Date:	04-12-2017
Violations Found:	No
Eval Type:	Routine done by local agency
Eval Notes:	Not reported
Eval Division:	Contra Costa County Health Services Department
Eval Program:	HMRRP
Eval Source:	CERS

Eval General Type:	Compliance Evaluation Inspection
Eval Date:	04-12-2017
Violations Found:	No
Eval Type:	Routine done by local agency
Eval Notes:	Not reported
Eval Division:	Contra Costa County Health Services Department
Eval Program:	HW
Eval Source:	CERS

Enforcement Action:

Site ID:	169514
Site Name:	VIZ CLEANERS
Site Address:	6935 LONE TREE WAY SUITE C
Site City:	BRENTWOOD
Site Zip:	94513
Enf Action Date:	05-20-2014

VIZ CLEANERS (Continued) **S121749524**

Enf Action Type:	Notice of Violation (Unified Program)
Enf Action Description:	Notice of Violation Issued by the Inspector at the Time of Inspection
Enf Action Notes:	Not reported
Enf Action Division:	Contra Costa County Health Services Department
Enf Action Program:	HMRRP
Enf Action Source:	CERS

Affiliation:

Affiliation Type Desc:	Identification Signer
Entity Name:	zalman ezros
Entity Title:	owner
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	Not reported

Affiliation Type Desc:	Operator
Entity Name:	ZALMAN EZROS
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	(925) 354-8709

Affiliation Type Desc:	Parent Corporation
Entity Name:	VIZ DRY CLEANERS
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	Not reported

Affiliation Type Desc:	Document Preparer
Entity Name:	ZALMAN EZROS
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	Not reported

Affiliation Type Desc:	Legal Owner
Entity Name:	ZALMAN EZROS
Entity Title:	Not reported
Affiliation Address:	zal5555@yahoo.com
Affiliation City:	BRENTWOOD
Affiliation State:	CA
Affiliation Country:	United States
Affiliation Zip:	94513
Affiliation Phone:	(925) 513-3277

VIZ CLEANERS (Continued) **S121749524**

Affiliation Type Desc:	Environmental Contact
Entity Name:	ZALMAN EZROS
Entity Title:	Not reported
Affiliation Address:	6935 lone tree way suite C
Affiliation City:	BRENTWOOD
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	94513
Affiliation Phone:	(925) 354-8709

Affiliation Type Desc:	Facility Mailing Address
Entity Name:	Mailing Address
Entity Title:	Not reported
Affiliation Address:	6935 lone tree way suite C
Affiliation City:	bremtwood
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	94513
Affiliation Phone:	Not reported

Affiliation Type Desc:	CUPA District
Entity Name:	Contra Costa County Health Services Department
Entity Title:	Not reported
Affiliation Address:	4585 Pacheco BlvdSuite 100
Affiliation City:	Martinez
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	94553
Affiliation Phone:	(925) 335-3200

CERS TANKS:

Site ID:	169514
CERS ID:	10019524
CERS Description:	Chemical Storage Facilities

Violations:

Site ID:	169514
Site Name:	VIZ CLEANERS
Violation Date:	05-20-2014
Citation:	HSC 6.95 Multiple - California Health and Safety Code, Chapter 6.95, Section(s) Multiple
Violation Description:	Business Plan Program - Administration/Documentation - General
Violation Notes:	Returned to compliance on 05/20/2014.
Violation Division:	Contra Costa County Health Services Department
Violation Program:	HMRRP
Violation Source:	CERS

Evaluation:

Eval General Type:	Compliance Evaluation Inspection
Eval Date:	05-20-2014
Violations Found:	Yes
Eval Type:	Routine done by local agency
Eval Notes:	Not reported
Eval Division:	Contra Costa County Health Services Department
Eval Program:	HMRRP
Eval Source:	CERS

VIZ CLEANERS (Continued) **S121749524**

Eval General Type:	Compliance Evaluation Inspection
Eval Date:	05-20-2014
Violations Found:	No
Eval Type:	Routine done by local agency
Eval Notes:	Not reported
Eval Division:	Contra Costa County Health Services Department
Eval Program:	HW
Eval Source:	CERS

Eval General Type:	Compliance Evaluation Inspection
Eval Date:	04-12-2017
Violations Found:	No
Eval Type:	Routine done by local agency
Eval Notes:	Not reported
Eval Division:	Contra Costa County Health Services Department
Eval Program:	HMRRP
Eval Source:	CERS

Eval General Type:	Compliance Evaluation Inspection
Eval Date:	04-12-2017
Violations Found:	No
Eval Type:	Routine done by local agency
Eval Notes:	Not reported
Eval Division:	Contra Costa County Health Services Department
Eval Program:	HW
Eval Source:	CERS

Enforcement Action:

Site ID:	169514
Site Name:	VIZ CLEANERS
Site Address:	6935 LONE TREE WAY SUITE C
Site City:	BRENTWOOD
Site Zip:	94513
Enf Action Date:	05-20-2014
Enf Action Type:	Notice of Violation (Unified Program)
Enf Action Description:	Notice of Violation Issued by the Inspector at the Time of Inspection
Enf Action Notes:	Not reported
Enf Action Division:	Contra Costa County Health Services Department
Enf Action Program:	HMRRP
Enf Action Source:	CERS

Affiliation:

Affiliation Type Desc:	Identification Signer
Entity Name:	zalman ezros
Entity Title:	owner
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	Not reported

Affiliation Type Desc:	Operator
Entity Name:	ZALMAN EZROS
Entity Title:	Not reported
Affiliation Address:	Not reported

VIZ CLEANERS (Continued) **S121749524**

Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	(925) 354-8709

Affiliation Type Desc:	Parent Corporation
Entity Name:	VIZ DRY CLEANERS
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	Not reported

Affiliation Type Desc:	Document Preparer
Entity Name:	ZALMAN EZROS
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	Not reported

Affiliation Type Desc:	Legal Owner
Entity Name:	ZALMAN EZROS
Entity Title:	Not reported
Affiliation Address:	zal5555@yahoo.com
Affiliation City:	BRENTWOOD
Affiliation State:	CA
Affiliation Country:	United States
Affiliation Zip:	94513
Affiliation Phone:	(925) 513-3277

Affiliation Type Desc:	Environmental Contact
Entity Name:	ZALMAN EZROS
Entity Title:	Not reported
Affiliation Address:	6935 lone tree way suite C
Affiliation City:	BRENTWOOD
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	94513
Affiliation Phone:	(925) 354-8709

Affiliation Type Desc:	Facility Mailing Address
Entity Name:	Mailing Address
Entity Title:	Not reported
Affiliation Address:	6935 lone tree way suite C
Affiliation City:	bremtwood
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	94513
Affiliation Phone:	Not reported

Affiliation Type Desc:	CUPA District

VIZ CLEANERS (Continued) **S121749524**

Entity Name:	Contra Costa County Health Services Department
Entity Title:	Not reported
Affiliation Address:	4585 Pacheco BlvdSuite 100
Affiliation City:	Martinez
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	94553
Affiliation Phone:	(925) 335-3200

A8 **TRI CITY AUTO PLAZA INC** **UST** **U004261569**
West **6935 LONE TREE WAY** **N/A**
1/8-1/4 **BRENTWOOD, CA 94513**
0.247 mi.
1306 ft. **Site 6 of 7 in cluster A**

Relative:
Higher

Actual:
99 ft.

UST:

Facility ID:	07-000-773602
Permitting Agency:	Contra Costa County Health Services Department
Latitude:	37.961463
Longitude:	-121.724617

A9 **TRI CITY AUTO PLAZA INC** **AST** **A100425404**
West **6935 LONE TREE WAY** **N/A**
1/8-1/4 **BRENTWOOD, CA 94513**
0.247 mi.
1306 ft. **Site 7 of 7 in cluster A**

Relative:
Higher

Actual:
99 ft.

AST:

Certified Unified Program Agencies:	Not reported
Owner:	Igor Pashover
Total Gallons:	Not reported
CERSID:	10018531
Facility ID:	07-000-773602
Business Name:	Chevron Extra Mile
Phone:	925-513-7305
Fax:	925-513-7304
Mailing Address:	6935 Lone tree way
Mailing Address City:	Brentwood, CA
Mailing Address State:	CA
Mailing Address Zip Code:	94513
Operator Name:	Tri city Auto Plaza inc
Operator Phone:	925-513-7305
Owner Phone:	925-513-7305
Owner Mail Address:	6935 Lone Tree way
Owner State:	CA
Owner Zip Code:	94513
Owner Country:	United States
Property Owner Name:	Igor Pashover
Property Owner Phone:	925-513-7305
Property Owner Mailing Address:	6935 Lone tree way
Property Owner City:	Brentwood,
Property Owner Stat :	CA
Property Owner Zip Code:	94513
Property Owner Country:	United States
EPAID:	CAL000329240

B10 ESE 1/4-1/2 0.459 mi. 2425 ft. | **DUTRA, LEROY**
SMITH LN
BRENTWOOD, CA 94513

Site 1 of 2 in cluster B

ENVIROSTOR
SCH
SWEEPS UST
CA FID UST
CONTRA COSTA CO. SITE LIST
CERS

S101580840
N/A

Relative: Lower

Actual: 81 ft.

ENVIROSTOR:

Facility ID:	60000916
Status:	Inactive - Action Required
Status Date:	12/16/2011
Site Code:	204222
Site Type:	School Cleanup
Site Type Detailed:	School
Acres:	18.93
NPL:	NO
Regulatory Agencies:	SMBRP
Lead Agency:	SMBRP
Program Manager:	Jose Luevano
Supervisor:	Juan Koponen
Division Branch:	Northern California Schools & Santa Susana
Assembly:	11
Senate:	07
Special Program:	EPA - Target Site Investigation
Restricted Use:	NO
Site Mgmt Req:	NONE SPECIFIED
Funding:	School District
Latitude:	37.95865
Longitude:	-121.7105
APN:	018-100-033-2, 018-100-040-7, 018-100-041-5, 018100040
Past Use:	AGRICULTURAL - ORCHARD, AGRICULTURAL - ROW CROPS, FUEL - VEHICLE STORAGE/ REFUELING
Potential COC:	Under Investigation Arsenic Benzene Chlordane DDD DDE DDT Lead Toxaphene TPH-diesel TPH-gas
Confirmed COC:	Under Investigation
Potential Description:	SOIL
Alias Name:	Proposed Fourth Middle School Site
Alias Type:	Alternate Name
Alias Name:	018-100-033-2
Alias Type:	APN
Alias Name:	018-100-040-7
Alias Type:	APN
Alias Name:	018-100-041-5
Alias Type:	APN
Alias Name:	018100040
Alias Type:	APN
Alias Name:	204222
Alias Type:	Project Code (Site Code)
Alias Name:	60000916
Alias Type:	Envirostor ID Number

Completed Info:

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	School Cleanup Agreement
Completed Date:	04/06/2009
Comments:	Not reported
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported

DUTRA, LEROY (Continued) **S101580840**

Completed Document Type: Environmental Oversight Agreement
Completed Date: 06/16/2008
Comments: DTSC fully executed the EOA. One original mailed to the District and the other maintained in the project file. DA

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: State/Federal Funded Site Work Order
Completed Date: 01/07/2011
Comments: Work Order issued.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: State/Federal Funded Site Contract Fiscal Approval (CFA)
Completed Date: 10/18/2010
Comments: CFA fully executed.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Site Inspections/Visit (Non LUR)
Completed Date: 01/10/2011
Comments: DTSC PM and consultant (Stuart StClair, URS) conducted site visit. Met on-site by District representative (Barbara Tittle)

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Inactive Status Letter
Completed Date: 12/14/2011
Comments: Inactive status notice mailed out 12/14/2011

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: State/Federal Funded Site Contract
Completed Date: 12/31/2010
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Preliminary Endangerment Assessment Workplan
Completed Date: 06/27/2008
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Other Report
Completed Date: 06/12/2008
Comments: Phase I ESA submitted as background information for a PEAR site.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Preliminary Endangerment Assessment Report
Completed Date: 02/10/2009
Comments: DTSC concurred and approved the PEA with a further action determination.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported

DUTRA, LEROY (Continued) **S101580840**

Completed Document Type:	4.14 Request
Completed Date:	04/01/2009
Comments:	DTSC approved Form SFPD 4.14.

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Supplemental Site Investigation Workplan
Completed Date:	02/23/2011
Comments:	DTSC approved the SSI Workplan for implementation. Field work is scheduled for Feb 28 amd Mar 1, 2011.

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Fieldwork
Completed Date:	02/28/2011
Comments:	DTSC provided SSI fieldwork oversight.

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Supplemental Site Investigation Report
Completed Date:	05/16/2011
Comments:	DTSC approved the SSI Report with a further action determination.

Future Area Name:	Not reported
Future Sub Area Name:	Not reported
Future Document Type:	Not reported
Future Due Date:	Not reported
Schedule Area Name:	Not reported
Schedule Sub Area Name:	Not reported
Schedule Document Type:	Not reported
Schedule Due Date:	Not reported
Schedule Revised Date:	Not reported

SCH:

Facility ID:	60000916
Site Type:	School Cleanup
Site Type Detail:	School
Site Mgmt. Req.:	NONE SPECIFIED
Acres:	18.93
National Priorities List:	NO
Cleanup Oversight Agencies:	SMBRP
Lead Agency:	SMBRP
Lead Agency Description:	DTSC - Site Cleanup Program
Project Manager:	Jose Luevano
Supervisor:	Juan Koponen
Division Branch:	Northern California Schools & Santa Susana
Site Code:	204222
Assembly:	11
Senate:	07
Special Program Status:	EPA - Target Site Investigation
Status:	Inactive - Action Required
Status Date:	12/16/2011
Restricted Use:	NO
Funding:	School District
Latitude:	37.95865
Longitude:	-121.7105

DUTRA, LEROY (Continued) **S101580840**

APN:	018-100-033-2, 018-100-040-7, 018-100-041-5, 018100040
Past Use:	AGRICULTURAL - ORCHARD, AGRICULTURAL - ROW CROPS, FUEL - VEHICLE STORAGE/ REFUELING
Potential COC:	Under Investigation, Arsenic, Benzene, Chlordane, DDD, DDE, DDT, Lead, Toxaphene, TPH-diesel, TPH-gas
Confirmed COC:	Under Investigation
Potential Description:	SOIL
Alias Name:	Proposed Fourth Middle School Site
Alias Type:	Alternate Name
Alias Name:	018-100-033-2
Alias Type:	APN
Alias Name:	018-100-040-7
Alias Type:	APN
Alias Name:	018-100-041-5
Alias Type:	APN
Alias Name:	018100040
Alias Type:	APN
Alias Name:	204222
Alias Type:	Project Code (Site Code)
Alias Name:	60000916
Alias Type:	Envirostor ID Number

Completed Info:

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	School Cleanup Agreement
Completed Date:	04/06/2009
Comments:	Not reported

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Environmental Oversight Agreement
Completed Date:	06/16/2008
Comments:	DTSC fully executed the EOA. One original mailed to the District and the other maintained in the project file. DA

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	State/Federal Funded Site Work Order
Completed Date:	01/07/2011
Comments:	Work Order issued.

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	State/Federal Funded Site Contract Fiscal Approval (CFA)
Completed Date:	10/18/2010
Comments:	CFA fully executed.

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Site Inspections/Visit (Non LUR)
Completed Date:	01/10/2011
Comments:	DTSC PM and consultant (Stuart StClair, URS) conducted site visit. Met on-site by District representative (Barbara Tittle)

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Inactive Status Letter

DUTRA, LEROY (Continued) **S101580840**

Completed Date: 12/14/2011
Comments: Inactive status notice mailed out 12/14/2011

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: State/Federal Funded Site Contract
Completed Date: 12/31/2010
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Preliminary Endangerment Assessment Workplan
Completed Date: 06/27/2008
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Other Report
Completed Date: 06/12/2008
Comments: Phase I ESA submitted as background information for a PEAR site.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Preliminary Endangerment Assessment Report
Completed Date: 02/10/2009
Comments: DTSC concurred and approved the PEA with a further action determination.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: 4.14 Request
Completed Date: 04/01/2009
Comments: DTSC approved Form SFPD 4.14.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Supplemental Site Investigation Workplan
Completed Date: 02/23/2011
Comments: DTSC approved the SSI Workplan for implementation. Field work is scheduled for Feb 28 amd Mar 1, 2011.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Fieldwork
Completed Date: 02/28/2011
Comments: DTSC provided SSI fieldwork oversight.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Supplemental Site Investigation Report
Completed Date: 05/16/2011
Comments: DTSC approved the SSI Report with a further action determination.

Future Area Name: Not reported
Future Sub Area Name: Not reported
Future Document Type: Not reported
Future Due Date: Not reported

DUTRA, LEROY (Continued) **S101580840**

Schedule Area Name: Not reported
Schedule Sub Area Name: Not reported
Schedule Document Type: Not reported
Schedule Due Date: Not reported
Schedule Revised Date: Not reported

SWEEPS UST:
Status: Not reported
Comp Number: 30096
Number: Not reported
Board Of Equalization: Not reported
Referral Date: Not reported
Action Date: Not reported
Created Date: Not reported
Owner Tank Id: Not reported
SWRCB Tank Id: 07-000-030096-000001
Tank Status: Not reported
Capacity: 300
Active Date: Not reported
Tank Use: M.V. FUEL
STG: PRODUCT
Content: REG UNLEADED
Number Of Tanks: 1

CA FID UST:
Facility ID: 07000800
Regulated By: UTNKI
Regulated ID: Not reported
Cortese Code: Not reported
SIC Code: Not reported
Facility Phone: 4156341795
Mail To: Not reported
Mailing Address: SMITH LN
Mailing Address 2: Not reported
Mailing City,St,Zip: BRENTWOOD 94513
Contact: Not reported
Contact Phone: Not reported
DUNs Number: Not reported
NPDES Number: Not reported
EPA ID: Not reported
Comments: Not reported
Status: Inactive

CONTRA COSTA CO. SITE LIST:
Facility ID: FA0032036
Billing Status: INACTIVE, NON-BILLABLE
Program Status: CONTRA COSTA CO. SITE LIST
Program/Elements: UNDERGROUND STORAGE TANK SITE
Region: CONTRA COSTA
Cupa Number: 730096

CERS TANKS:
Site ID: 341860
CERS ID: 60000916
CERS Description: School Cleanup

DUTRA, LEROY (Continued) **S101580840**

Affiliation:

Affiliation Type Desc:	Supervisor
Entity Name:	JUAN KOPONEN
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	Not reported

Affiliation Type Desc:	Lead Project Manager
Entity Name:	JOSE LUEVANO
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	SACRAMENTO
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	Not reported

B11 **PROPOSED FOURTH MIDDLE SCHOOL SITE** **US BROWNFIELDS** **1023620470**
ESE **2340 SMITH ROAD** **FINDS** **N/A**
1/4-1/2 **BRENTWOOD, CA 95413**
0.459 mi.
2425 ft. **Site 2 of 2 in cluster B**

Relative:
Lower

Actual:
81 ft.

US BROWNFIELDS:

Property Name:	PROPOSED FOURTH MIDDLE SCHOOL SITE
Recipient Name:	California Department of Toxic Substances Control
Grant Type:	Section 128(a) State/Tribal
Property Number:	018-100-041-5 018-100-040-7 018-100-033-2
Parcel size:	18.93
Latitude:	37.958653
Longitude:	-121.710572
HCM Label:	Address Matching-House Number
Map Scale:	Not reported
Point of Reference:	Entrance Point of a Facility or Station
Highlights:	Not reported
Datum:	North American Datum of 1983
Acres Property ID:	133703
IC Data Access:	Not reported
Start Date:	Not reported
Redev Completition Date:	Not reported
Completed Date:	Not reported
Acres Cleaned Up:	Not reported
Cleanup Funding:	Not reported
Cleanup Funding Source:	Not reported
Assessment Funding:	40000
Assessment Funding Source:	State/Tribal Funding (non-section 128(a))
Redevelopment Funding:	Not reported
Redev. Funding Source:	Not reported
Redev. Funding Entity Name:	Not reported
Redevelopment Start Date:	Not reported
Assessment Funding Entity:	DTSC via 128a grnt
Cleanup Funding Entity:	Not reported

PROPOSED FOURTH MIDDLE SCHOOL SITE (Continued) **1023620470**

Grant Type:	N/A
Accomplishment Type:	Supplemental Assessment
Accomplishment Count:	0
Cooperative Agreement Number:	00T14502
Start Date:	01/06/2011 00:00:00
Ownership Entity:	Government
Completion Date:	04/30/2011 00:00:00
Current Owner:	Brentwood Union Elementary School District
Did Owner Change:	N
Cleanup Required:	Y
Video Available:	Not reported
Photo Available:	Y
Institutional Controls Required:	N
IC Category Proprietary Controls:	Not reported
IC Cat. Info. Devices:	Not reported
IC Cat. Gov. Controls:	Not reported
IC Cat. Enforcement Permit Tools:	Not reported
IC in place date:	Not reported
IC in place:	Not reported
State/tribal program date:	10/18/2010 00:00:00
State/tribal program ID:	204222-83
State/tribal NFA date:	Not reported
Air contaminated:	Not reported
Air cleaned:	Not reported
Asbestos found:	Not reported
Asbestos cleaned:	Not reported
Controled substance found:	Not reported
Controled substance cleaned:	Not reported
Drinking water affected:	Not reported
Drinking water cleaned:	Not reported
Groundwater affected:	Not reported
Groundwater cleaned:	Not reported
Lead contaminant found:	Y
Lead cleaned up:	Not reported
No media affected:	Not reported
Unknown media affected:	Not reported
Other cleaned up:	Not reported
Other metals found:	Not reported
Other metals cleaned:	Not reported
Other contaminants found:	Y
Other contams found description:	OCPchlordane
PAHs found:	Not reported
PAHs cleaned up:	Not reported
PCBs found:	Not reported
PCBs cleaned up:	Not reported
Petro products found:	Not reported
Petro products cleaned:	Not reported
Sediments found:	Not reported
Sediments cleaned:	Not reported
Soil affected:	Y
Soil cleaned up:	Not reported
Surface water cleaned:	Not reported
VOCs found:	Not reported
VOCs cleaned:	Not reported
Cleanup other description:	Not reported
Num. of cleanup and re-dev. jobs:	Not reported
Past use greenspace acreage:	Not reported

PROPOSED FOURTH MIDDLE SCHOOL SITE (Continued) **1023620470**

Past use residential acreage:	10.31
Surface Water:	Not reported
Past use commercial acreage:	8.62
Past use industrial acreage:	Not reported
Future use greenspace acreage:	Not reported
Future use residential acreage:	10.31
Future use commercial acreage:	8.62
Future use industrial acreage:	Not reported
Greenspace acreage and type:	Not reported
Superfund Fed. landowner flag:	N
Arsenic cleaned up:	Not reported
Cadmium cleaned up:	Not reported
Chromium cleaned up:	Not reported
Copper cleaned up:	Not reported
Iron cleaned up:	Not reported
mercury cleaned up:	Not reported
Nickel Cleaned Up:	Not reported
No clean up:	Not reported
Pesticides cleaned up:	Not reported
Selenium cleaned up:	Not reported
SVOCs cleaned up:	Not reported
Unknown clean up:	Not reported
Arsenic contaminant found:	Not reported
Cadmium contaminant found:	Not reported
Chromium contaminant found:	Not reported
Copper contaminant found:	Not reported
Iron contaminant found:	Not reported
Mercury contaminant found:	Not reported
Nickel contaminant found:	Not reported
No contaminant found:	Not reported
Pesticides contaminant found:	Not reported
Selenium contaminant found:	Not reported
SVOCs contaminant found:	Not reported
Unknown contaminant found:	Not reported
Future Use: Multistory	Not reported
Media affected Bluiding Material:	Not reported
Media affected indoor air:	Not reported
Building material media cleaned up:	Not reported
Indoor air media cleaned up:	Not reported
Unknown media cleaned up:	Not reported
Past Use: Multistory	Not reported
Property Description:	Site consists of APNs: 018-100-033-23.10-ac, 5-build & ag-land -040-7 7,21-ac, 3 build 500 gal gas UST/250 gal diesel AST, & ag -041-5 8.69-ac ag. AG since 1939. See attachment for more details.
Below Poverty Number:	146
Below Poverty Percent:	7.6%
Meidan Income:	1814
Meidan Income Number:	318
Meidan Income Percent:	16.5%
Vacant Housing Number:	32
Vacant Housing Percent:	5.5%
Unemployed Number:	79
Unemployed Percent:	4.1%

FINDS:

Registry ID: 110070068534

PROPOSED FOURTH MIDDLE SCHOOL SITE (Continued) **1023620470**

Environmental Interest/Information System

US EPA Assessment, Cleanup and Redevelopment Exchange System (ACRES) is an federal online database for Brownfields Grantees to electronically submit data directly to EPA.

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

12
West
1/2-1
0.513 mi.
2707 ft.

LA PALOMA
6651 LONE TREE WAY
BRENTWOOD, CA 94513

ENVIROSTOR **S105628389**
SCH **N/A**
CERS

Relative:
Higher

Actual:
103 ft.

ENVIROSTOR:

Facility ID:	7010008
Status:	No Further Action
Status Date:	09/09/2004
Site Code:	204056
Site Type:	School Investigation
Site Type Detailed:	School
Acres:	5.65
NPL:	NO
Regulatory Agencies:	SMBRP
Lead Agency:	SMBRP
Program Manager:	Kamili Siglowide
Supervisor:	Mark Malinowski
Division Branch:	Northern California Schools & Santa Susana
Assembly:	11
Senate:	07
Special Program:	Not reported
Restricted Use:	NO
Site Mgmt Req:	NONE SPECIFIED
Funding:	School District
Latitude:	37.96115
Longitude:	-121.7299
APN:	019050040
Past Use:	AGRICULTURAL - ROW CROPS
Potential COC:	Toxaphene
Confirmed COC:	30023-NO No Contaminants found
Potential Description:	SOIL
Alias Name:	Not reported
Alias Type:	Not reported

Completed Info:

Completed Area Name:	Not reported
Completed Sub Area Name:	Not reported
Completed Document Type:	Not reported
Completed Date:	Not reported
Comments:	Not reported
Future Area Name:	Not reported
Future Sub Area Name:	Not reported
Future Document Type:	Not reported
Future Due Date:	Not reported
Schedule Area Name:	Not reported
Schedule Sub Area Name:	Not reported

LA PALOMA (Continued) **S105628389**

Schedule Document Type: Not reported
Schedule Due Date: Not reported
Schedule Revised Date: Not reported

SCH:

Facility ID: 7010008
Site Type: School Investigation
Site Type Detail: School
Site Mgmt. Req.: NONE SPECIFIED
Acres: 5.65
National Priorities List: NO
Cleanup Oversight Agencies: SMBRP
Lead Agency: SMBRP
Lead Agency Description: DTSC - Site Cleanup Program
Project Manager: Kamili Siglowide
Supervisor: Mark Malinowski
Division Branch: Northern California Schools & Santa Susana
Site Code: 204056
Assembly: 11
Senate: 07
Special Program Status: Not reported
Status: No Further Action
Status Date: 09/09/2004
Restricted Use: NO
Funding: School District
Latitude: 37.96115
Longitude: -121.7299
APN: 019050040
Past Use: AGRICULTURAL - ROW CROPS
Potential COC: Toxaphene
Confirmed COC: 30023-NO, No Contaminants found
Potential Description: SOIL
Alias Name: Not reported
Alias Type: Not reported

Completed Info:
Completed Area Name: Not reported
Completed Sub Area Name: Not reported
Completed Document Type: Not reported
Completed Date: Not reported
Comments: Not reported

Future Area Name: Not reported
Future Sub Area Name: Not reported
Future Document Type: Not reported
Future Due Date: Not reported
Schedule Area Name: Not reported
Schedule Sub Area Name: Not reported
Schedule Document Type: Not reported
Schedule Due Date: Not reported
Schedule Revised Date: Not reported

CERS TANKS:
Site ID: 339145
CERS ID: 07010008
CERS Description: School Investigation

LA PALOMA (Continued) **S105628389**

Affiliation:

Affiliation Type Desc:	Lead Project Manager
Entity Name:	KAMILI SIGLOWIDE
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	SACRAMENTO
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	Not reported

Affiliation Type Desc:	Supervisor
Entity Name:	MARK MALINOWSKI
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	Not reported

13
WNW
1/2-1
0.694 mi.
3665 ft.

EMPIRE ACRES LLC
2700 EMPIRE AVENUE
BRENTWOOD, CA 94513

ENVIROSTOR **S121018194**
VCP **N/A**
HAZNET
NPDES
CIWQS

Relative:
Higher

Actual:
104 ft.

ENVIROSTOR:

Facility ID:	60002665
Status:	No Further Action
Status Date:	07/18/2018
Site Code:	202187
Site Type:	Voluntary Cleanup
Site Type Detailed:	Voluntary Cleanup
Acres:	8
NPL:	NO
Regulatory Agencies:	SMBRP
Lead Agency:	SMBRP
Program Manager:	Parag Shah
Supervisor:	Daniel Murphy
Division Branch:	Cleanup Berkeley
Assembly:	, 11
Senate:	, 07
Special Program:	Voluntary Cleanup Program
Restricted Use:	NO
Site Mgmt Req:	NONE SPECIFIED
Funding:	Responsible Party
Latitude:	37.95562
Longitude:	-121.7324
APN:	NONE SPECIFIED
Past Use:	AGRICULTURAL - LIVESTOCK, AGRICULTURAL - ORCHARD, AGRICULTURAL - ROW CROPS
Potential COC:	Chlordane DDT Heptachlor epoxide
Confirmed COC:	Chlordane DDT Heptachlor epoxide
Potential Description:	SOIL
Alias Name:	202187

EMPIRE ACRES LLC (Continued) **S121018194**

Alias Type: Project Code (Site Code)
Alias Name: 60002665
Alias Type: Envirostor ID Number

Completed Info:
Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Voluntary Cleanup Agreement
Completed Date: 06/18/2018
Comments: final draft

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: No Further Action Letter
Completed Date: 07/18/2018
Comments: No Further Action Letter - Final Draft

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Preliminary Endangerment Assessment Report
Completed Date: 07/18/2018
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Voluntary Cleanup Consultation
Completed Date: 05/30/2018
Comments: final draft

Future Area Name: Not reported
Future Sub Area Name: Not reported
Future Document Type: Not reported
Future Due Date: Not reported
Schedule Area Name: Not reported
Schedule Sub Area Name: Not reported
Schedule Document Type: Not reported
Schedule Due Date: Not reported
Schedule Revised Date: Not reported

VCP:
Facility ID: 60002665
Site Type: Voluntary Cleanup
Site Type Detail: Voluntary Cleanup
Site Mgmt. Req.: NONE SPECIFIED
Acres: 8
National Priorities List: NO
Cleanup Oversight Agencies: SMBRP
Lead Agency: SMBRP
Lead Agency Description: DTSC - Site Cleanup Program
Project Manager: Parag Shah
Supervisor: Daniel Murphy
Division Branch: Cleanup Berkeley
Site Code: 202187
Assembly: , 11
Senate: , 07
Special Programs Code: Voluntary Cleanup Program
Status: No Further Action

EMPIRE ACRES LLC (Continued) **S121018194**

Status Date:	07/18/2018
Restricted Use:	NO
Funding:	Responsible Party
Lat/Long:	37.95562 / -121.7324
APN:	NONE SPECIFIED
Past Use:	AGRICULTURAL - LIVESTOCK, AGRICULTURAL - ORCHARD, AGRICULTURAL - ROW CROPS
Potential COC:	30004, 30008, 30309
Confirmed COC:	30004,30008,30309
Potential Description:	SOIL
Alias Name:	202187
Alias Type:	Project Code (Site Code)
Alias Name:	60002665
Alias Type:	Envirostor ID Number

Completed Info:

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Voluntary Cleanup Agreement
Completed Date:	06/18/2018
Comments:	final draft
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	No Further Action Letter
Completed Date:	07/18/2018
Comments:	No Further Action Letter - Final Draft
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Preliminary Endangerment Assessment Report
Completed Date:	07/18/2018
Comments:	Not reported
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Voluntary Cleanup Consultation
Completed Date:	05/30/2018
Comments:	final draft
Future Area Name:	Not reported
Future Sub Area Name:	Not reported
Future Document Type:	Not reported
Future Due Date:	Not reported
Schedule Area Name:	Not reported
Schedule Sub Area Name:	Not reported
Schedule Document Type:	Not reported
Schedule Due Date:	Not reported
Schedule Revised Date:	Not reported

HAZNET:

Facility Name:	EMPIRE ACRES, LLC.
envid:	S121018194
Year:	2016
GEPAID:	CAC002890949
Contact:	SCOTT HALLEY
Telephone:	9253925685

EMPIRE ACRES LLC (Continued) **S121018194**

Mailing Name:	Not reported
Mailing Address:	1820 BONANZA ST
Mailing City,St,Zip:	WALNUT CREEK, CA 94596
Gen County:	Contra Costa
TSD EPA ID:	CAD982042475
TSD County:	Solano
Waste Category:	Asbestos containing waste
Disposal Method:	Landfill Or Surface Impoundment That Will Be Closed As Landfill(To Include On-Site Treatment And/Or Stabilization)
Tons:	6.9
Cat Decode:	Not reported
Method Decode:	Not reported
Facility County:	Contra Costa

NPDES:

Facility Status:	Not reported
NPDES Number:	Not reported
Region:	Not reported
Agency Number:	Not reported
Regulatory Measure ID:	Not reported
Place ID:	Not reported
Order Number:	Not reported
WDID:	5S07C384032
Regulatory Measure Type:	Construction
Program Type:	Not reported
Adoption Date Of Regulatory Measure:	Not reported
Effective Date Of Regulatory Measure:	Not reported
Termination Date Of Regulatory Measure:	Not reported
Expiration Date Of Regulatory Measure:	Not reported
Discharge Address:	Not reported
Discharge Name:	Not reported
Discharge City:	Not reported
Discharge State:	Not reported
Discharge Zip:	Not reported
Status:	Active
Status Date:	07/20/2018
Operator Name:	K Hovnanian Companies of California
Operator Address:	3721 Dounglas Blvd Suite 150
Operator City:	Sacramento
Operator State:	California
Operator Zip:	95821

Facility Status:	Active
NPDES Number:	CAS000002
Region:	5S
Agency Number:	0
Regulatory Measure ID:	499652
Place ID:	Not reported
Order Number:	2009-0009-DWQ
WDID:	5S07C384032
Regulatory Measure Type:	Enrollee
Program Type:	Construction
Adoption Date Of Regulatory Measure:	Not reported
Effective Date Of Regulatory Measure:	07/20/2018
Termination Date Of Regulatory Measure:	Not reported
Expiration Date Of Regulatory Measure:	Not reported
Discharge Address:	3721 Dounglas Blvd Suite 150

EMPIRE ACRES LLC (Continued) **S121018194**

Discharge Name:	K Hovnanian Companies of California
Discharge City:	Sacramento
Discharge State:	California
Discharge Zip:	95821
Status:	Not reported
Status Date:	Not reported
Operator Name:	Not reported
Operator Address:	Not reported
Operator City:	Not reported
Operator State:	Not reported
Operator Zip:	Not reported

CIWQS:

Agency:	K Hovnanian Companies of California
Agency Address:	3721 Dounglas Blvd Suite 150, Sacramento, CA 95821
Place/Project Type:	Construction - Residential
SIC/NAICS:	Not reported
Region:	5S
Program:	CONSTW
Regulatory Measure Status:	Active
Regulatory Measure Type:	Storm water construction
Order Number:	2009-0009-DWQ
WDID:	5S07C384032
NPDES Number:	CAS000002
Adoption Date:	Not reported
Effective Date:	07/20/2018
Termination Date:	Not reported
Expiration/Review Date:	Not reported
Design Flow:	Not reported
Major/Minor:	Not reported
Complexity:	Not reported
TTWQ:	Not reported
Enforcement Actions within 5 years:	0
Violations within 5 years:	0
Latitude:	37.96464
Longitude:	-121.73128

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14 WSW 1/2-1 0.821 mi. 4335 ft. **EMPIRE ELEMENTARY SCHOOL**
EMPIRE AVENUE/AMBER LANE
BRENTWOOD, CA 94513
ENVIROSTOR SCH **S116165206 N/A**

Relative: Higher

Actual: 114 ft.

ENVIROSTOR:

Facility ID:	1010005
Status:	Certified
Status Date:	06/09/2003
Site Code:	201282
Site Type:	School Cleanup
Site Type Detailed:	School
Acres:	18.96
NPL:	NO
Regulatory Agencies:	HWMP
Lead Agency:	HWMP
Program Manager:	Kamili Siglowide
Supervisor:	Mark Malinowski
Division Branch:	Northern California Schools & Santa Susana

EMPIRE ELEMENTARY SCHOOL (Continued) **S116165206**

Assembly:	11
Senate:	07
Special Program:	Not reported
Restricted Use:	NO
Site Mgmt Req:	NONE SPECIFIED
Funding:	School District
Latitude:	37.95523
Longitude:	-121.7335
APN:	NONE SPECIFIED
Past Use:	AGRICULTURAL - ROW CROPS
Potential COC:	Arsenic DDE DDT Toxaphene
Confirmed COC:	Arsenic DDE DDT Toxaphene
Potential Description:	SOIL
Alias Name:	Not reported
Alias Type:	Not reported

Completed Info:

Completed Area Name:	Not reported
Completed Sub Area Name:	Not reported
Completed Document Type:	Not reported
Completed Date:	Not reported
Comments:	Not reported
Future Area Name:	Not reported
Future Sub Area Name:	Not reported
Future Document Type:	Not reported
Future Due Date:	Not reported
Schedule Area Name:	Not reported
Schedule Sub Area Name:	Not reported
Schedule Document Type:	Not reported
Schedule Due Date:	Not reported
Schedule Revised Date:	Not reported

SCH:

Facility ID:	1010005
Site Type:	School Cleanup
Site Type Detail:	School
Site Mgmt. Req.:	NONE SPECIFIED
Acres:	18.96
National Priorities List:	NO
Cleanup Oversight Agencies:	HWMP
Lead Agency:	HWMP
Lead Agency Description:	DTSC - Hazardous Waste Management Program
Project Manager:	Kamili Siglowide
Supervisor:	Mark Malinowski
Division Branch:	Northern California Schools & Santa Susana
Site Code:	201282
Assembly:	11
Senate:	07
Special Program Status:	Not reported
Status:	Certified
Status Date:	06/09/2003
Restricted Use:	NO
Funding:	School District
Latitude:	37.95523
Longitude:	-121.7335

EMPIRE ELEMENTARY SCHOOL (Continued) **S116165206**

APN:	NONE SPECIFIED
Past Use:	AGRICULTURAL - ROW CROPS
Potential COC:	Arsenic, DDE, DDT, Toxaphene
Confirmed COC:	Arsenic, DDE, DDT, Toxaphene
Potential Description:	SOIL
Alias Name:	Not reported
Alias Type:	Not reported

Completed Info:

Completed Area Name:	Not reported
Completed Sub Area Name:	Not reported
Completed Document Type:	Not reported
Completed Date:	Not reported
Comments:	Not reported
Future Area Name:	Not reported
Future Sub Area Name:	Not reported
Future Document Type:	Not reported
Future Due Date:	Not reported
Schedule Area Name:	Not reported
Schedule Sub Area Name:	Not reported
Schedule Document Type:	Not reported
Schedule Due Date:	Not reported
Schedule Revised Date:	Not reported

15
WSW
1/2-1
0.887 mi.
4685 ft.

MILES-FENELL PROPERTY **ENVIROSTOR** **S116490709**
2200 SHADY WILLOW LANE,2301 & 2251 EMPIRE AVENUE **VCP** **N/A**
BRENTWOOD, CA 94513

Relative:
Higher

Actual:
114 ft.

ENVIROSTOR:

Facility ID:	60001996
Status:	No Further Action
Status Date:	08/12/2014
Site Code:	202004
Site Type:	Voluntary Cleanup
Site Type Detailed:	Voluntary Cleanup
Acres:	13.92
NPL:	NO
Regulatory Agencies:	SMBRP
Lead Agency:	SMBRP
Program Manager:	Not reported
Supervisor:	Daniel Murphy
Division Branch:	Cleanup Berkeley
Assembly:	11
Senate:	07
Special Program:	Not reported
Restricted Use:	NO
Site Mgmt Req:	NONE SPECIFIED
Funding:	Responsible Party
Latitude:	37.95763
Longitude:	-121.7360
APN:	019040050, 019040051, 019040066
Past Use:	AGRICULTURAL - ORCHARD, AGRICULTURAL - ROW CROPS
Potential COC:	Arsenic
Confirmed COC:	Arsenic
Potential Description:	SOIL

MILES-FENELL PROPERTY (Continued) **S116490709**

Alias Name:	Bella Fiore Development
Alias Type:	Alternate Name
Alias Name:	019040050
Alias Type:	APN
Alias Name:	019040051
Alias Type:	APN
Alias Name:	019040066
Alias Type:	APN
Alias Name:	202004
Alias Type:	Project Code (Site Code)
Alias Name:	60001996
Alias Type:	Envirostor ID Number

Completed Info:

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Preliminary Endangerment Assessment Report
Completed Date:	06/27/2014
Comments:	Acceptance of the documents as a PEA equivalency with further work needed.

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Application
Completed Date:	04/03/2014
Comments:	DTSC was selected for the oversight for this project.

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Voluntary Cleanup Agreement
Completed Date:	05/14/2014
Comments:	Not reported

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	No Further Action Letter
Completed Date:	08/12/2014
Comments:	Not reported

Future Area Name:	Not reported
Future Sub Area Name:	Not reported
Future Document Type:	Not reported
Future Due Date:	Not reported
Schedule Area Name:	Not reported
Schedule Sub Area Name:	Not reported
Schedule Document Type:	Not reported
Schedule Due Date:	Not reported
Schedule Revised Date:	Not reported

VCP:

Facility ID:	60001996
Site Type:	Voluntary Cleanup
Site Type Detail:	Voluntary Cleanup
Site Mgmt. Req.:	NONE SPECIFIED
Acres:	13.92
National Priorities List:	NO
Cleanup Oversight Agencies:	SMBRP

MILES-FENELL PROPERTY (Continued) **S116490709**

Lead Agency:	SMBRP
Lead Agency Description:	DTSC - Site Cleanup Program
Project Manager:	Not reported
Supervisor:	Daniel Murphy
Division Branch:	Cleanup Berkeley
Site Code:	202004
Assembly:	11
Senate:	07
Special Programs Code:	Not reported
Status:	No Further Action
Status Date:	08/12/2014
Restricted Use:	NO
Funding:	Responsible Party
Lat/Long:	37.95763 / -121.7360
APN:	019040050, 019040051, 019040066
Past Use:	AGRICULTURAL - ORCHARD, AGRICULTURAL - ROW CROPS
Potential COC:	30001
Confirmed COC:	30001
Potential Description:	SOIL
Alias Name:	Bella Fiore Development
Alias Type:	Alternate Name
Alias Name:	019040050
Alias Type:	APN
Alias Name:	019040051
Alias Type:	APN
Alias Name:	019040066
Alias Type:	APN
Alias Name:	202004
Alias Type:	Project Code (Site Code)
Alias Name:	60001996
Alias Type:	Envirostor ID Number

Completed Info:

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Preliminary Endangerment Assessment Report
Completed Date:	06/27/2014
Comments:	Acceptance of the documents as a PEA equivalency with further work needed.
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Application
Completed Date:	04/03/2014
Comments:	DTSC was selected for the oversight for this project.
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Voluntary Cleanup Agreement
Completed Date:	05/14/2014
Comments:	Not reported
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	No Further Action Letter
Completed Date:	08/12/2014
Comments:	Not reported

MILES-FENELL PROPERTY (Continued) **S116490709**

Future Area Name:	Not reported
Future Sub Area Name:	Not reported
Future Document Type:	Not reported
Future Due Date:	Not reported
Schedule Area Name:	Not reported
Schedule Sub Area Name:	Not reported
Schedule Document Type:	Not reported
Schedule Due Date:	Not reported
Schedule Revised Date:	Not reported

Count: 10 records.

ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
ANTIOCH	S121651786	LONE TREE LANDING	LONE TREE WAY & HILLCREST AVEN	94531	CIWQS
ANTIOCH	S122248188	LONE TREE WAY INTERSECTION IMPROVE	LONE TREE WAY HILLCREST AVENUE	94531	NPDES
ANTIOCH	S121651792	LONE TREE WAY & HILLCREST WIDENING	LONE TREE WAY & HILLCREST AVEN	94531	CIWQS
BRENTWOOD	S106230275	VENTURINI LEASE SITE (BRENTWOOD OI	DEER VALLEY RD & LONE TREE WAY		CPS-SLIC
BRENTWOOD	S121651794	LONE TREE WAY	LONE TREE WAY	94513	CIWQS
BRENTWOOD	S121651790	LONE TREE TOWNE PLAZA	LONE TREE WY	94513	CIWQS
BRENTWOOD	S106112407	OXY USA INC. (BRENTWOOD OIL & GAS	LONE TREE WAY & DEER VALLEY RD		CPS-SLIC
BRENTWOOD	S121651787	LONE TREE PLAZA	NEC HEIDORN RANCH RD & LONE T	94513	CIWQS
BRENTWOOD	S121641205	GOLDEN EAGLE AT LONE TREE	SOF LONE TREE WAY W OF FAIRVIE		CIWQS
BRENTWOOD	S121651788	LONE TREE PLAZA	SWC OF LONE TREE WAY AND SR4 B	94513	CIWQS

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

To maintain currency of the following federal and state databases, EDR contacts the appropriate governmental agency on a monthly or quarterly basis, as required.

Number of Days to Update: Provides confirmation that EDR is reporting records that have been updated within 90 days from the date the government agency made the information available to the public.

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

NPL: National Priority List

National Priorities List (Superfund). The NPL is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund Program. NPL sites may encompass relatively large areas. As such, EDR provides polygon coverage for over 1,000 NPL site boundaries produced by EPA's Environmental Photographic Interpretation Center (EPIC) and regional EPA offices.

Date of Government Version: 03/11/2019
Date Data Arrived at EDR: 03/14/2019
Date Made Active in Reports: 04/01/2019
Number of Days to Update: 18

Source: EPA
Telephone: N/A
Last EDR Contact: 04/18/2019
Next Scheduled EDR Contact: 07/15/2019
Data Release Frequency: Quarterly

NPL Site Boundaries

Sources:

EPA's Environmental Photographic Interpretation Center (EPIC)
Telephone: 202-564-7333

EPA Region 1
Telephone 617-918-1143

EPA Region 6
Telephone: 214-655-6659

EPA Region 3
Telephone 215-814-5418

EPA Region 7
Telephone: 913-551-7247

EPA Region 4
Telephone 404-562-8033

EPA Region 8
Telephone: 303-312-6774

EPA Region 5
Telephone 312-886-6686

EPA Region 9
Telephone: 415-947-4246

EPA Region 10
Telephone 206-553-8665

Proposed NPL: Proposed National Priority List Sites

A site that has been proposed for listing on the National Priorities List through the issuance of a proposed rule in the Federal Register. EPA then accepts public comments on the site, responds to the comments, and places on the NPL those sites that continue to meet the requirements for listing.

Date of Government Version: 03/11/2019
Date Data Arrived at EDR: 03/14/2019
Date Made Active in Reports: 04/01/2019
Number of Days to Update: 18

Source: EPA
Telephone: N/A
Last EDR Contact: 04/18/2019
Next Scheduled EDR Contact: 07/15/2019
Data Release Frequency: Quarterly

NPL LIENS: Federal Superfund Liens

Federal Superfund Liens. Under the authority granted the USEPA by CERCLA of 1980, the USEPA has the authority to file liens against real property in order to recover remedial action expenditures or when the property owner received notification of potential liability. USEPA compiles a listing of filed notices of Superfund Liens.

Date of Government Version: 10/15/1991
Date Data Arrived at EDR: 02/02/1994
Date Made Active in Reports: 03/30/1994
Number of Days to Update: 56

Source: EPA
Telephone: 202-564-4267
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

Federal Delisted NPL site list

Delisted NPL: National Priority List Deletions

The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the NPL where no further response is appropriate.

Date of Government Version: 03/11/2019
Date Data Arrived at EDR: 03/14/2019
Date Made Active in Reports: 04/01/2019
Number of Days to Update: 18

Source: EPA
Telephone: N/A
Last EDR Contact: 04/18/2019
Next Scheduled EDR Contact: 07/15/2019
Data Release Frequency: Quarterly

Federal CERCLIS list

FEDERAL FACILITY: Federal Facility Site Information listing

A listing of National Priority List (NPL) and Base Realignment and Closure (BRAC) sites found in the Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) Database where EPA Federal Facilities Restoration and Reuse Office is involved in cleanup activities.

Date of Government Version: 11/07/2016
Date Data Arrived at EDR: 01/05/2017
Date Made Active in Reports: 04/07/2017
Number of Days to Update: 92

Source: Environmental Protection Agency
Telephone: 703-603-8704
Last EDR Contact: 04/05/2019
Next Scheduled EDR Contact: 07/15/2019
Data Release Frequency: Varies

SEMS: Superfund Enterprise Management System

SEMS (Superfund Enterprise Management System) tracks hazardous waste sites, potentially hazardous waste sites, and remedial activities performed in support of EPA's Superfund Program across the United States. The list was formerly know as CERCLIS, renamed to SEMS by the EPA in 2015. The list contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). This dataset also contains sites which are either proposed to or on the National Priorities List (NPL) and the sites which are in the screening and assessment phase for possible inclusion on the NPL.

Date of Government Version: 03/11/2019
Date Data Arrived at EDR: 03/14/2019
Date Made Active in Reports: 04/17/2019
Number of Days to Update: 34

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 04/18/2019
Next Scheduled EDR Contact: 07/29/2019
Data Release Frequency: Quarterly

Federal CERCLIS NFRAP site list

SEMS-ARCHIVE: Superfund Enterprise Management System Archive

SEMS-ARCHIVE (Superfund Enterprise Management System Archive) tracks sites that have no further interest under the Federal Superfund Program based on available information. The list was formerly known as the CERCLIS-NFRAP, renamed to SEMS ARCHIVE by the EPA in 2015. EPA may perform a minimal level of assessment work at a site while it is archived if site conditions change and/or new information becomes available. Archived sites have been removed and archived from the inventory of SEMS sites. Archived status indicates that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list the site on the National Priorities List (NPL), unless information indicates this decision was not appropriate or other considerations require a recommendation for listing at a later time. The decision does not necessarily mean that there is no hazard associated with a given site; it only means that. based upon available information, the location is not judged to be potential NPL site.

Date of Government Version: 03/11/2019
Date Data Arrived at EDR: 03/14/2019
Date Made Active in Reports: 04/17/2019
Number of Days to Update: 34

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 04/18/2019
Next Scheduled EDR Contact: 07/29/2019
Data Release Frequency: Quarterly

Federal RCRA CORRACTS facilities list

CORRACTS: Corrective Action Report
CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

Date of Government Version: 03/25/2019
Date Data Arrived at EDR: 03/27/2019
Date Made Active in Reports: 04/17/2019
Number of Days to Update: 21

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 03/27/2019
Next Scheduled EDR Contact: 07/08/2019
Data Release Frequency: Quarterly

Federal RCRA non-CORRACTS TSD facilities list

RCRA-TSDF: RCRA - Treatment, Storage and Disposal
RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Transporters are individuals or entities that move hazardous waste from the generator offsite to a facility that can recycle, treat, store, or dispose of the waste. TSDFs treat, store, or dispose of the waste.

Date of Government Version: 03/25/2019
Date Data Arrived at EDR: 03/27/2019
Date Made Active in Reports: 04/17/2019
Number of Days to Update: 21

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 03/27/2019
Next Scheduled EDR Contact: 07/08/2019
Data Release Frequency: Quarterly

Federal RCRA generators list

RCRA-LQG: RCRA - Large Quantity Generators
RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Large quantity generators (LQGs) generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month.

Date of Government Version: 03/25/2019
Date Data Arrived at EDR: 03/27/2019
Date Made Active in Reports: 04/17/2019
Number of Days to Update: 21

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 03/27/2019
Next Scheduled EDR Contact: 07/08/2019
Data Release Frequency: Quarterly

RCRA-SQG: RCRA - Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

Date of Government Version: 03/25/2019
Date Data Arrived at EDR: 03/27/2019
Date Made Active in Reports: 04/17/2019
Number of Days to Update: 21

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 03/27/2019
Next Scheduled EDR Contact: 07/08/2019
Data Release Frequency: Quarterly

RCRA-CESQG: RCRA - Conditionally Exempt Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Conditionally exempt small quantity generators (CESQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month.

Date of Government Version: 03/25/2019
Date Data Arrived at EDR: 03/27/2019
Date Made Active in Reports: 04/17/2019
Number of Days to Update: 21

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 03/27/2019
Next Scheduled EDR Contact: 07/08/2019
Data Release Frequency: Quarterly

Federal institutional controls / engineering controls registries

LUCIS: Land Use Control Information System

LUCIS contains records of land use control information pertaining to the former Navy Base Realignment and Closure properties.

Date of Government Version: 02/22/2019
Date Data Arrived at EDR: 03/07/2019
Date Made Active in Reports: 04/17/2019
Number of Days to Update: 41

Source: Department of the Navy
Telephone: 843-820-7326
Last EDR Contact: 02/07/2019
Next Scheduled EDR Contact: 05/27/2019
Data Release Frequency: Varies

US ENG CONTROLS: Engineering Controls Sites List

A listing of sites with engineering controls in place. Engineering controls include various forms of caps, building foundations, liners, and treatment methods to create pathway elimination for regulated substances to enter environmental media or effect human health.

Date of Government Version: 01/31/2019
Date Data Arrived at EDR: 02/04/2019
Date Made Active in Reports: 03/08/2019
Number of Days to Update: 32

Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 02/04/2019
Next Scheduled EDR Contact: 06/10/2019
Data Release Frequency: Varies

US INST CONTROL: Sites with Institutional Controls

A listing of sites with institutional controls in place. Institutional controls include administrative measures, such as groundwater use restrictions, construction restrictions, property use restrictions, and post remediation care requirements intended to prevent exposure to contaminants remaining on site. Deed restrictions are generally required as part of the institutional controls.

Date of Government Version: 01/31/2019
Date Data Arrived at EDR: 02/04/2019
Date Made Active in Reports: 03/08/2019
Number of Days to Update: 32

Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 02/04/2019
Next Scheduled EDR Contact: 06/10/2019
Data Release Frequency: Varies

Federal ERNS list

ERNS: Emergency Response Notification System

Emergency Response Notification System. ERNS records and stores information on reported releases of oil and hazardous substances.

Date of Government Version: 02/04/2019
Date Data Arrived at EDR: 02/08/2019
Date Made Active in Reports: 03/08/2019
Number of Days to Update: 28

Source: National Response Center, United States Coast Guard
Telephone: 202-267-2180
Last EDR Contact: 03/26/2019
Next Scheduled EDR Contact: 07/08/2019
Data Release Frequency: Quarterly

State- and tribal - equivalent NPL

RESPONSE: State Response Sites

Identifies confirmed release sites where DTSC is involved in remediation, either in a lead or oversight capacity. These confirmed release sites are generally high-priority and high potential risk.

Date of Government Version: 01/28/2019
Date Data Arrived at EDR: 01/29/2019
Date Made Active in Reports: 03/05/2019
Number of Days to Update: 35

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 01/29/2019
Next Scheduled EDR Contact: 05/11/2019
Data Release Frequency: Quarterly

State- and tribal - equivalent CERCLIS

ENVIROSTOR: EnviroStor Database

The Department of Toxic Substances Control's (DTSC's) Site Mitigation and Brownfields Reuse Program's (SMBRP's) EnviroStor database identifes sites that have known contamination or sites for which there may be reasons to investigate further. The database includes the following site types: Federal Superfund sites (National Priorities List (NPL)); State Response, including Military Facilities and State Superfund; Voluntary Cleanup; and School sites. EnviroStor provides similar information to the information that was available in CalSites, and provides additional site information, including, but not limited to, identification of formerly-contaminated properties that have been released for reuse, properties where environmental deed restrictions have been recorded to prevent inappropriate land uses, and risk characterization information that is used to assess potential impacts to public health and the environment at contaminated sites.

Date of Government Version: 01/28/2019
Date Data Arrived at EDR: 01/29/2019
Date Made Active in Reports: 03/05/2019
Number of Days to Update: 35

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 01/29/2019
Next Scheduled EDR Contact: 05/11/2019
Data Release Frequency: Quarterly

State and tribal landfill and/or solid waste disposal site lists

SWF/LF (SWIS): Solid Waste Information System

Active, Closed and Inactive Landfills. SWF/LF records typically contain an inve ntory of solid waste disposal facilities or landfills. These may be active or i nactive facilities or open dumps that failed to meet RCRA Section 4004 criteria for solid waste landfills or disposal sites.

Date of Government Version: 02/11/2019
Date Data Arrived at EDR: 02/12/2019
Date Made Active in Reports: 03/05/2019
Number of Days to Update: 21

Source: Department of Resources Recycling and Recovery
Telephone: 916-341-6320
Last EDR Contact: 02/12/2019
Next Scheduled EDR Contact: 05/27/2019
Data Release Frequency: Quarterly

State and tribal leaking storage tank lists

LUST REG 1: Active Toxic Site Investigation
Del Norte, Humboldt, Lake, Mendocino, Modoc, Siskiyou, Sonoma, Trinity counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 02/01/2001
Date Data Arrived at EDR: 02/28/2001
Date Made Active in Reports: 03/29/2001
Number of Days to Update: 29

Source: California Regional Water Quality Control Board North Coast (1)
Telephone: 707-570-3769
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

LUST REG 7: Leaking Underground Storage Tank Case Listing
Leaking Underground Storage Tank locations. Imperial, Riverside, San Diego, Santa Barbara counties.

Date of Government Version: 02/26/2004
Date Data Arrived at EDR: 02/26/2004
Date Made Active in Reports: 03/24/2004
Number of Days to Update: 27

Source: California Regional Water Quality Control Board Colorado River Basin Region (7)
Telephone: 760-776-8943
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

LUST REG 8: Leaking Underground Storage Tanks
California Regional Water Quality Control Board Santa Ana Region (8). For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 02/14/2005
Date Data Arrived at EDR: 02/15/2005
Date Made Active in Reports: 03/28/2005
Number of Days to Update: 41

Source: California Regional Water Quality Control Board Santa Ana Region (8)
Telephone: 909-782-4496
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: Varies

LUST REG 6V: Leaking Underground Storage Tank Case Listing
Leaking Underground Storage Tank locations. Inyo, Kern, Los Angeles, Mono, San Bernardino counties.

Date of Government Version: 06/07/2005
Date Data Arrived at EDR: 06/07/2005
Date Made Active in Reports: 06/29/2005
Number of Days to Update: 22

Source: California Regional Water Quality Control Board Victorville Branch Office (6)
Telephone: 760-241-7365
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: No Update Planned

LUST REG 6L: Leaking Underground Storage Tank Case Listing
For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 09/09/2003
Date Data Arrived at EDR: 09/10/2003
Date Made Active in Reports: 10/07/2003
Number of Days to Update: 27

Source: California Regional Water Quality Control Board Lahontan Region (6)
Telephone: 530-542-5572
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: No Update Planned

LUST REG 5: Leaking Underground Storage Tank Database
Leaking Underground Storage Tank locations. Alameda, Alpine, Amador, Butte, Colusa, Contra Costa, Calveras, El Dorado, Fresno, Glenn, Kern, Kings, Lake, Lassen, Madera, Mariposa, Merced, Modoc, Napa, Nevada, Placer, Plumas, Sacramento, San Joaquin, Shasta, Solano, Stanislaus, Sutter, Tehama, Tulare, Tuolumne, Yolo, Yuba counties.

Date of Government Version: 07/01/2008
Date Data Arrived at EDR: 07/22/2008
Date Made Active in Reports: 07/31/2008
Number of Days to Update: 9

Source: California Regional Water Quality Control Board Central Valley Region (5)
Telephone: 916-464-4834
Last EDR Contact: 07/01/2011
Next Scheduled EDR Contact: 10/17/2011
Data Release Frequency: No Update Planned

LUST: Leaking Underground Fuel Tank Report (GEOTRACKER)
Leaking Underground Storage Tank (LUST) Sites included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 12/10/2018
Date Data Arrived at EDR: 12/11/2018
Date Made Active in Reports: 01/15/2019
Number of Days to Update: 35

Source: State Water Resources Control Board
Telephone: see region list
Last EDR Contact: 12/11/2018
Next Scheduled EDR Contact: 03/25/2019
Data Release Frequency: Quarterly

LUST REG 2: Fuel Leak List

Leaking Underground Storage Tank locations. Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, Solano, Sonoma counties.

Date of Government Version: 09/30/2004
Date Data Arrived at EDR: 10/20/2004
Date Made Active in Reports: 11/19/2004
Number of Days to Update: 30

Source: California Regional Water Quality Control Board San Francisco Bay Region (2)
Telephone: 510-622-2433
Last EDR Contact: 09/19/2011
Next Scheduled EDR Contact: 01/02/2012
Data Release Frequency: Quarterly

LUST REG 3: Leaking Underground Storage Tank Database

Leaking Underground Storage Tank locations. Monterey, San Benito, San Luis Obispo, Santa Barbara, Santa Cruz counties.

Date of Government Version: 05/19/2003
Date Data Arrived at EDR: 05/19/2003
Date Made Active in Reports: 06/02/2003
Number of Days to Update: 14

Source: California Regional Water Quality Control Board Central Coast Region (3)
Telephone: 805-542-4786
Last EDR Contact: 07/18/2011
Next Scheduled EDR Contact: 10/31/2011
Data Release Frequency: No Update Planned

LUST REG 4: Underground Storage Tank Leak List

Los Angeles, Ventura counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 09/07/2004
Date Data Arrived at EDR: 09/07/2004
Date Made Active in Reports: 10/12/2004
Number of Days to Update: 35

Source: California Regional Water Quality Control Board Los Angeles Region (4)
Telephone: 213-576-6710
Last EDR Contact: 09/06/2011
Next Scheduled EDR Contact: 12/19/2011
Data Release Frequency: No Update Planned

LUST REG 9: Leaking Underground Storage Tank Report

Orange, Riverside, San Diego counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 03/01/2001
Date Data Arrived at EDR: 04/23/2001
Date Made Active in Reports: 05/21/2001
Number of Days to Update: 28

Source: California Regional Water Quality Control Board San Diego Region (9)
Telephone: 858-637-5595
Last EDR Contact: 09/26/2011
Next Scheduled EDR Contact: 01/09/2012
Data Release Frequency: No Update Planned

INDIAN LUST R10: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Alaska, Idaho, Oregon and Washington.

Date of Government Version: 04/12/2018
Date Data Arrived at EDR: 05/18/2018
Date Made Active in Reports: 07/20/2018
Number of Days to Update: 63

Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 03/07/2019
Next Scheduled EDR Contact: 05/06/2019
Data Release Frequency: Varies

INDIAN LUST R9: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Arizona, California, New Mexico and Nevada

Date of Government Version: 04/10/2018
Date Data Arrived at EDR: 05/18/2018
Date Made Active in Reports: 07/20/2018
Number of Days to Update: 63

Source: Environmental Protection Agency
Telephone: 415-972-3372
Last EDR Contact: 03/07/2019
Next Scheduled EDR Contact: 05/06/2019
Data Release Frequency: Varies

INDIAN LUST R8: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Colorado, Montana, North Dakota, South Dakota, Utah and Wyoming.

Date of Government Version: 04/25/2018
Date Data Arrived at EDR: 05/18/2018
Date Made Active in Reports: 07/20/2018
Number of Days to Update: 63

Source: EPA Region 8
Telephone: 303-312-6271
Last EDR Contact: 03/07/2019
Next Scheduled EDR Contact: 05/06/2019
Data Release Frequency: Varies

INDIAN LUST R7: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Iowa, Kansas, and Nebraska

Date of Government Version: 04/24/2018
Date Data Arrived at EDR: 05/18/2018
Date Made Active in Reports: 07/20/2018
Number of Days to Update: 63

Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 03/07/2019
Next Scheduled EDR Contact: 05/06/2019
Data Release Frequency: Varies

INDIAN LUST R6: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in New Mexico and Oklahoma.

Date of Government Version: 04/01/2018
Date Data Arrived at EDR: 05/18/2018
Date Made Active in Reports: 07/20/2018
Number of Days to Update: 63

Source: EPA Region 6
Telephone: 214-665-6597
Last EDR Contact: 03/07/2019
Next Scheduled EDR Contact: 05/06/2019
Data Release Frequency: Varies

INDIAN LUST R4: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Florida, Mississippi and North Carolina.

Date of Government Version: 05/08/2018
Date Data Arrived at EDR: 05/18/2018
Date Made Active in Reports: 07/20/2018
Number of Days to Update: 63

Source: EPA Region 4
Telephone: 404-562-8677
Last EDR Contact: 03/05/2019
Next Scheduled EDR Contact: 05/06/2019
Data Release Frequency: Varies

INDIAN LUST R1: Leaking Underground Storage Tanks on Indian Land
A listing of leaking underground storage tank locations on Indian Land.

Date of Government Version: 04/13/2018
Date Data Arrived at EDR: 05/18/2018
Date Made Active in Reports: 07/20/2018
Number of Days to Update: 63

Source: EPA Region 1
Telephone: 617-918-1313
Last EDR Contact: 03/07/2019
Next Scheduled EDR Contact: 05/06/2019
Data Release Frequency: Varies

INDIAN LUST R5: Leaking Underground Storage Tanks on Indian Land
Leaking underground storage tanks located on Indian Land in Michigan, Minnesota and Wisconsin.

Date of Government Version: 04/12/2018
Date Data Arrived at EDR: 05/18/2018
Date Made Active in Reports: 07/20/2018
Number of Days to Update: 63

Source: EPA, Region 5
Telephone: 312-886-7439
Last EDR Contact: 03/07/2019
Next Scheduled EDR Contact: 05/06/2019
Data Release Frequency: Varies

CPS-SLIC: Statewide SLIC Cases (GEOTRACKER)
Cleanup Program Sites (CPS; also known as Site Cleanups [SC] and formerly known as Spills, Leaks, Investigations, and Cleanups [SLIC] sites) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 12/10/2018
Date Data Arrived at EDR: 12/11/2018
Date Made Active in Reports: 01/15/2019
Number of Days to Update: 35

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 12/12/2018
Next Scheduled EDR Contact: 03/25/2019
Data Release Frequency: Varies

SLIC REG 1: Active Toxic Site Investigations
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/03/2003
Date Data Arrived at EDR: 04/07/2003
Date Made Active in Reports: 04/25/2003
Number of Days to Update: 18

Source: California Regional Water Quality Control Board, North Coast Region (1)
Telephone: 707-576-2220
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

SLIC REG 2: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/30/2004
Date Data Arrived at EDR: 10/20/2004
Date Made Active in Reports: 11/19/2004
Number of Days to Update: 30

Source: Regional Water Quality Control Board San Francisco Bay Region (2)
Telephone: 510-286-0457
Last EDR Contact: 09/19/2011
Next Scheduled EDR Contact: 01/02/2012
Data Release Frequency: Quarterly

SLIC REG 3: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 05/18/2006
Date Data Arrived at EDR: 05/18/2006
Date Made Active in Reports: 06/15/2006
Number of Days to Update: 28

Source: California Regional Water Quality Control Board Central Coast Region (3)
Telephone: 805-549-3147
Last EDR Contact: 07/18/2011
Next Scheduled EDR Contact: 10/31/2011
Data Release Frequency: Semi-Annually

SLIC REG 4: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 11/17/2004
Date Data Arrived at EDR: 11/18/2004
Date Made Active in Reports: 01/04/2005
Number of Days to Update: 47

Source: Region Water Quality Control Board Los Angeles Region (4)
Telephone: 213-576-6600
Last EDR Contact: 07/01/2011
Next Scheduled EDR Contact: 10/17/2011
Data Release Frequency: Varies

SLIC REG 5: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/01/2005
Date Data Arrived at EDR: 04/05/2005
Date Made Active in Reports: 04/21/2005
Number of Days to Update: 16

Source: Regional Water Quality Control Board Central Valley Region (5)
Telephone: 916-464-3291
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: Semi-Annually

SLIC REG 6V: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 05/24/2005
Date Data Arrived at EDR: 05/25/2005
Date Made Active in Reports: 06/16/2005
Number of Days to Update: 22

Source: Regional Water Quality Control Board, Victorville Branch
Telephone: 619-241-6583
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: Semi-Annually

SLIC REG 6L: SLIC Sites
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/07/2004
Date Data Arrived at EDR: 09/07/2004
Date Made Active in Reports: 10/12/2004
Number of Days to Update: 35

Source: California Regional Water Quality Control Board, Lahontan Region
Telephone: 530-542-5574
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

SLIC REG 7: SLIC List
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 11/24/2004
Date Data Arrived at EDR: 11/29/2004
Date Made Active in Reports: 01/04/2005
Number of Days to Update: 36

Source: California Regional Quality Control Board, Colorado River Basin Region
Telephone: 760-346-7491
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

SLIC REG 8: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/03/2008
Date Data Arrived at EDR: 04/03/2008
Date Made Active in Reports: 04/14/2008
Number of Days to Update: 11

Source: California Region Water Quality Control Board Santa Ana Region (8)
Telephone: 951-782-3298
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: Semi-Annually

SLIC REG 9: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/10/2007
Date Data Arrived at EDR: 09/11/2007
Date Made Active in Reports: 09/28/2007
Number of Days to Update: 17

Source: California Regional Water Quality Control Board San Diego Region (9)
Telephone: 858-467-2980
Last EDR Contact: 08/08/2011
Next Scheduled EDR Contact: 11/21/2011
Data Release Frequency: Annually

State and tribal registered storage tank lists

FEMA UST: Underground Storage Tank Listing
A listing of all FEMA owned underground storage tanks.

Date of Government Version: 05/15/2017
Date Data Arrived at EDR: 05/30/2017
Date Made Active in Reports: 10/13/2017
Number of Days to Update: 136

Source: FEMA
Telephone: 202-646-5797
Last EDR Contact: 04/12/2019
Next Scheduled EDR Contact: 07/22/2019
Data Release Frequency: Varies

UST CLOSURE: Proposed Closure of Underground Storage Tank (UST) Cases
UST cases that are being considered for closure by either the State Water Resources Control Board or the Executive Director have been posted for a 60-day public comment period. UST Case Closures being proposed for consideration by the State Water Resources Control Board. These are primarily UST cases that meet closure criteria under the decisional framework in State Water Board Resolution No. 92-49 and other Board orders. UST Case Closures proposed for consideration by the Executive Director pursuant to State Water Board Resolution No. 2012-0061. These are cases that meet the criteria of the Low-Threat UST Case Closure Policy. UST Case Closure Review Denials and Approved Orders.

Date of Government Version: 03/11/2019
Date Data Arrived at EDR: 03/13/2019
Date Made Active in Reports: 04/03/2019
Number of Days to Update: 21

Source: State Water Resources Control Board
Telephone: 916-327-7844
Last EDR Contact: 03/13/2019
Next Scheduled EDR Contact: 06/24/2019
Data Release Frequency: Varies

MILITARY UST SITES: Military UST Sites (GEOTRACKER)
Military ust sites

Date of Government Version: 12/10/2018
Date Data Arrived at EDR: 12/11/2018
Date Made Active in Reports: 01/15/2019
Number of Days to Update: 35

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 12/12/2018
Next Scheduled EDR Contact: 03/25/2019
Data Release Frequency: Varies

UST: Active UST Facilities
Active UST facilities gathered from the local regulatory agencies

Date of Government Version: 12/10/2018
Date Data Arrived at EDR: 12/11/2018
Date Made Active in Reports: 01/15/2019
Number of Days to Update: 35

Source: SWRCB
Telephone: 916-341-5851
Last EDR Contact: 12/11/2018
Next Scheduled EDR Contact: 03/25/2019
Data Release Frequency: Semi-Annually

AST: Aboveground Petroleum Storage Tank Facilities
A listing of aboveground storage tank petroleum storage tank locations.

Date of Government Version: 07/06/2016
Date Data Arrived at EDR: 07/12/2016
Date Made Active in Reports: 09/19/2016
Number of Days to Update: 69

Source: California Environmental Protection Agency
Telephone: 916-327-5092
Last EDR Contact: 03/18/2019
Next Scheduled EDR Contact: 07/01/2019
Data Release Frequency: Quarterly

INDIAN UST R10: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 10 (Alaska, Idaho, Oregon, Washington, and Tribal Nations).

Date of Government Version: 04/12/2018
Date Data Arrived at EDR: 05/18/2018
Date Made Active in Reports: 07/20/2018
Number of Days to Update: 63

Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 03/07/2019
Next Scheduled EDR Contact: 05/06/2019
Data Release Frequency: Varies

INDIAN UST R9: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 9 (Arizona, California, Hawaii, Nevada, the Pacific Islands, and Tribal Nations).

Date of Government Version: 04/10/2018
Date Data Arrived at EDR: 05/18/2018
Date Made Active in Reports: 07/20/2018
Number of Days to Update: 63

Source: EPA Region 9
Telephone: 415-972-3368
Last EDR Contact: 03/07/2019
Next Scheduled EDR Contact: 05/06/2019
Data Release Frequency: Varies

INDIAN UST R8: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 8 (Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming and 27 Tribal Nations).

Date of Government Version: 04/25/2018
Date Data Arrived at EDR: 05/18/2018
Date Made Active in Reports: 07/20/2018
Number of Days to Update: 63

Source: EPA Region 8
Telephone: 303-312-6137
Last EDR Contact: 03/07/2019
Next Scheduled EDR Contact: 05/06/2019
Data Release Frequency: Varies

INDIAN UST R7: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 7 (Iowa, Kansas, Missouri, Nebraska, and 9 Tribal Nations).

Date of Government Version: 04/24/2018
Date Data Arrived at EDR: 05/18/2018
Date Made Active in Reports: 07/20/2018
Number of Days to Update: 63

Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 03/07/2019
Next Scheduled EDR Contact: 05/06/2019
Data Release Frequency: Varies

INDIAN UST R6: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 6 (Louisiana, Arkansas, Oklahoma, New Mexico, Texas and 65 Tribes).

Date of Government Version: 04/01/2018
Date Data Arrived at EDR: 05/18/2018
Date Made Active in Reports: 07/20/2018
Number of Days to Update: 63

Source: EPA Region 6
Telephone: 214-665-7591
Last EDR Contact: 03/07/2019
Next Scheduled EDR Contact: 05/06/2019
Data Release Frequency: Varies

INDIAN UST R1: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 1 (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont and ten Tribal Nations).

Date of Government Version: 04/13/2018
Date Data Arrived at EDR: 05/18/2018
Date Made Active in Reports: 07/20/2018
Number of Days to Update: 63

Source: EPA, Region 1
Telephone: 617-918-1313
Last EDR Contact: 03/07/2019
Next Scheduled EDR Contact: 05/06/2019
Data Release Frequency: Varies

INDIAN UST R4: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 4 (Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee and Tribal Nations)

Date of Government Version: 05/08/2018
Date Data Arrived at EDR: 05/18/2018
Date Made Active in Reports: 07/20/2018
Number of Days to Update: 63

Source: EPA Region 4
Telephone: 404-562-9424
Last EDR Contact: 03/05/2019
Next Scheduled EDR Contact: 05/06/2019
Data Release Frequency: Varies

INDIAN UST R5: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 5 (Michigan, Minnesota and Wisconsin and Tribal Nations).

Date of Government Version: 04/12/2018
Date Data Arrived at EDR: 05/18/2018
Date Made Active in Reports: 07/20/2018
Number of Days to Update: 63

Source: EPA Region 5
Telephone: 312-886-6136
Last EDR Contact: 03/07/2019
Next Scheduled EDR Contact: 05/06/2019
Data Release Frequency: Varies

State and tribal voluntary cleanup sites

INDIAN VCP R1: Voluntary Cleanup Priority Listing
A listing of voluntary cleanup priority sites located on Indian Land located in Region 1.

Date of Government Version: 07/27/2015
Date Data Arrived at EDR: 09/29/2015
Date Made Active in Reports: 02/18/2016
Number of Days to Update: 142

Source: EPA, Region 1
Telephone: 617-918-1102
Last EDR Contact: 03/25/2019
Next Scheduled EDR Contact: 07/08/2019
Data Release Frequency: Varies

VCP: Voluntary Cleanup Program Properties
Contains low threat level properties with either confirmed or unconfirmed releases and the project proponents have request that DTSC oversee investigation and/or cleanup activities and have agreed to provide coverage for DTSC's costs.

Date of Government Version: 01/28/2019
Date Data Arrived at EDR: 01/29/2019
Date Made Active in Reports: 03/05/2019
Number of Days to Update: 35

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 01/29/2019
Next Scheduled EDR Contact: 05/11/2019
Data Release Frequency: Quarterly

INDIAN VCP R7: Voluntary Cleanup Priority Lisitng
A listing of voluntary cleanup priority sites located on Indian Land located in Region 7.

Date of Government Version: 03/20/2008
Date Data Arrived at EDR: 04/22/2008
Date Made Active in Reports: 05/19/2008
Number of Days to Update: 27

Source: EPA, Region 7
Telephone: 913-551-7365
Last EDR Contact: 04/20/2009
Next Scheduled EDR Contact: 07/20/2009
Data Release Frequency: Varies

State and tribal Brownfields sites

BROWNFIELDS: Considered Brownfieds Sites Listing
A listing of sites the SWRCB considers to be Brownfields since these are sites have come to them through the MOA Process.

Date of Government Version: 12/20/2018
Date Data Arrived at EDR: 12/21/2018
Date Made Active in Reports: 02/28/2019
Number of Days to Update: 69

Source: State Water Resources Control Board
Telephone: 916-323-7905
Last EDR Contact: 03/26/2019
Next Scheduled EDR Contact: 07/08/2019
Data Release Frequency: Quarterly

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS: A Listing of Brownfields Sites
Brownfields are real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. Cleaning up and reinvesting in these properties takes development pressures off of undeveloped, open land, and both improves and protects the environment. Assessment, Cleanup and Redevelopment Exchange System (ACRES) stores information reported by EPA Brownfields grant recipients on brownfields properties assessed or cleaned up with grant funding as well as information on Targeted Brownfields Assessments performed by EPA Regions. A listing of ACRES Brownfield sites is obtained from Cleanups in My Community. Cleanups in My Community provides information on Brownfields properties for which information is reported back to EPA, as well as areas served by Brownfields grant programs.

Date of Government Version: 12/17/2018
Date Data Arrived at EDR: 12/18/2018
Date Made Active in Reports: 01/11/2019
Number of Days to Update: 24

Source: Environmental Protection Agency
Telephone: 202-566-2777
Last EDR Contact: 03/19/2019
Next Scheduled EDR Contact: 07/01/2019
Data Release Frequency: Semi-Annually

Local Lists of Landfill / Solid Waste Disposal Sites

WMUDS/SWAT: Waste Management Unit Database
Waste Management Unit Database System. WMUDS is used by the State Water Resources Control Board staff and the Regional Water Quality Control Boards for program tracking and inventory of waste management units. WMUDS is composed of the following databases: Facility Information, Scheduled Inspections Information, Waste Management Unit Information, SWAT Program Information, SWAT Report Summary Information, SWAT Report Summary Data, Chapter 15 (formerly Subchapter 15) Information, Chapter 15 Monitoring Parameters, TPCA Program Information, RCRA Program Information, Closure Information, and Interested Parties Information.

Date of Government Version: 04/01/2000
Date Data Arrived at EDR: 04/10/2000
Date Made Active in Reports: 05/10/2000
Number of Days to Update: 30

Source: State Water Resources Control Board
Telephone: 916-227-4448
Last EDR Contact: 01/28/2019
Next Scheduled EDR Contact: 05/11/2019
Data Release Frequency: No Update Planned

SWRCY: Recycler Database
A listing of recycling facilities in California.

Date of Government Version: 12/10/2018
Date Data Arrived at EDR: 12/12/2018
Date Made Active in Reports: 01/15/2019
Number of Days to Update: 34

Source: Department of Conservation
Telephone: 916-323-3836
Last EDR Contact: 03/13/2019
Next Scheduled EDR Contact: 06/24/2019
Data Release Frequency: Quarterly

HAULERS: Registered Waste Tire Haulers Listing
A listing of registered waste tire haulers.

Date of Government Version: 02/09/2019
Date Data Arrived at EDR: 02/12/2019
Date Made Active in Reports: 03/27/2019
Number of Days to Update: 43

Source: Integrated Waste Management Board
Telephone: 916-341-6422
Last EDR Contact: 03/26/2019
Next Scheduled EDR Contact: 05/27/2019
Data Release Frequency: Varies

INDIAN ODI: Report on the Status of Open Dumps on Indian Lands
Location of open dumps on Indian land.

Date of Government Version: 12/31/1998
Date Data Arrived at EDR: 12/03/2007
Date Made Active in Reports: 01/24/2008
Number of Days to Update: 52

Source: Environmental Protection Agency
Telephone: 703-308-8245
Last EDR Contact: 01/29/2019
Next Scheduled EDR Contact: 05/13/2019
Data Release Frequency: Varies

ODI: Open Dump Inventory
An open dump is defined as a disposal facility that does not comply with one or more of the Part 257 or Part 258 Subtitle D Criteria.

Date of Government Version: 06/30/1985
Date Data Arrived at EDR: 08/09/2004
Date Made Active in Reports: 09/17/2004
Number of Days to Update: 39

Source: Environmental Protection Agency
Telephone: 800-424-9346
Last EDR Contact: 06/09/2004
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

DEBRIS REGION 9: Torres Martinez Reservation Illegal Dump Site Locations
A listing of illegal dump sites location on the Torres Martinez Indian Reservation located in eastern Riverside County and northern Imperial County, California.

Date of Government Version: 01/12/2009
Date Data Arrived at EDR: 05/07/2009
Date Made Active in Reports: 09/21/2009
Number of Days to Update: 137

Source: EPA, Region 9
Telephone: 415-947-4219
Last EDR Contact: 04/22/2019
Next Scheduled EDR Contact: 08/05/2019
Data Release Frequency: No Update Planned

IHS OPEN DUMPS: Open Dumps on Indian Land
A listing of all open dumps located on Indian Land in the United States.

Date of Government Version: 04/01/2014
Date Data Arrived at EDR: 08/06/2014
Date Made Active in Reports: 01/29/2015
Number of Days to Update: 176

Source: Department of Health & Human Serivces, Indian Health Service
Telephone: 301-443-1452
Last EDR Contact: 02/01/2019
Next Scheduled EDR Contact: 05/13/2019
Data Release Frequency: Varies

Local Lists of Hazardous waste / Contaminated Sites

US HIST CDL: National Clandestine Laboratory Register

A listing of clandestine drug lab locations that have been removed from the DEAs National Clandestine Laboratory Register.

Date of Government Version: 02/24/2019
Date Data Arrived at EDR: 02/26/2019
Date Made Active in Reports: 04/17/2019
Number of Days to Update: 50

Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 02/21/2019
Next Scheduled EDR Contact: 06/10/2019
Data Release Frequency: No Update Planned

HIST CAL-SITES: Calsites Database

The Calsites database contains potential or confirmed hazardous substance release properties. In 1996, California EPA reevaluated and significantly reduced the number of sites in the Calsites database. No longer updated by the state agency. It has been replaced by ENVIROSTOR.

Date of Government Version: 08/08/2005
Date Data Arrived at EDR: 08/03/2006
Date Made Active in Reports: 08/24/2006
Number of Days to Update: 21

Source: Department of Toxic Substance Control
Telephone: 916-323-3400
Last EDR Contact: 02/23/2009
Next Scheduled EDR Contact: 05/25/2009
Data Release Frequency: No Update Planned

SCH: School Property Evaluation Program

This category contains proposed and existing school sites that are being evaluated by DTSC for possible hazardous materials contamination. In some cases, these properties may be listed in the CalSites category depending on the level of threat to public health and safety or the environment they pose.

Date of Government Version: 01/28/2019
Date Data Arrived at EDR: 01/29/2019
Date Made Active in Reports: 03/05/2019
Number of Days to Update: 35

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 01/29/2019
Next Scheduled EDR Contact: 05/11/2019
Data Release Frequency: Quarterly

CDL: Clandestine Drug Labs

A listing of drug lab locations. Listing of a location in this database does not indicate that any illegal drug lab materials were or were not present there, and does not constitute a determination that the location either requires or does not require additional cleanup work.

Date of Government Version: 12/31/2017
Date Data Arrived at EDR: 06/12/2018
Date Made Active in Reports: 08/06/2018
Number of Days to Update: 55

Source: Department of Toxic Substances Control
Telephone: 916-255-6504
Last EDR Contact: 04/22/2019
Next Scheduled EDR Contact: 07/22/2019
Data Release Frequency: Varies

CERS HAZ WASTE: CERS HAZ WASTE

List of sites in the California Environmental Protection Agency (CalEPA) Regulated Site Portal which fall under the Hazardous Chemical Management, Hazardous Waste Onsite Treatment, Household Hazardous Waste Collection, Hazardous Waste Generator, and RCRA LQ HW Generator programs.

Date of Government Version: 10/22/2018
Date Data Arrived at EDR: 10/23/2018
Date Made Active in Reports: 11/30/2018
Number of Days to Update: 38

Source: CalEPA
Telephone: 916-323-2514
Last EDR Contact: 04/11/2019
Next Scheduled EDR Contact: 08/05/2019
Data Release Frequency: Quarterly

TOXIC PITS: Toxic Pits Cleanup Act Sites

Toxic PITS Cleanup Act Sites. TOXIC PITS identifies sites suspected of containing hazardous substances where cleanup has not yet been completed.

Date of Government Version: 07/01/1995
Date Data Arrived at EDR: 08/30/1995
Date Made Active in Reports: 09/26/1995
Number of Days to Update: 27

Source: State Water Resources Control Board
Telephone: 916-227-4364
Last EDR Contact: 01/26/2009
Next Scheduled EDR Contact: 04/27/2009
Data Release Frequency: No Update Planned

US CDL: Clandestine Drug Labs

A listing of clandestine drug lab locations. The U.S. Department of Justice ("the Department") provides this web site as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments.

Date of Government Version: 02/24/2019
Date Data Arrived at EDR: 02/26/2019
Date Made Active in Reports: 04/17/2019
Number of Days to Update: 50

Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 02/21/2019
Next Scheduled EDR Contact: 06/10/2019
Data Release Frequency: Quarterly

PFAS: PFAS Contamination Site Location Listing

A listing of PFAS contaminated sites included in the GeoTracker database.

Date of Government Version: 02/21/2019
Date Data Arrived at EDR: 02/22/2019
Date Made Active in Reports: 04/15/2019
Number of Days to Update: 52

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 03/11/2019
Next Scheduled EDR Contact: 06/24/2019
Data Release Frequency: Varies

Local Lists of Registered Storage Tanks

SWEEPS UST: SWEEPS UST Listing

Statewide Environmental Evaluation and Planning System. This underground storage tank listing was updated and maintained by a company contacted by the SWRCB in the early 1990's. The listing is no longer updated or maintained. The local agency is the contact for more information on a site on the SWEEPS list.

Date of Government Version: 06/01/1994
Date Data Arrived at EDR: 07/07/2005
Date Made Active in Reports: 08/11/2005
Number of Days to Update: 35

Source: State Water Resources Control Board
Telephone: N/A
Last EDR Contact: 06/03/2005
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

UST MENDOCINO: Mendocino County UST Database

A listing of underground storage tank locations in Mendocino County.

Date of Government Version: 12/04/2018
Date Data Arrived at EDR: 12/06/2018
Date Made Active in Reports: 12/14/2018
Number of Days to Update: 8

Source: Department of Public Health
Telephone: 707-463-4466
Last EDR Contact: 02/21/2019
Next Scheduled EDR Contact: 06/10/2019
Data Release Frequency: Annually

HIST UST: Hazardous Substance Storage Container Database

The Hazardous Substance Storage Container Database is a historical listing of UST sites. Refer to local/county source for current data.

Date of Government Version: 10/15/1990
Date Data Arrived at EDR: 01/25/1991
Date Made Active in Reports: 02/12/1991
Number of Days to Update: 18

Source: State Water Resources Control Board
Telephone: 916-341-5851
Last EDR Contact: 07/26/2001
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

SAN FRANCISCO AST: Aboveground Storage Tank Site Listing
Aboveground storage tank sites

Date of Government Version: 09/11/2018
Date Data Arrived at EDR: 09/12/2018
Date Made Active in Reports: 10/11/2018
Number of Days to Update: 29

Source: San Francisco County Department of Public Health
Telephone: 415-252-3896
Last EDR Contact: 01/31/2019
Next Scheduled EDR Contact: 05/20/2019
Data Release Frequency: Varies

CERS TANKS: California Environmental Reporting System (CERS) Tanks
List of sites in the California Environmental Protection Agency (CalEPA) Regulated Site Portal which fall under the Aboveground Petroleum Storage and Underground Storage Tank regulatory programs.

Date of Government Version: 10/22/2018
Date Data Arrived at EDR: 10/23/2018
Date Made Active in Reports: 11/30/2018
Number of Days to Update: 38

Source: California Environmental Protection Agency
Telephone: 916-323-2514
Last EDR Contact: 04/11/2019
Next Scheduled EDR Contact: 08/05/2019
Data Release Frequency: Quarterly

CA FID UST: Facility Inventory Database
The Facility Inventory Database (FID) contains a historical listing of active and inactive underground storage tank locations from the State Water Resource Control Board. Refer to local/county source for current data.

Date of Government Version: 10/31/1994
Date Data Arrived at EDR: 09/05/1995
Date Made Active in Reports: 09/29/1995
Number of Days to Update: 24

Source: California Environmental Protection Agency
Telephone: 916-341-5851
Last EDR Contact: 12/28/1998
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

Local Land Records

LIENS: Environmental Liens Listing
A listing of property locations with environmental liens for California where DTSC is a lien holder.

Date of Government Version: 02/28/2019
Date Data Arrived at EDR: 03/01/2019
Date Made Active in Reports: 04/02/2019
Number of Days to Update: 32

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 02/27/2019
Next Scheduled EDR Contact: 06/17/2019
Data Release Frequency: Varies

LIENS 2: CERCLA Lien Information
A Federal CERCLA ('Superfund') lien can exist by operation of law at any site or property at which EPA has spent Superfund monies. These monies are spent to investigate and address releases and threatened releases of contamination. CERCLIS provides information as to the identity of these sites and properties.

Date of Government Version: 03/11/2019
Date Data Arrived at EDR: 03/14/2019
Date Made Active in Reports: 03/21/2019
Number of Days to Update: 7

Source: Environmental Protection Agency
Telephone: 202-564-6023
Last EDR Contact: 04/18/2019
Next Scheduled EDR Contact: 08/05/2019
Data Release Frequency: Semi-Annually

DEED: Deed Restriction Listing

Site Mitigation and Brownfields Reuse Program Facility Sites with Deed Restrictions & Hazardous Waste Management Program Facility Sites with Deed / Land Use Restriction. The DTSC Site Mitigation and Brownfields Reuse Program (SMBRP) list includes sites cleaned up under the program's oversight and generally does not include current or former hazardous waste facilities that required a hazardous waste facility permit. The list represents deed restrictions that are active. Some sites have multiple deed restrictions. The DTSC Hazardous Waste Management Program (HWMP) has developed a list of current or former hazardous waste facilities that have a recorded land use restriction at the local county recorder's office. The land use restrictions on this list were required by the DTSC HWMP as a result of the presence of hazardous substances that remain on site after the facility (or part of the facility) has been closed or cleaned up. The types of land use restriction include deed notice, deed restriction, or a land use restriction that binds current and future owners.

Date of Government Version: 03/04/2019
Date Data Arrived at EDR: 03/05/2019
Date Made Active in Reports: 04/01/2019
Number of Days to Update: 27

Source: DTSC and SWRCB
Telephone: 916-323-3400
Last EDR Contact: 03/05/2019
Next Scheduled EDR Contact: 06/17/2019
Data Release Frequency: Semi-Annually

Records of Emergency Release Reports

HMIRS: Hazardous Materials Information Reporting System
Hazardous Materials Incident Report System. HMIRS contains hazardous material spill incidents reported to DOT.

Date of Government Version: 02/08/2019
Date Data Arrived at EDR: 02/08/2019
Date Made Active in Reports: 03/21/2019
Number of Days to Update: 41

Source: U.S. Department of Transportation
Telephone: 202-366-4555
Last EDR Contact: 03/26/2019
Next Scheduled EDR Contact: 07/08/2019
Data Release Frequency: Quarterly

CHMIRS: California Hazardous Material Incident Report System
California Hazardous Material Incident Reporting System. CHMIRS contains information on reported hazardous material incidents (accidental releases or spills).

Date of Government Version: 10/24/2018
Date Data Arrived at EDR: 01/24/2019
Date Made Active in Reports: 03/05/2019
Number of Days to Update: 40

Source: Office of Emergency Services
Telephone: 916-845-8400
Last EDR Contact: 01/24/2019
Next Scheduled EDR Contact: 05/06/2019
Data Release Frequency: Semi-Annually

LDS: Land Disposal Sites Listing (GEOTRACKER)
Land Disposal sites (Landfills) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 12/10/2018
Date Data Arrived at EDR: 12/11/2018
Date Made Active in Reports: 01/15/2019
Number of Days to Update: 35

Source: State Water Qualilty Control Board
Telephone: 866-480-1028
Last EDR Contact: 12/12/2018
Next Scheduled EDR Contact: 03/25/2019
Data Release Frequency: Quarterly

MCS: Military Cleanup Sites Listing (GEOTRACKER)
Military sites (consisting of: Military UST sites; Military Privatized sites; and Military Cleanup sites [formerly known as DoD non UST]) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 12/10/2018
Date Data Arrived at EDR: 12/11/2018
Date Made Active in Reports: 01/15/2019
Number of Days to Update: 35

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 12/12/2018
Next Scheduled EDR Contact: 03/25/2019
Data Release Frequency: Quarterly

SPILLS 90: SPILLS90 data from FirstSearch

Spills 90 includes those spill and release records available exclusively from FirstSearch databases. Typically, they may include chemical, oil and/or hazardous substance spills recorded after 1990. Duplicate records that are already included in EDR incident and release records are not included in Spills 90.

Date of Government Version: 06/06/2012
Date Data Arrived at EDR: 01/03/2013
Date Made Active in Reports: 02/22/2013
Number of Days to Update: 50

Source: FirstSearch
Telephone: N/A
Last EDR Contact: 01/03/2013
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

Other Ascertainable Records

RCRA NonGen / NLR: RCRA - Non Generators / No Longer Regulated

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

Date of Government Version: 03/25/2019
Date Data Arrived at EDR: 03/27/2019
Date Made Active in Reports: 04/17/2019
Number of Days to Update: 21

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 03/27/2019
Next Scheduled EDR Contact: 07/08/2019
Data Release Frequency: Quarterly

FUDS: Formerly Used Defense Sites

The listing includes locations of Formerly Used Defense Sites properties where the US Army Corps of Engineers is actively working or will take necessary cleanup actions.

Date of Government Version: 01/31/2015
Date Data Arrived at EDR: 07/08/2015
Date Made Active in Reports: 10/13/2015
Number of Days to Update: 97

Source: U.S. Army Corps of Engineers
Telephone: 202-528-4285
Last EDR Contact: 04/03/2019
Next Scheduled EDR Contact: 06/03/2019
Data Release Frequency: Varies

DOD: Department of Defense Sites

This data set consists of federally owned or administered lands, administered by the Department of Defense, that have any area equal to or greater than 640 acres of the United States, Puerto Rico, and the U.S. Virgin Islands.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 11/10/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 62

Source: USGS
Telephone: 888-275-8747
Last EDR Contact: 04/12/2019
Next Scheduled EDR Contact: 07/22/2019
Data Release Frequency: Semi-Annually

FEDLAND: Federal and Indian Lands

Federally and Indian administrated lands of the United States. Lands included are administrated by: Army Corps of Engineers, Bureau of Reclamation, National Wild and Scenic River, National Wildlife Refuge, Public Domain Land, Wilderness, Wilderness Study Area, Wildlife Management Area, Bureau of Indian Affairs, Bureau of Land Management, Department of Justice, Forest Service, Fish and Wildlife Service, National Park Service.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 02/06/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 339

Source: U.S. Geological Survey
Telephone: 888-275-8747
Last EDR Contact: 04/12/2019
Next Scheduled EDR Contact: 07/22/2019
Data Release Frequency: N/A

SCRD DRYCLEANERS: State Coalition for Remediation of Drycleaners Listing

The State Coalition for Remediation of Drycleaners was established in 1998, with support from the U.S. EPA Office of Superfund Remediation and Technology Innovation. It is comprised of representatives of states with established drycleaner remediation programs. Currently the member states are Alabama, Connecticut, Florida, Illinois, Kansas, Minnesota, Missouri, North Carolina, Oregon, South Carolina, Tennessee, Texas, and Wisconsin.

Date of Government Version: 01/01/2017
Date Data Arrived at EDR: 02/03/2017
Date Made Active in Reports: 04/07/2017
Number of Days to Update: 63

Source: Environmental Protection Agency
Telephone: 615-532-8599
Last EDR Contact: 02/15/2019
Next Scheduled EDR Contact: 05/27/2019
Data Release Frequency: Varies

US FIN ASSUR: Financial Assurance Information

All owners and operators of facilities that treat, store, or dispose of hazardous waste are required to provide proof that they will have sufficient funds to pay for the clean up, closure, and post-closure care of their facilities.

Date of Government Version: 01/31/2019
Date Data Arrived at EDR: 02/04/2019
Date Made Active in Reports: 03/08/2019
Number of Days to Update: 32

Source: Environmental Protection Agency
Telephone: 202-566-1917
Last EDR Contact: 03/26/2019
Next Scheduled EDR Contact: 07/08/2019
Data Release Frequency: Quarterly

EPA WATCH LIST: EPA WATCH LIST

EPA maintains a "Watch List" to facilitate dialogue between EPA, state and local environmental agencies on enforcement matters relating to facilities with alleged violations identified as either significant or high priority. Being on the Watch List does not mean that the facility has actually violated the law only that an investigation by EPA or a state or local environmental agency has led those organizations to allege that an unproven violation has in fact occurred. Being on the Watch List does not represent a higher level of concern regarding the alleged violations that were detected, but instead indicates cases requiring additional dialogue between EPA, state and local agencies - primarily because of the length of time the alleged violation has gone unaddressed or unresolved.

Date of Government Version: 08/30/2013
Date Data Arrived at EDR: 03/21/2014
Date Made Active in Reports: 06/17/2014
Number of Days to Update: 88

Source: Environmental Protection Agency
Telephone: 617-520-3000
Last EDR Contact: 02/08/2019
Next Scheduled EDR Contact: 05/20/2019
Data Release Frequency: Quarterly

2020 COR ACTION: 2020 Corrective Action Program List

The EPA has set ambitious goals for the RCRA Corrective Action program by creating the 2020 Corrective Action Universe. This RCRA cleanup baseline includes facilities expected to need corrective action. The 2020 universe contains a wide variety of sites. Some properties are heavily contaminated while others were contaminated but have since been cleaned up. Still others have not been fully investigated yet, and may require little or no remediation. Inclusion in the 2020 Universe does not necessarily imply failure on the part of a facility to meet its RCRA obligations.

Date of Government Version: 09/30/2017
Date Data Arrived at EDR: 05/08/2018
Date Made Active in Reports: 07/20/2018
Number of Days to Update: 73

Source: Environmental Protection Agency
Telephone: 703-308-4044
Last EDR Contact: 02/08/2019
Next Scheduled EDR Contact: 05/20/2019
Data Release Frequency: Varies

TSCA: Toxic Substances Control Act

Toxic Substances Control Act. TSCA identifies manufacturers and importers of chemical substances included on the TSCA Chemical Substance Inventory list. It includes data on the production volume of these substances by plant site.

Date of Government Version: 12/31/2016
Date Data Arrived at EDR: 06/21/2017
Date Made Active in Reports: 01/05/2018
Number of Days to Update: 198

Source: EPA
Telephone: 202-260-5521
Last EDR Contact: 03/22/2019
Next Scheduled EDR Contact: 07/01/2019
Data Release Frequency: Every 4 Years

TRIS: Toxic Chemical Release Inventory System

Toxic Release Inventory System. TRIS identifies facilities which release toxic chemicals to the air, water and land in reportable quantities under SARA Title III Section 313.

Date of Government Version: 12/31/2016
Date Data Arrived at EDR: 01/10/2018
Date Made Active in Reports: 01/12/2018
Number of Days to Update: 2

Source: EPA
Telephone: 202-566-0250
Last EDR Contact: 02/20/2019
Next Scheduled EDR Contact: 06/03/2019
Data Release Frequency: Annually

SSTS: Section 7 Tracking Systems

Section 7 of the Federal Insecticide, Fungicide and Rodenticide Act, as amended (92 Stat. 829) requires all registered pesticide-producing establishments to submit a report to the Environmental Protection Agency by March 1st each year. Each establishment must report the types and amounts of pesticides, active ingredients and devices being produced, and those having been produced and sold or distributed in the past year.

Date of Government Version: 12/31/2009
Date Data Arrived at EDR: 12/10/2010
Date Made Active in Reports: 02/25/2011
Number of Days to Update: 77

Source: EPA
Telephone: 202-564-4203
Last EDR Contact: 03/25/2019
Next Scheduled EDR Contact: 05/06/2019
Data Release Frequency: Annually

ROD: Records Of Decision

Record of Decision. ROD documents mandate a permanent remedy at an NPL (Superfund) site containing technical and health information to aid in the cleanup.

Date of Government Version: 03/11/2019
Date Data Arrived at EDR: 03/14/2019
Date Made Active in Reports: 04/01/2019
Number of Days to Update: 18

Source: EPA
Telephone: 703-416-0223
Last EDR Contact: 04/18/2019
Next Scheduled EDR Contact: 06/17/2019
Data Release Frequency: Annually

RMP: Risk Management Plans

When Congress passed the Clean Air Act Amendments of 1990, it required EPA to publish regulations and guidance for chemical accident prevention at facilities using extremely hazardous substances. The Risk Management Program Rule (RMP Rule) was written to implement Section 112(r) of these amendments. The rule, which built upon existing industry codes and standards, requires companies of all sizes that use certain flammable and toxic substances to develop a Risk Management Program, which includes a(n): Hazard assessment that details the potential effects of an accidental release, an accident history of the last five years, and an evaluation of worst-case and alternative accidental releases; Prevention program that includes safety precautions and maintenance, monitoring, and employee training measures; and Emergency response program that spells out emergency health care, employee training measures and procedures for informing the public and response agencies (e.g the fire department) should an accident occur.

Date of Government Version: 02/01/2019
Date Data Arrived at EDR: 02/14/2019
Date Made Active in Reports: 03/21/2019
Number of Days to Update: 35

Source: Environmental Protection Agency
Telephone: 202-564-8600
Last EDR Contact: 04/22/2019
Next Scheduled EDR Contact: 08/05/2019
Data Release Frequency: Varies

RAATS: RCRA Administrative Action Tracking System

RCRA Administration Action Tracking System. RAATS contains records based on enforcement actions issued under RCRA pertaining to major violators and includes administrative and civil actions brought by the EPA. For administration actions after September 30, 1995, data entry in the RAATS database was discontinued. EPA will retain a copy of the database for historical records. It was necessary to terminate RAATS because a decrease in agency resources made it impossible to continue to update the information contained in the database.

Date of Government Version: 04/17/1995
Date Data Arrived at EDR: 07/03/1995
Date Made Active in Reports: 08/07/1995
Number of Days to Update: 35

Source: EPA
Telephone: 202-564-4104
Last EDR Contact: 06/02/2008
Next Scheduled EDR Contact: 09/01/2008
Data Release Frequency: No Update Planned

PRP: Potentially Responsible Parties
A listing of verified Potentially Responsible Parties

Date of Government Version: 03/11/2019
Date Data Arrived at EDR: 03/14/2019
Date Made Active in Reports: 04/17/2019
Number of Days to Update: 34

Source: EPA
Telephone: 202-564-6023
Last EDR Contact: 04/18/2019
Next Scheduled EDR Contact: 05/20/2019
Data Release Frequency: Quarterly

PADS: PCB Activity Database System
PCB Activity Database. PADS Identifies generators, transporters, commercial storers and/or brokers and disposers of PCB's who are required to notify the EPA of such activities.

Date of Government Version: 09/14/2018
Date Data Arrived at EDR: 10/11/2018
Date Made Active in Reports: 12/07/2018
Number of Days to Update: 57

Source: EPA
Telephone: 202-566-0500
Last EDR Contact: 04/10/2019
Next Scheduled EDR Contact: 07/22/2019
Data Release Frequency: Annually

ICIS: Integrated Compliance Information System
The Integrated Compliance Information System (ICIS) supports the information needs of the national enforcement and compliance program as well as the unique needs of the National Pollutant Discharge Elimination System (NPDES) program.

Date of Government Version: 11/18/2016
Date Data Arrived at EDR: 11/23/2016
Date Made Active in Reports: 02/10/2017
Number of Days to Update: 79

Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 04/08/2019
Next Scheduled EDR Contact: 07/22/2019
Data Release Frequency: Quarterly

FTTS: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
FTTS tracks administrative cases and pesticide enforcement actions and compliance activities related to FIFRA, TSCA and EPCRA (Emergency Planning and Community Right-to-Know Act). To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 04/09/2009
Date Data Arrived at EDR: 04/16/2009
Date Made Active in Reports: 05/11/2009
Number of Days to Update: 25

Source: EPA/Office of Prevention, Pesticides and Toxic Substances
Telephone: 202-566-1667
Last EDR Contact: 08/18/2017
Next Scheduled EDR Contact: 12/04/2017
Data Release Frequency: Quarterly

FTTS INSP: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
A listing of FIFRA/TSCA Tracking System (FTTS) inspections and enforcements.

Date of Government Version: 04/09/2009
Date Data Arrived at EDR: 04/16/2009
Date Made Active in Reports: 05/11/2009
Number of Days to Update: 25

Source: EPA
Telephone: 202-566-1667
Last EDR Contact: 08/18/2017
Next Scheduled EDR Contact: 12/04/2017
Data Release Frequency: Quarterly

MLTS: Material Licensing Tracking System
MLTS is maintained by the Nuclear Regulatory Commission and contains a list of approximately 8,100 sites which possess or use radioactive materials and which are subject to NRC licensing requirements. To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 08/30/2016
Date Data Arrived at EDR: 09/08/2016
Date Made Active in Reports: 10/21/2016
Number of Days to Update: 43

Source: Nuclear Regulatory Commission
Telephone: 301-415-7169
Last EDR Contact: 04/22/2019
Next Scheduled EDR Contact: 08/05/2019
Data Release Frequency: Quarterly

COAL ASH DOE: Steam-Electric Plant Operation Data
A listing of power plants that store ash in surface ponds.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 08/07/2009
Date Made Active in Reports: 10/22/2009
Number of Days to Update: 76

Source: Department of Energy
Telephone: 202-586-8719
Last EDR Contact: 03/07/2019
Next Scheduled EDR Contact: 06/17/2019
Data Release Frequency: Varies

COAL ASH EPA: Coal Combustion Residues Surface Impoundments List
A listing of coal combustion residues surface impoundments with high hazard potential ratings.

Date of Government Version: 07/01/2014
Date Data Arrived at EDR: 09/10/2014
Date Made Active in Reports: 10/20/2014
Number of Days to Update: 40

Source: Environmental Protection Agency
Telephone: N/A
Last EDR Contact: 03/05/2019
Next Scheduled EDR Contact: 06/17/2019
Data Release Frequency: Varies

PCB TRANSFORMER: PCB Transformer Registration Database
The database of PCB transformer registrations that includes all PCB registration submittals.

Date of Government Version: 05/24/2017
Date Data Arrived at EDR: 11/30/2017
Date Made Active in Reports: 12/15/2017
Number of Days to Update: 15

Source: Environmental Protection Agency
Telephone: 202-566-0517
Last EDR Contact: 01/25/2019
Next Scheduled EDR Contact: 05/06/2019
Data Release Frequency: Varies

RADINFO: Radiation Information Database
The Radiation Information Database (RADINFO) contains information about facilities that are regulated by U.S. Environmental Protection Agency (EPA) regulations for radiation and radioactivity.

Date of Government Version: 01/02/2019
Date Data Arrived at EDR: 01/03/2019
Date Made Active in Reports: 03/15/2019
Number of Days to Update: 71

Source: Environmental Protection Agency
Telephone: 202-343-9775
Last EDR Contact: 04/02/2019
Next Scheduled EDR Contact: 07/15/2019
Data Release Frequency: Quarterly

HIST FTTS: FIFRA/TSCA Tracking System Administrative Case Listing
A complete administrative case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006
Date Data Arrived at EDR: 03/01/2007
Date Made Active in Reports: 04/10/2007
Number of Days to Update: 40

Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 12/17/2007
Next Scheduled EDR Contact: 03/17/2008
Data Release Frequency: No Update Planned

HIST FTTS INSP: FIFRA/TSCA Tracking System Inspection & Enforcement Case Listing
A complete inspection and enforcement case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006
Date Data Arrived at EDR: 03/01/2007
Date Made Active in Reports: 04/10/2007
Number of Days to Update: 40

Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 12/17/2008
Next Scheduled EDR Contact: 03/17/2008
Data Release Frequency: No Update Planned

DOT OPS: Incident and Accident Data

Department of Transporation, Office of Pipeline Safety Incident and Accident data.

Date of Government Version: 12/03/2018
Date Data Arrived at EDR: 01/29/2019
Date Made Active in Reports: 03/21/2019
Number of Days to Update: 51

Source: Department of Transporation, Office of Pipeline Safety
Telephone: 202-366-4595
Last EDR Contact: 01/29/2019
Next Scheduled EDR Contact: 05/11/2019
Data Release Frequency: Quarterly

CONSENT: Superfund (CERCLA) Consent Decrees

Major legal settlements that establish responsibility and standards for cleanup at NPL (Superfund) sites. Released periodically by United States District Courts after settlement by parties to litigation matters.

Date of Government Version: 12/31/2018
Date Data Arrived at EDR: 02/11/2019
Date Made Active in Reports: 03/21/2019
Number of Days to Update: 38

Source: Department of Justice, Consent Decree Library
Telephone: Varies
Last EDR Contact: 04/05/2019
Next Scheduled EDR Contact: 07/22/2019
Data Release Frequency: Varies

BRS: Biennial Reporting System

The Biennial Reporting System is a national system administered by the EPA that collects data on the generation and management of hazardous waste. BRS captures detailed data from two groups: Large Quantity Generators (LQG) and Treatment, Storage, and Disposal Facilities.

Date of Government Version: 12/31/2015
Date Data Arrived at EDR: 02/22/2017
Date Made Active in Reports: 09/28/2017
Number of Days to Update: 218

Source: EPA/NTIS
Telephone: 800-424-9346
Last EDR Contact: 02/13/2019
Next Scheduled EDR Contact: 06/03/2019
Data Release Frequency: Biennially

INDIAN RESERV: Indian Reservations

This map layer portrays Indian administered lands of the United States that have any area equal to or greater than 640 acres.

Date of Government Version: 12/31/2014
Date Data Arrived at EDR: 07/14/2015
Date Made Active in Reports: 01/10/2017
Number of Days to Update: 546

Source: USGS
Telephone: 202-208-3710
Last EDR Contact: 04/11/2019
Next Scheduled EDR Contact: 07/22/2019
Data Release Frequency: Semi-Annually

FUSRAP: Formerly Utilized Sites Remedial Action Program

DOE established the Formerly Utilized Sites Remedial Action Program (FUSRAP) in 1974 to remediate sites where radioactive contamination remained from Manhattan Project and early U.S. Atomic Energy Commission (AEC) operations.

Date of Government Version: 08/08/2017
Date Data Arrived at EDR: 09/11/2018
Date Made Active in Reports: 09/14/2018
Number of Days to Update: 3

Source: Department of Energy
Telephone: 202-586-3559
Last EDR Contact: 01/31/2019
Next Scheduled EDR Contact: 05/20/2019
Data Release Frequency: Varies

UMTRA: Uranium Mill Tailings Sites

Uranium ore was mined by private companies for federal government use in national defense programs. When the mills shut down, large piles of the sand-like material (mill tailings) remain after uranium has been extracted from the ore. Levels of human exposure to radioactive materials from the piles are low; however, in some cases tailings were used as construction materials before the potential health hazards of the tailings were recognized.

Date of Government Version: 06/23/2017
Date Data Arrived at EDR: 10/11/2017
Date Made Active in Reports: 11/03/2017
Number of Days to Update: 23

Source: Department of Energy
Telephone: 505-845-0011
Last EDR Contact: 02/22/2019
Next Scheduled EDR Contact: 06/03/2019
Data Release Frequency: Varies

LEAD SMELTER 1: Lead Smelter Sites

A listing of former lead smelter site locations.

Date of Government Version: 03/11/2019
Date Data Arrived at EDR: 03/14/2019
Date Made Active in Reports: 03/21/2019
Number of Days to Update: 7

Source: Environmental Protection Agency
Telephone: 703-603-8787
Last EDR Contact: 04/18/2019
Next Scheduled EDR Contact: 07/15/2019
Data Release Frequency: Varies

LEAD SMELTER 2: Lead Smelter Sites

A list of several hundred sites in the U.S. where secondary lead smelting was done from 1931and 1964. These sites may pose a threat to public health through ingestion or inhalation of contaminated soil or dust

Date of Government Version: 04/05/2001
Date Data Arrived at EDR: 10/27/2010
Date Made Active in Reports: 12/02/2010
Number of Days to Update: 36

Source: American Journal of Public Health
Telephone: 703-305-6451
Last EDR Contact: 12/02/2009
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

US AIRS (AFS): Aerometric Information Retrieval System Facility Subsystem (AFS)

The database is a sub-system of Aerometric Information Retrieval System (AIRS). AFS contains compliance data on air pollution point sources regulated by the U.S. EPA and/or state and local air regulatory agencies. This information comes from source reports by various stationary sources of air pollution, such as electric power plants, steel mills, factories, and universities, and provides information about the air pollutants they produce. Action, air program, air program pollutant, and general level plant data. It is used to track emissions and compliance data from industrial plants.

Date of Government Version: 10/12/2016
Date Data Arrived at EDR: 10/26/2016
Date Made Active in Reports: 02/03/2017
Number of Days to Update: 100

Source: EPA
Telephone: 202-564-2496
Last EDR Contact: 09/26/2017
Next Scheduled EDR Contact: 01/08/2018
Data Release Frequency: Annually

US AIRS MINOR: Air Facility System Data

A listing of minor source facilities.

Date of Government Version: 10/12/2016
Date Data Arrived at EDR: 10/26/2016
Date Made Active in Reports: 02/03/2017
Number of Days to Update: 100

Source: EPA
Telephone: 202-564-2496
Last EDR Contact: 09/26/2017
Next Scheduled EDR Contact: 01/08/2018
Data Release Frequency: Annually

US MINES: Mines Master Index File

Contains all mine identification numbers issued for mines active or opened since 1971. The data also includes violation information.

Date of Government Version: 11/27/2018
Date Data Arrived at EDR: 02/27/2019
Date Made Active in Reports: 04/01/2019
Number of Days to Update: 33

Source: Department of Labor, Mine Safety and Health Administration
Telephone: 303-231-5959
Last EDR Contact: 02/27/2019
Next Scheduled EDR Contact: 06/10/2019
Data Release Frequency: Semi-Annually

US MINES 2: Ferrous and Nonferrous Metal Mines Database Listing

This map layer includes ferrous (ferrous metal mines are facilities that extract ferrous metals, such as iron ore or molybdenum) and nonferrous (Nonferrous metal mines are facilities that extract nonferrous metals, such as gold, silver, copper, zinc, and lead) metal mines in the United States.

Date of Government Version: 12/05/2005
Date Data Arrived at EDR: 02/29/2008
Date Made Active in Reports: 04/18/2008
Number of Days to Update: 49

Source: USGS
Telephone: 703-648-7709
Last EDR Contact: 03/01/2019
Next Scheduled EDR Contact: 06/10/2019
Data Release Frequency: Varies

US MINES 3: Active Mines & Mineral Plants Database Listing

Active Mines and Mineral Processing Plant operations for commodities monitored by the Minerals Information Team of the USGS.

Date of Government Version: 04/14/2011
Date Data Arrived at EDR: 06/08/2011
Date Made Active in Reports: 09/13/2011
Number of Days to Update: 97

Source: USGS
Telephone: 703-648-7709
Last EDR Contact: 03/01/2019
Next Scheduled EDR Contact: 06/10/2019
Data Release Frequency: Varies

ABANDONED MINES: Abandoned Mines

An inventory of land and water impacted by past mining (primarily coal mining) is maintained by OSMRE to provide information needed to implement the Surface Mining Control and Reclamation Act of 1977 (SMCRA). The inventory contains information on the location, type, and extent of AML impacts, as well as, information on the cost associated with the reclamation of those problems. The inventory is based upon field surveys by State, Tribal, and OSMRE program officials. It is dynamic to the extent that it is modified as new problems are identified and existing problems are reclaimed.

Date of Government Version: 09/10/2018
Date Data Arrived at EDR: 09/11/2018
Date Made Active in Reports: 09/14/2018
Number of Days to Update: 3

Source: Department of Interior
Telephone: 202-208-2609
Last EDR Contact: 03/21/2019
Next Scheduled EDR Contact: 06/24/2019
Data Release Frequency: Quarterly

FINDS: Facility Index System/Facility Registry System

Facility Index System. FINDS contains both facility information and 'pointers' to other sources that contain more detail. EDR includes the following FINDS databases in this report: PCS (Permit Compliance System), AIRS (Aerometric Information Retrieval System), DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes), FURS (Federal Underground Injection Control), C-DOCKET (Criminal Docket System used to track criminal enforcement actions for all environmental statutes), FFIS (Federal Facilities Information System), STATE (State Environmental Laws and Statutes), and PADS (PCB Activity Data System).

Date of Government Version: 02/15/2019
Date Data Arrived at EDR: 03/05/2019
Date Made Active in Reports: 03/15/2019
Number of Days to Update: 10

Source: EPA
Telephone: (415) 947-8000
Last EDR Contact: 03/05/2019
Next Scheduled EDR Contact: 06/17/2019
Data Release Frequency: Quarterly

UXO: Unexploded Ordnance Sites

A listing of unexploded ordnance site locations

Date of Government Version: 12/31/2017
Date Data Arrived at EDR: 01/17/2019
Date Made Active in Reports: 04/01/2019
Number of Days to Update: 74

Source: Department of Defense
Telephone: 703-704-1564
Last EDR Contact: 04/15/2019
Next Scheduled EDR Contact: 07/29/2019
Data Release Frequency: Varies

DOCKET HWC: Hazardous Waste Compliance Docket Listing

A complete list of the Federal Agency Hazardous Waste Compliance Docket Facilities.

Date of Government Version: 05/31/2018
Date Data Arrived at EDR: 07/26/2018
Date Made Active in Reports: 10/05/2018
Number of Days to Update: 71

Source: Environmental Protection Agency
Telephone: 202-564-0527
Last EDR Contact: 03/01/2019
Next Scheduled EDR Contact: 06/10/2019
Data Release Frequency: Varies

ECHO: Enforcement & Compliance History Information
ECHO provides integrated compliance and enforcement information for about 800,000 regulated facilities nationwide.

Date of Government Version: 03/03/2019
Date Data Arrived at EDR: 03/05/2019
Date Made Active in Reports: 04/01/2019
Number of Days to Update: 27

Source: Environmental Protection Agency
Telephone: 202-564-2280
Last EDR Contact: 04/09/2019
Next Scheduled EDR Contact: 07/22/2019
Data Release Frequency: Quarterly

FUELS PROGRAM: EPA Fuels Program Registered Listing
This listing includes facilities that are registered under the Part 80 (Code of Federal Regulations) EPA Fuels Programs. All companies now are required to submit new and updated registrations.

Date of Government Version: 02/19/2019
Date Data Arrived at EDR: 02/21/2019
Date Made Active in Reports: 04/01/2019
Number of Days to Update: 39

Source: EPA
Telephone: 800-385-6164
Last EDR Contact: 02/21/2019
Next Scheduled EDR Contact: 06/03/2019
Data Release Frequency: Quarterly

CA BOND EXP. PLAN: Bond Expenditure Plan
Department of Health Services developed a site-specific expenditure plan as the basis for an appropriation of Hazardous Substance Cleanup Bond Act funds. It is not updated.

Date of Government Version: 01/01/1989
Date Data Arrived at EDR: 07/27/1994
Date Made Active in Reports: 08/02/1994
Number of Days to Update: 6

Source: Department of Health Services
Telephone: 916-255-2118
Last EDR Contact: 05/31/1994
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

CORTESE: "Cortese" Hazardous Waste & Substances Sites List
The sites for the list are designated by the State Water Resource Control Board (LUST), the Integrated Waste Board (SWF/LS), and the Department of Toxic Substances Control (Cal-Sites).

Date of Government Version: 12/20/2018
Date Data Arrived at EDR: 12/21/2018
Date Made Active in Reports: 02/28/2019
Number of Days to Update: 69

Source: CAL EPA/Office of Emergency Information
Telephone: 916-323-3400
Last EDR Contact: 03/26/2019
Next Scheduled EDR Contact: 07/08/2019
Data Release Frequency: Quarterly

CUPA SAN FRANCISCO CO: CUPA Facility Listing
Cupa facilities

Date of Government Version: 09/11/2018
Date Data Arrived at EDR: 09/12/2018
Date Made Active in Reports: 09/19/2018
Number of Days to Update: 7

Source: San Francisco County Department of Environmental Health
Telephone: 415-252-3896
Last EDR Contact: 04/18/2019
Next Scheduled EDR Contact: 05/20/2019
Data Release Frequency: Varies

CUPA LIVERMORE-PLEASANTON: CUPA Facility Listing
list of facilities associated with the various CUPA programs in Livermore-Pleasanton

Date of Government Version: 01/23/2019
Date Data Arrived at EDR: 02/26/2019
Date Made Active in Reports: 04/01/2019
Number of Days to Update: 34

Source: Livermore-Pleasanton Fire Department
Telephone: 925-454-2361
Last EDR Contact: 02/26/2019
Next Scheduled EDR Contact: 05/27/2019
Data Release Frequency: Varies

DRYCLEAN AVAQMD: Antelope Valley Air Quality Management District Drycleaner Listing
A listing of dry cleaners in the Antelope Valley Air Quality Management District.

Date of Government Version: 02/27/2019
Date Data Arrived at EDR: 02/28/2019
Date Made Active in Reports: 04/01/2019
Number of Days to Update: 32

Source: Antelope Valley Air Quality Management District
Telephone: 661-723-8070
Last EDR Contact: 02/27/2019
Next Scheduled EDR Contact: 06/17/2019
Data Release Frequency: Varies

DRYCLEANERS: Cleaner Facilities

A list of drycleaner related facilities that have EPA ID numbers. These are facilities with certain SIC codes: power laundries, family and commercial; garment pressing and cleaner's agents; linen supply; coin-operated laundries and cleaning; drycleaning plants, except rugs; carpet and upholster cleaning; industrial launderers; laundry and garment services.

Date of Government Version: 12/13/2018
Date Data Arrived at EDR: 01/17/2019
Date Made Active in Reports: 03/05/2019
Number of Days to Update: 47

Source: Department of Toxic Substance Control
Telephone: 916-327-4498
Last EDR Contact: 02/27/2019
Next Scheduled EDR Contact: 06/17/2019
Data Release Frequency: Annually

DRYCLEAN SOUTH COAST: South Coast Air Quality Management District Drycleaner Listing

A listing of dry cleaners in the South Coast Air Quality Management District

Date of Government Version: 03/19/2019
Date Data Arrived at EDR: 03/22/2019
Date Made Active in Reports: 04/09/2019
Number of Days to Update: 18

Source: South Coast Air Quality Management District
Telephone: 909-396-3211
Last EDR Contact: 03/22/2019
Next Scheduled EDR Contact: 06/10/2019
Data Release Frequency: Varies

EMI: Emissions Inventory Data

Toxics and criteria pollutant emissions data collected by the ARB and local air pollution agencies.

Date of Government Version: 12/31/2017
Date Data Arrived at EDR: 06/20/2018
Date Made Active in Reports: 08/06/2018
Number of Days to Update: 47

Source: California Air Resources Board
Telephone: 916-322-2990
Last EDR Contact: 03/22/2019
Next Scheduled EDR Contact: 07/01/2019
Data Release Frequency: Varies

ENF: Enforcement Action Listing

A listing of Water Board Enforcement Actions. Formal is everything except Oral/Verbal Communication, Notice of Violation, Expedited Payment Letter, and Staff Enforcement Letter.

Date of Government Version: 11/01/2018
Date Data Arrived at EDR: 11/02/2018
Date Made Active in Reports: 12/13/2018
Number of Days to Update: 41

Source: State Water Resoruces Control Board
Telephone: 916-445-9379
Last EDR Contact: 04/23/2019
Next Scheduled EDR Contact: 08/05/2019
Data Release Frequency: Varies

Financial Assurance 1: Financial Assurance Information Listing

Financial Assurance information

Date of Government Version: 01/10/2019
Date Data Arrived at EDR: 01/23/2019
Date Made Active in Reports: 03/05/2019
Number of Days to Update: 41

Source: Department of Toxic Substances Control
Telephone: 916-255-3628
Last EDR Contact: 04/22/2019
Next Scheduled EDR Contact: 08/05/2019
Data Release Frequency: Varies

Financial Assurance 2: Financial Assurance Information Listing

A listing of financial assurance information for solid waste facilities. Financial assurance is intended to ensure that resources are available to pay for the cost of closure, post-closure care, and corrective measures if the owner or operator of a regulated facility is unable or unwilling to pay.

Date of Government Version: 02/15/2019
Date Data Arrived at EDR: 02/19/2019
Date Made Active in Reports: 03/05/2019
Number of Days to Update: 14

Source: California Integrated Waste Management Board
Telephone: 916-341-6066
Last EDR Contact: 02/11/2019
Next Scheduled EDR Contact: 05/27/2019
Data Release Frequency: Varies

HAZNET: Facility and Manifest Data

Facility and Manifest Data. The data is extracted from the copies of hazardous waste manifests received each year by the DTSC. The annual volume of manifests is typically 700,000 - 1,000,000 annually, representing approximately 350,000 - 500,000 shipments. Data are from the manifests submitted without correction, and therefore many contain some invalid values for data elements such as generator ID, TSD ID, waste category, and disposal method. This database begins with calendar year 1993.

Date of Government Version: 12/31/2017
Date Data Arrived at EDR: 10/10/2018
Date Made Active in Reports: 11/16/2018
Number of Days to Update: 37

Source: California Environmental Protection Agency
Telephone: 916-255-1136
Last EDR Contact: 04/22/2019
Next Scheduled EDR Contact: 07/22/2019
Data Release Frequency: Annually

ICE: ICE

Contains data pertaining to the Permitted Facilities with Inspections / Enforcements sites tracked in Envirostor.

Date of Government Version: 02/19/2019
Date Data Arrived at EDR: 02/20/2019
Date Made Active in Reports: 03/05/2019
Number of Days to Update: 13

Source: Department of Toxic Subsances Control
Telephone: 877-786-9427
Last EDR Contact: 02/20/2019
Next Scheduled EDR Contact: 06/03/2019
Data Release Frequency: Quarterly

HIST CORTESE: Hazardous Waste & Substance Site List

The sites for the list are designated by the State Water Resource Control Board [LUST], the Integrated Waste Board [SWF/LS], and the Department of Toxic Substances Control [CALSITES]. This listing is no longer updated by the state agency.

Date of Government Version: 04/01/2001
Date Data Arrived at EDR: 01/22/2009
Date Made Active in Reports: 04/08/2009
Number of Days to Update: 76

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 01/22/2009
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

HWP: EnviroStor Permitted Facilities Listing

Detailed information on permitted hazardous waste facilities and corrective action ("cleanups") tracked in EnviroStor.

Date of Government Version: 02/19/2019
Date Data Arrived at EDR: 02/20/2019
Date Made Active in Reports: 03/05/2019
Number of Days to Update: 13

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 02/20/2019
Next Scheduled EDR Contact: 06/03/2019
Data Release Frequency: Quarterly

HWT: Registered Hazardous Waste Transporter Database

A listing of hazardous waste transporters. In California, unless specifically exempted, it is unlawful for any person to transport hazardous wastes unless the person holds a valid registration issued by DTSC. A hazardous waste transporter registration is valid for one year and is assigned a unique registration number.

Date of Government Version: 01/07/2019
Date Data Arrived at EDR: 01/08/2019
Date Made Active in Reports: 03/05/2019
Number of Days to Update: 56

Source: Department of Toxic Substances Control
Telephone: 916-440-7145
Last EDR Contact: 04/09/2019
Next Scheduled EDR Contact: 07/22/2019
Data Release Frequency: Quarterly

MINES: Mines Site Location Listing
A listing of mine site locations from the Office of Mine Reclamation.

Date of Government Version: 12/10/2018
Date Data Arrived at EDR: 12/12/2018
Date Made Active in Reports: 01/15/2019
Number of Days to Update: 34

Source: Department of Conservation
Telephone: 916-322-1080
Last EDR Contact: 12/12/2018
Next Scheduled EDR Contact: 03/25/2019
Data Release Frequency: Quarterly

MWMP: Medical Waste Management Program Listing
The Medical Waste Management Program (MWMP) ensures the proper handling and disposal of medical waste by permitting and inspecting medical waste Offsite Treatment Facilities (PDF) and Transfer Stations (PDF) throughout the state. MWMP also oversees all Medical Waste Transporters.

Date of Government Version: 02/20/2019
Date Data Arrived at EDR: 03/05/2019
Date Made Active in Reports: 04/02/2019
Number of Days to Update: 28

Source: Department of Public Health
Telephone: 916-558-1784
Last EDR Contact: 03/05/2019
Next Scheduled EDR Contact: 06/17/2019
Data Release Frequency: Varies

NPDES: NPDES Permits Listing
A listing of NPDES permits, including stormwater.

Date of Government Version: 02/11/2019
Date Data Arrived at EDR: 02/12/2019
Date Made Active in Reports: 03/07/2019
Number of Days to Update: 23

Source: State Water Resources Control Board
Telephone: 916-445-9379
Last EDR Contact: 02/12/2019
Next Scheduled EDR Contact: 05/27/2019
Data Release Frequency: Quarterly

PEST LIC: Pesticide Regulation Licenses Listing
A listing of licenses and certificates issued by the Department of Pesticide Regulation. The DPR issues licenses and/or certificates to: Persons and businesses that apply or sell pesticides; Pest control dealers and brokers; Persons who advise on agricultural pesticide applications.

Date of Government Version: 03/04/2019
Date Data Arrived at EDR: 03/05/2019
Date Made Active in Reports: 04/05/2019
Number of Days to Update: 31

Source: Department of Pesticide Regulation
Telephone: 916-445-4038
Last EDR Contact: 03/05/2019
Next Scheduled EDR Contact: 06/17/2019
Data Release Frequency: Quarterly

PROC: Certified Processors Database
A listing of certified processors.

Date of Government Version: 12/10/2018
Date Data Arrived at EDR: 12/12/2018
Date Made Active in Reports: 01/15/2019
Number of Days to Update: 34

Source: Department of Conservation
Telephone: 916-323-3836
Last EDR Contact: 03/13/2019
Next Scheduled EDR Contact: 06/24/2019
Data Release Frequency: Quarterly

NOTIFY 65: Proposition 65 Records
Listings of all Proposition 65 incidents reported to counties by the State Water Resources Control Board and the Regional Water Quality Control Board. This database is no longer updated by the reporting agency.

Date of Government Version: 09/19/2018
Date Data Arrived at EDR: 09/20/2018
Date Made Active in Reports: 10/19/2018
Number of Days to Update: 29

Source: State Water Resources Control Board
Telephone: 916-445-3846
Last EDR Contact: 03/18/2019
Next Scheduled EDR Contact: 07/01/2019
Data Release Frequency: No Update Planned

UIC: UIC Listing
A listing of wells identified as underground injection wells, in the California Oil and Gas Wells database.

Date of Government Version: 04/27/2018
Date Data Arrived at EDR: 06/13/2018
Date Made Active in Reports: 07/17/2018
Number of Days to Update: 34

Source: Deaprtment of Conservation
Telephone: 916-445-2408
Last EDR Contact: 03/13/2019
Next Scheduled EDR Contact: 06/24/2019
Data Release Frequency: Varies

UIC GEO: Underground Injection Control Sites (GEOTRACKER)
Underground control injection sites

Date of Government Version: 12/10/2018
Date Data Arrived at EDR: 12/11/2018
Date Made Active in Reports: 01/15/2019
Number of Days to Update: 35

Source: State Water Resource Control Board
Telephone: 866-480-1028
Last EDR Contact: 12/12/2018
Next Scheduled EDR Contact: 03/25/2019
Data Release Frequency: Varies

WASTEWATER PITS: Oil Wastewater Pits Listing
Water officials discovered that oil producers have been dumping chemical-laden wastewater into hundreds of unlined pits that are operating without proper permits. Inspections completed by the Central Valley Regional Water Quality Control Board revealed the existence of previously unidentified waste sites. The water boards review found that more than one-third of the region's active disposal pits are operating without permission.

Date of Government Version: 05/08/2018
Date Data Arrived at EDR: 07/11/2018
Date Made Active in Reports: 09/13/2018
Number of Days to Update: 64

Source: RWQCB, Central Valley Region
Telephone: 559-445-5577
Last EDR Contact: 04/12/2019
Next Scheduled EDR Contact: 07/22/2019
Data Release Frequency: Varies

WDS: Waste Discharge System
Sites which have been issued waste discharge requirements.

Date of Government Version: 06/19/2007
Date Data Arrived at EDR: 06/20/2007
Date Made Active in Reports: 06/29/2007
Number of Days to Update: 9

Source: State Water Resources Control Board
Telephone: 916-341-5227
Last EDR Contact: 02/13/2019
Next Scheduled EDR Contact: 06/03/2019
Data Release Frequency: Quarterly

MILITARY PRIV SITES: Military Privatized Sites (GEOTRACKER)
Military privatized sites

Date of Government Version: 12/10/2018
Date Data Arrived at EDR: 12/11/2018
Date Made Active in Reports: 01/15/2019
Number of Days to Update: 35

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 12/12/2018
Next Scheduled EDR Contact: 03/25/2019
Data Release Frequency: Varies

PROJECT: Project Sites (GEOTRACKER)
Projects sites

Date of Government Version: 12/10/2018
Date Data Arrived at EDR: 12/11/2018
Date Made Active in Reports: 01/15/2019
Number of Days to Update: 35

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 12/12/2018
Next Scheduled EDR Contact: 03/25/2019
Data Release Frequency: Varies

WDR: Waste Discharge Requirements Listing
In general, the Waste Discharge Requirements (WDRs) Program (sometimes also referred to as the "Non Chapter 15 (Non 15) Program") regulates point discharges that are exempt pursuant to Subsection 20090 of Title 27 and not subject to the Federal Water Pollution Control Act. Exemptions from Title 27 may be granted for nine categories of discharges (e.g., sewage, wastewater, etc.) that meet, and continue to meet, the preconditions listed for each specific exemption. The scope of the WDRs Program also includes the discharge of wastes classified as inert, pursuant to section 20230 of Title 27.

Date of Government Version: 12/10/2018
Date Data Arrived at EDR: 12/12/2018
Date Made Active in Reports: 01/18/2019
Number of Days to Update: 37

Source: State Water Resources Control Board
Telephone: 916-341-5810
Last EDR Contact: 03/13/2019
Next Scheduled EDR Contact: 06/24/2019
Data Release Frequency: Quarterly

CIWQS: California Integrated Water Quality System

The California Integrated Water Quality System (CIWQS) is a computer system used by the State and Regional Water Quality Control Boards to track information about places of environmental interest, manage permits and other orders, track inspections, and manage violations and enforcement activities.

Date of Government Version: 03/05/2019
Date Data Arrived at EDR: 03/05/2019
Date Made Active in Reports: 04/02/2019
Number of Days to Update: 28

Source: State Water Resources Control Board
Telephone: 866-794-4977
Last EDR Contact: 03/05/2019
Next Scheduled EDR Contact: 06/17/2019
Data Release Frequency: Varies

CERS: CalEPA Regulated Site Portal Data

The CalEPA Regulated Site Portal database combines data about environmentally regulated sites and facilities in California into a single database. It combines data from a variety of state and federal databases, and provides an overview of regulated activities across the spectrum of environmental programs for any given location in California. These activities include hazardous materials and waste, state and federal cleanups, impacted ground and surface waters, and toxic materials

Date of Government Version: 10/22/2018
Date Data Arrived at EDR: 10/23/2018
Date Made Active in Reports: 11/30/2018
Number of Days to Update: 38

Source: California Environmental Protection Agency
Telephone: 916-323-2514
Last EDR Contact: 04/11/2019
Next Scheduled EDR Contact: 08/05/2019
Data Release Frequency: Varies

NON-CASE INFO: Non-Case Information Sites (GEOTRACKER)

Non-Case Information sites

Date of Government Version: 12/10/2018
Date Data Arrived at EDR: 12/11/2018
Date Made Active in Reports: 01/15/2019
Number of Days to Update: 35

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 12/12/2018
Next Scheduled EDR Contact: 03/25/2019
Data Release Frequency: Varies

WIP: Well Investigation Program Case List

Well Investigation Program case in the San Gabriel and San Fernando Valley area.

Date of Government Version: 07/03/2009
Date Data Arrived at EDR: 07/21/2009
Date Made Active in Reports: 08/03/2009
Number of Days to Update: 13

Source: Los Angeles Water Quality Control Board
Telephone: 213-576-6726
Last EDR Contact: 03/25/2019
Next Scheduled EDR Contact: 07/08/2019
Data Release Frequency: Varies

OTHER OIL GAS: Other Oil & Gas Projects Sites (GEOTRACKER)

Other Oil & Gas Projects sites

Date of Government Version: 12/10/2018
Date Data Arrived at EDR: 12/11/2018
Date Made Active in Reports: 01/15/2019
Number of Days to Update: 35

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 12/12/2018
Next Scheduled EDR Contact: 03/25/2019
Data Release Frequency: Varies

PROD WATER PONDS: Produced Water Ponds Sites (GEOTRACKER)

Produced water ponds sites

Date of Government Version: 12/10/2018
Date Data Arrived at EDR: 12/11/2018
Date Made Active in Reports: 01/15/2019
Number of Days to Update: 35

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 12/12/2018
Next Scheduled EDR Contact: 03/25/2019
Data Release Frequency: Varies

SAMPLING POINT: Sampling Point ? Public Sites (GEOTRACKER)
Sampling point - public sites

Date of Government Version: 12/10/2018
Date Data Arrived at EDR: 12/11/2018
Date Made Active in Reports: 01/15/2019
Number of Days to Update: 35

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 12/12/2018
Next Scheduled EDR Contact: 03/25/2019
Data Release Frequency: Varies

WELL STIM PROJ: Well Stimulation Project (GEOTRACKER)
Includes areas of groundwater monitoring plans, a depiction of the monitoring network, and the facilities, boundaries, and subsurface characteristics of the oilfield and the features (oil and gas wells, produced water ponds, UIC wells, water supply wells, etc?) being monitored

Date of Government Version: 12/10/2018
Date Data Arrived at EDR: 12/11/2018
Date Made Active in Reports: 01/15/2019
Number of Days to Update: 35

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 12/12/2018
Next Scheduled EDR Contact: 03/25/2019
Data Release Frequency: Varies

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP: EDR Proprietary Manufactured Gas Plants
The EDR Proprietary Manufactured Gas Plant Database includes records of coal gas plants (manufactured gas plants) compiled by EDR's researchers. Manufactured gas sites were used in the United States from the 1800's to 1950's to produce a gas that could be distributed and used as fuel. These plants used whale oil, rosin, coal, or a mixture of coal, oil, and water that also produced a significant amount of waste. Many of the byproducts of the gas production, such as coal tar (oily waste containing volatile and non-volatile chemicals), sludges, oils and other compounds are potentially hazardous to human health and the environment. The byproduct from this process was frequently disposed of directly at the plant site and can remain or spread slowly, serving as a continuous source of soil and groundwater contamination.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

EDR Hist Auto: EDR Exclusive Historical Auto Stations
EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR Hist Cleaner: EDR Exclusive Historical Cleaners

EDR has searched selected national collections of business directories and has collected listings of potential dry cleaner sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include dry cleaning establishments. The categories reviewed included, but were not limited to dry cleaners, cleaners, laundry, laundromat, cleaning/laundry, wash & dry etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

RGA LF: Recovered Government Archive Solid Waste Facilities List

The EDR Recovered Government Archive Landfill database provides a list of landfills derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of Resources Recycling and Recovery in California.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 01/13/2014
Number of Days to Update: 196

Source: Department of Resources Recycling and Recovery
Telephone: N/A
Last EDR Contact: 06/01/2012
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

RGA LUST: Recovered Government Archive Leaking Underground Storage Tank

The EDR Recovered Government Archive Leaking Underground Storage Tank database provides a list of LUST incidents derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the State Water Resources Control Board in California.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 12/30/2013
Number of Days to Update: 182

Source: State Water Resources Control Board
Telephone: N/A
Last EDR Contact: 06/01/2012
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

COUNTY RECORDS

ALAMEDA COUNTY:

CS ALAMEDA: Contaminated Sites

A listing of contaminated sites overseen by the Toxic Release Program (oil and groundwater contamination from chemical releases and spills) and the Leaking Underground Storage Tank Program (soil and ground water contamination from leaking petroleum USTs).

Date of Government Version: 01/09/2019
Date Data Arrived at EDR: 01/11/2019
Date Made Active in Reports: 03/05/2019
Number of Days to Update: 53

Source: Alameda County Environmental Health Services
Telephone: 510-567-6700
Last EDR Contact: 04/22/2019
Next Scheduled EDR Contact: 07/22/2019
Data Release Frequency: Semi-Annually

UST ALAMEDA: Underground Tanks

Underground storage tank sites located in Alameda county.

Date of Government Version: 01/07/2019
Date Data Arrived at EDR: 01/08/2019
Date Made Active in Reports: 03/08/2019
Number of Days to Update: 59

Source: Alameda County Environmental Health Services
Telephone: 510-567-6700
Last EDR Contact: 04/08/2019
Next Scheduled EDR Contact: 04/24/2047
Data Release Frequency: Semi-Annually

AMADOR COUNTY:

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

CUPA AMADOR: CUPA Facility List
Cupa Facility List

Date of Government Version: 01/07/2019
Date Data Arrived at EDR: 01/08/2019
Date Made Active in Reports: 03/07/2019
Number of Days to Update: 58

Source: Amador County Environmental Health
Telephone: 209-223-6439
Last EDR Contact: 02/27/2019
Next Scheduled EDR Contact: 06/17/2019
Data Release Frequency: Varies

BUTTE COUNTY:

CUPA BUTTE: CUPA Facility Listing
Cupa facility list.

Date of Government Version: 04/21/2017
Date Data Arrived at EDR: 04/25/2017
Date Made Active in Reports: 08/09/2017
Number of Days to Update: 106

Source: Public Health Department
Telephone: 530-538-7149
Last EDR Contact: 04/08/2019
Next Scheduled EDR Contact: 07/22/2019
Data Release Frequency: No Update Planned

CALVERAS COUNTY:

CUPA CALVERAS: CUPA Facility Listing
Cupa Facility Listing

Date of Government Version: 01/24/2019
Date Data Arrived at EDR: 01/25/2019
Date Made Active in Reports: 03/05/2019
Number of Days to Update: 39

Source: Calveras County Environmental Health
Telephone: 209-754-6399
Last EDR Contact: 03/25/2019
Next Scheduled EDR Contact: 07/08/2019
Data Release Frequency: Quarterly

COLUSA COUNTY:

CUPA COLUSA: CUPA Facility List
Cupa facility list.

Date of Government Version: 02/27/2019
Date Data Arrived at EDR: 02/28/2019
Date Made Active in Reports: 04/01/2019
Number of Days to Update: 32

Source: Health & Human Services
Telephone: 530-458-0396
Last EDR Contact: 02/27/2019
Next Scheduled EDR Contact: 05/20/2019
Data Release Frequency: Semi-Annually

CONTRA COSTA COUNTY:

SL CONTRA COSTA: Site List
List includes sites from the underground tank, hazardous waste generator and business plan/2185 programs.

Date of Government Version: 02/14/2019
Date Data Arrived at EDR: 02/19/2019
Date Made Active in Reports: 03/08/2019
Number of Days to Update: 17

Source: Contra Costa Health Services Department
Telephone: 925-646-2286
Last EDR Contact: 01/28/2019
Next Scheduled EDR Contact: 05/11/2019
Data Release Frequency: Semi-Annually

DEL NORTE COUNTY:

CUPA DEL NORTE: CUPA Facility List
Cupa Facility list

Date of Government Version: 01/16/2019
Date Data Arrived at EDR: 02/05/2019
Date Made Active in Reports: 03/05/2019
Number of Days to Update: 28

Source: Del Norte County Environmental Health Division
Telephone: 707-465-0426
Last EDR Contact: 01/28/2019
Next Scheduled EDR Contact: 05/11/2019
Data Release Frequency: Varies

EL DORADO COUNTY:

CUPA EL DORADO: CUPA Facility List
CUPA facility list.

Date of Government Version: 02/27/2019
Date Data Arrived at EDR: 02/28/2019
Date Made Active in Reports: 04/01/2019
Number of Days to Update: 32

Source: El Dorado County Environmental Management Department
Telephone: 530-621-6623
Last EDR Contact: 01/28/2019
Next Scheduled EDR Contact: 05/11/2019
Data Release Frequency: Varies

FRESNO COUNTY:

CUPA FRESNO: CUPA Resources List
Certified Unified Program Agency. CUPA's are responsible for implementing a unified hazardous materials and hazardous waste management regulatory program. The agency provides oversight of businesses that deal with hazardous materials, operate underground storage tanks or aboveground storage tanks.

Date of Government Version: 10/16/2018
Date Data Arrived at EDR: 10/18/2018
Date Made Active in Reports: 11/14/2018
Number of Days to Update: 27

Source: Dept. of Community Health
Telephone: 559-445-3271
Last EDR Contact: 03/29/2019
Next Scheduled EDR Contact: 07/15/2019
Data Release Frequency: Semi-Annually

GLENN COUNTY:

CUPA GLENN: CUPA Facility List
Cupa facility list

Date of Government Version: 01/22/2018
Date Data Arrived at EDR: 01/24/2018
Date Made Active in Reports: 03/14/2018
Number of Days to Update: 49

Source: Glenn County Air Pollution Control District
Telephone: 830-934-6500
Last EDR Contact: 04/22/2019
Next Scheduled EDR Contact: 08/05/2019
Data Release Frequency: Varies

HUMBOLDT COUNTY:

CUPA HUMBOLDT: CUPA Facility List
CUPA facility list.

Date of Government Version: 12/11/2018
Date Data Arrived at EDR: 12/13/2018
Date Made Active in Reports: 01/15/2019
Number of Days to Update: 33

Source: Humboldt County Environmental Health
Telephone: N/A
Last EDR Contact: 11/19/2018
Next Scheduled EDR Contact: 03/04/2019
Data Release Frequency: Semi-Annually

IMPERIAL COUNTY:

CUPA IMPERIAL: CUPA Facility List
Cupa facility list.

Date of Government Version: 01/18/2019
Date Data Arrived at EDR: 01/23/2019
Date Made Active in Reports: 03/05/2019
Number of Days to Update: 41

Source: San Diego Border Field Office
Telephone: 760-339-2777
Last EDR Contact: 04/22/2019
Next Scheduled EDR Contact: 08/05/2019
Data Release Frequency: Varies

INYO COUNTY:

CUPA INYO: CUPA Facility List
Cupa facility list.

Date of Government Version: 04/02/2018
Date Data Arrived at EDR: 04/03/2018
Date Made Active in Reports: 06/14/2018
Number of Days to Update: 72

Source: Inyo County Environmental Health Services
Telephone: 760-878-0238
Last EDR Contact: 02/13/2019
Next Scheduled EDR Contact: 06/03/2019
Data Release Frequency: Varies

KERN COUNTY:

UST KERN: Underground Storage Tank Sites & Tank Listing
Kern County Sites and Tanks Listing.

Date of Government Version: 01/28/2019
Date Data Arrived at EDR: 02/07/2019
Date Made Active in Reports: 03/08/2019
Number of Days to Update: 29

Source: Kern County Environment Health Services Department
Telephone: 661-862-8700
Last EDR Contact: 01/31/2019
Next Scheduled EDR Contact: 05/20/2019
Data Release Frequency: Quarterly

KINGS COUNTY:

CUPA KINGS: CUPA Facility List
A listing of sites included in the county's Certified Unified Program Agency database. California's Secretary for Environmental Protection established the unified hazardous materials and hazardous waste regulatory program as required by chapter 6.11 of the California Health and Safety Code. The Unified Program consolidates the administration, permits, inspections, and enforcement activities.

Date of Government Version: 02/14/2019
Date Data Arrived at EDR: 02/19/2019
Date Made Active in Reports: 03/05/2019
Number of Days to Update: 14

Source: Kings County Department of Public Health
Telephone: 559-584-1411
Last EDR Contact: 02/13/2019
Next Scheduled EDR Contact: 06/03/2019
Data Release Frequency: Varies

LAKE COUNTY:

CUPA LAKE: CUPA Facility List
Cupa facility list

Date of Government Version: 02/08/2019
Date Data Arrived at EDR: 02/12/2019
Date Made Active in Reports: 03/12/2019
Number of Days to Update: 28

Source: Lake County Environmental Health
Telephone: 707-263-1164
Last EDR Contact: 04/15/2019
Next Scheduled EDR Contact: 07/29/2019
Data Release Frequency: Varies

LASSEN COUNTY:

CUPA LASSEN: CUPA Facility List
Cupa facility list

Date of Government Version: 01/17/2019
Date Data Arrived at EDR: 01/18/2019
Date Made Active in Reports: 03/05/2019
Number of Days to Update: 46

Source: Lassen County Environmental Health
Telephone: 530-251-8528
Last EDR Contact: 04/22/2019
Next Scheduled EDR Contact: 08/05/2019
Data Release Frequency: Varies

LOS ANGELES COUNTY:

AOCONCERN: Key Areas of Concerns in Los Angeles County
San Gabriel Valley areas where VOC contamination is at or above the MCL as designated by region 9 EPA office. Date of Government Version: 3/30/2009 Exide Site area is a cleanup plan of lead-impacted soil surrounding the former Exide Facility as designated by the DTSC. Date of Government Version: 7/17/2017

Date of Government Version: 03/30/2009
Date Data Arrived at EDR: 03/31/2009
Date Made Active in Reports: 10/23/2009
Number of Days to Update: 206

Source: N/A
Telephone: N/A
Last EDR Contact: 03/18/2019
Next Scheduled EDR Contact: 07/01/2019
Data Release Frequency: No Update Planned

HMS LOS ANGELES: HMS: Street Number List
Industrial Waste and Underground Storage Tank Sites.

Date of Government Version: 12/19/2018
Date Data Arrived at EDR: 01/10/2019
Date Made Active in Reports: 03/07/2019
Number of Days to Update: 56

Source: Department of Public Works
Telephone: 626-458-3517
Last EDR Contact: 04/22/2019
Next Scheduled EDR Contact: 07/22/2019
Data Release Frequency: Semi-Annually

LF LOS ANGELES: List of Solid Waste Facilities
Solid Waste Facilities in Los Angeles County.

Date of Government Version: 01/14/2019
Date Data Arrived at EDR: 01/15/2019
Date Made Active in Reports: 03/07/2019
Number of Days to Update: 51

Source: La County Department of Public Works
Telephone: 818-458-5185
Last EDR Contact: 04/16/2019
Next Scheduled EDR Contact: 07/29/2019
Data Release Frequency: Varies

LF LOS ANGELES CITY: City of Los Angeles Landfills
Landfills owned and maintained by the City of Los Angeles.

Date of Government Version: 01/01/2019
Date Data Arrived at EDR: 01/15/2019
Date Made Active in Reports: 03/07/2019
Number of Days to Update: 51

Source: Engineering & Construction Division
Telephone: 213-473-7869
Last EDR Contact: 04/15/2019
Next Scheduled EDR Contact: 07/29/2019
Data Release Frequency: Varies

SITE MIT LOS ANGELES: Site Mitigation List
Industrial sites that have had some sort of spill or complaint.

Date of Government Version: 01/30/2019
Date Data Arrived at EDR: 02/01/2019
Date Made Active in Reports: 03/07/2019
Number of Days to Update: 34

Source: Community Health Services
Telephone: 323-890-7806
Last EDR Contact: 04/16/2019
Next Scheduled EDR Contact: 07/29/2019
Data Release Frequency: Annually

UST EL SEGUNDO: City of El Segundo Underground Storage Tank
Underground storage tank sites located in El Segundo city.

Date of Government Version: 01/21/2017
Date Data Arrived at EDR: 04/19/2017
Date Made Active in Reports: 05/10/2017
Number of Days to Update: 21

Source: City of El Segundo Fire Department
Telephone: 310-524-2236
Last EDR Contact: 04/15/2019
Next Scheduled EDR Contact: 07/29/2019
Data Release Frequency: Semi-Annually

UST LONG BEACH: City of Long Beach Underground Storage Tank
Underground storage tank sites located in the city of Long Beach.

Date of Government Version: 03/09/2017
Date Data Arrived at EDR: 03/10/2017
Date Made Active in Reports: 05/03/2017
Number of Days to Update: 54

Source: City of Long Beach Fire Department
Telephone: 562-570-2563
Last EDR Contact: 04/22/2019
Next Scheduled EDR Contact: 08/05/2019
Data Release Frequency: Annually

UST TORRANCE: City of Torrance Underground Storage Tank
Underground storage tank sites located in the city of Torrance.

Date of Government Version: 10/02/2018
Date Data Arrived at EDR: 10/05/2018
Date Made Active in Reports: 11/02/2018
Number of Days to Update: 28

Source: City of Torrance Fire Department
Telephone: 310-618-2973
Last EDR Contact: 04/22/2019
Next Scheduled EDR Contact: 08/05/2019
Data Release Frequency: Semi-Annually

MADERA COUNTY:

CUPA MADERA: CUPA Facility List
A listing of sites included in the county's Certified Unified Program Agency database. California's Secretary for Environmental Protection established the unified hazardous materials and hazardous waste regulatory program as required by chapter 6.11 of the California Health and Safety Code. The Unified Program consolidates the administration, permits, inspections, and enforcement activities.

Date of Government Version: 02/20/2019
Date Data Arrived at EDR: 02/22/2019
Date Made Active in Reports: 03/07/2019
Number of Days to Update: 13

Source: Madera County Environmental Health
Telephone: 559-675-7823
Last EDR Contact: 02/15/2019
Next Scheduled EDR Contact: 06/03/2019
Data Release Frequency: Varies

MARIN COUNTY:

UST MARIN: Underground Storage Tank Sites
Currently permitted USTs in Marin County.

Date of Government Version: 09/26/2018
Date Data Arrived at EDR: 10/04/2018
Date Made Active in Reports: 11/02/2018
Number of Days to Update: 29

Source: Public Works Department Waste Management
Telephone: 415-473-6647
Last EDR Contact: 03/29/2019
Next Scheduled EDR Contact: 07/15/2019
Data Release Frequency: Semi-Annually

MERCED COUNTY:

CUPA MERCED: CUPA Facility List
CUPA facility list.

Date of Government Version: 08/29/2018
Date Data Arrived at EDR: 08/31/2018
Date Made Active in Reports: 09/19/2018
Number of Days to Update: 19

Source: Merced County Environmental Health
Telephone: 209-381-1094
Last EDR Contact: 03/18/2019
Next Scheduled EDR Contact: 06/03/2019
Data Release Frequency: Varies

MONO COUNTY:

CUPA MONO: CUPA Facility List
CUPA Facility List

Date of Government Version: 02/21/2019
Date Data Arrived at EDR: 02/26/2019
Date Made Active in Reports: 04/01/2019
Number of Days to Update: 34

Source: Mono County Health Department
Telephone: 760-932-5580
Last EDR Contact: 02/21/2019
Next Scheduled EDR Contact: 06/10/2019
Data Release Frequency: Varies

MONTEREY COUNTY:

CUPA MONTEREY: CUPA Facility Listing
CUPA Program listing from the Environmental Health Division.

Date of Government Version: 02/05/2019
Date Data Arrived at EDR: 02/07/2019
Date Made Active in Reports: 03/05/2019
Number of Days to Update: 26

Source: Monterey County Health Department
Telephone: 831-796-1297
Last EDR Contact: 04/01/2019
Next Scheduled EDR Contact: 07/15/2019
Data Release Frequency: Varies

NAPA COUNTY:

LUST NAPA: Sites With Reported Contamination
A listing of leaking underground storage tank sites located in Napa county.

Date of Government Version: 01/09/2017
Date Data Arrived at EDR: 01/11/2017
Date Made Active in Reports: 03/02/2017
Number of Days to Update: 50

Source: Napa County Department of Environmental Management
Telephone: 707-253-4269
Last EDR Contact: 02/21/2019
Next Scheduled EDR Contact: 06/10/2019
Data Release Frequency: No Update Planned

UST NAPA: Closed and Operating Underground Storage Tank Sites
Underground storage tank sites located in Napa county.

Date of Government Version: 02/21/2019
Date Data Arrived at EDR: 02/22/2019
Date Made Active in Reports: 03/08/2019
Number of Days to Update: 14

Source: Napa County Department of Environmental Management
Telephone: 707-253-4269
Last EDR Contact: 02/21/2019
Next Scheduled EDR Contact: 06/10/2019
Data Release Frequency: No Update Planned

NEVADA COUNTY:

CUPA NEVADA: CUPA Facility List
CUPA facility list.

Date of Government Version: 01/25/2019
Date Data Arrived at EDR: 01/29/2019
Date Made Active in Reports: 03/05/2019
Number of Days to Update: 35

Source: Community Development Agency
Telephone: 530-265-1467
Last EDR Contact: 01/28/2019
Next Scheduled EDR Contact: 05/11/2019
Data Release Frequency: Varies

ORANGE COUNTY:

IND_SITE ORANGE: List of Industrial Site Cleanups
Petroleum and non-petroleum spills.

Date of Government Version: 01/02/2019
Date Data Arrived at EDR: 02/07/2019
Date Made Active in Reports: 03/05/2019
Number of Days to Update: 26

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 02/04/2019
Next Scheduled EDR Contact: 05/20/2019
Data Release Frequency: Annually

LUST ORANGE: List of Underground Storage Tank Cleanups
Orange County Underground Storage Tank Cleanups (LUST).

Date of Government Version: 01/02/2019
Date Data Arrived at EDR: 02/08/2019
Date Made Active in Reports: 03/06/2019
Number of Days to Update: 26

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 02/04/2019
Next Scheduled EDR Contact: 05/20/2019
Data Release Frequency: Quarterly

UST ORANGE: List of Underground Storage Tank Facilities
Orange County Underground Storage Tank Facilities (UST).

Date of Government Version: 01/02/2019
Date Data Arrived at EDR: 02/05/2019
Date Made Active in Reports: 03/08/2019
Number of Days to Update: 31

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 02/05/2019
Next Scheduled EDR Contact: 05/20/2019
Data Release Frequency: Quarterly

PLACER COUNTY:

MS PLACER: Master List of Facilities
List includes aboveground tanks, underground tanks and cleanup sites.

Date of Government Version: 02/28/2019
Date Data Arrived at EDR: 03/01/2019
Date Made Active in Reports: 04/12/2019
Number of Days to Update: 42

Source: Placer County Health and Human Services
Telephone: 530-745-2363
Last EDR Contact: 02/27/2019
Next Scheduled EDR Contact: 06/17/2019
Data Release Frequency: Semi-Annually

PLUMAS COUNTY:

CUPA PLUMAS: CUPA Facility List
Plumas County CUPA Program facilities.

Date of Government Version: 01/14/2019
Date Data Arrived at EDR: 01/18/2019
Date Made Active in Reports: 03/05/2019
Number of Days to Update: 46

Source: Plumas County Environmental Health
Telephone: 530-283-6355
Last EDR Contact: 04/22/2019
Next Scheduled EDR Contact: 08/05/2019
Data Release Frequency: Varies

RIVERSIDE COUNTY:

LUST RIVERSIDE: Listing of Underground Tank Cleanup Sites
Riverside County Underground Storage Tank Cleanup Sites (LUST).

Date of Government Version: 01/29/2019
Date Data Arrived at EDR: 01/31/2019
Date Made Active in Reports: 03/06/2019
Number of Days to Update: 34

Source: Department of Environmental Health
Telephone: 951-358-5055
Last EDR Contact: 03/18/2019
Next Scheduled EDR Contact: 07/01/2019
Data Release Frequency: Quarterly

UST RIVERSIDE: Underground Storage Tank Tank List
Underground storage tank sites located in Riverside county.

Date of Government Version: 01/29/2019
Date Data Arrived at EDR: 01/31/2019
Date Made Active in Reports: 03/08/2019
Number of Days to Update: 36

Source: Department of Environmental Health
Telephone: 951-358-5055
Last EDR Contact: 03/18/2019
Next Scheduled EDR Contact: 07/01/2019
Data Release Frequency: Quarterly

SACRAMENTO COUNTY:

CS SACRAMENTO: Toxic Site Clean-Up List
List of sites where unauthorized releases of potentially hazardous materials have occurred.

Date of Government Version: 11/07/2018
Date Data Arrived at EDR: 01/04/2019
Date Made Active in Reports: 03/05/2019
Number of Days to Update: 60

Source: Sacramento County Environmental Management
Telephone: 916-875-8406
Last EDR Contact: 04/02/2019
Next Scheduled EDR Contact: 07/15/2019
Data Release Frequency: Quarterly

ML SACRAMENTO: Master Hazardous Materials Facility List
Any business that has hazardous materials on site - hazardous material storage sites, underground storage tanks, waste generators.

Date of Government Version: 11/07/2018
Date Data Arrived at EDR: 12/28/2018
Date Made Active in Reports: 03/05/2019
Number of Days to Update: 67

Source: Sacramento County Environmental Management
Telephone: 916-875-8406
Last EDR Contact: 04/02/2019
Next Scheduled EDR Contact: 07/15/2019
Data Release Frequency: Quarterly

SAN BENITO COUNTY:

CUPA SAN BENITO: CUPA Facility List
Cupa facility list

Date of Government Version: 11/15/2018
Date Data Arrived at EDR: 11/16/2018
Date Made Active in Reports: 12/13/2018
Number of Days to Update: 27

Source: San Benito County Environmental Health
Telephone: N/A
Last EDR Contact: 02/27/2019
Next Scheduled EDR Contact: 05/20/2019
Data Release Frequency: Varies

SAN BERNARDINO COUNTY:

PERMITS SAN BERNARDINO: Hazardous Material Permits
This listing includes underground storage tanks, medical waste handlers/generators, hazardous materials handlers, hazardous waste generators, and waste oil generators/handlers.

Date of Government Version: 02/27/2019
Date Data Arrived at EDR: 02/28/2019
Date Made Active in Reports: 04/02/2019
Number of Days to Update: 33

Source: San Bernardino County Fire Department Hazardous Materials Division
Telephone: 909-387-3041
Last EDR Contact: 02/19/2019
Next Scheduled EDR Contact: 05/20/2019
Data Release Frequency: Quarterly

SAN DIEGO COUNTY:

HMMD SAN DIEGO: Hazardous Materials Management Division Database

The database includes: HE58 - This report contains the business name, site address, business phone number, establishment 'H' permit number, type of permit, and the business status. HE17 - In addition to providing the same information provided in the HE58 listing, HE17 provides inspection dates, violations received by the establishment, hazardous waste generated, the quantity, method of storage, treatment/disposal of waste and the hauler, and information on underground storage tanks. Unauthorized Release List - Includes a summary of environmental contamination cases in San Diego County (underground tank cases, non-tank cases, groundwater contamination, and soil contamination are included.)

Date of Government Version: 03/04/2019
Date Data Arrived at EDR: 03/05/2019
Date Made Active in Reports: 04/02/2019
Number of Days to Update: 28

Source: Hazardous Materials Management Division
Telephone: 619-338-2268
Last EDR Contact: 03/05/2019
Next Scheduled EDR Contact: 06/17/2019
Data Release Frequency: Quarterly

LF SAN DIEGO: Solid Waste Facilities

San Diego County Solid Waste Facilities.

Date of Government Version: 04/18/2018
Date Data Arrived at EDR: 04/24/2018
Date Made Active in Reports: 06/19/2018
Number of Days to Update: 56

Source: Department of Health Services
Telephone: 619-338-2209
Last EDR Contact: 04/22/2019
Next Scheduled EDR Contact: 08/05/2019
Data Release Frequency: Varies

SAN DIEGO CO LOP: Local Oversight Program Listing

A listing of all LOP release sites that are or were under the County of San Diego's jurisdiction. Included are closed or transferred cases, open cases, and cases that did not have a case type indicated. The cases without a case type are mostly complaints; however, some of them could be LOP cases.

Date of Government Version: 10/22/2018
Date Data Arrived at EDR: 10/23/2018
Date Made Active in Reports: 11/30/2018
Number of Days to Update: 38

Source: Department of Environmental Health
Telephone: 858-505-6874
Last EDR Contact: 04/22/2019
Next Scheduled EDR Contact: 08/05/2019
Data Release Frequency: Varies

SAN DIEGO CO. SAM: Environmental Case Listing

The listing contains all underground tank release cases and projects pertaining to properties contaminated with hazardous substances that are actively under review by the Site Assessment and Mitigation Program.

Date of Government Version: 03/23/2010
Date Data Arrived at EDR: 06/15/2010
Date Made Active in Reports: 07/09/2010
Number of Days to Update: 24

Source: San Diego County Department of Environmental Health
Telephone: 619-338-2371
Last EDR Contact: 02/27/2019
Next Scheduled EDR Contact: 06/17/2019
Data Release Frequency: No Update Planned

SAN FRANCISCO COUNTY:

LUST SAN FRANCISCO: Local Oversite Facilities

A listing of leaking underground storage tank sites located in San Francisco county.

Date of Government Version: 09/19/2008
Date Data Arrived at EDR: 09/19/2008
Date Made Active in Reports: 09/29/2008
Number of Days to Update: 10

Source: Department Of Public Health San Francisco County
Telephone: 415-252-3920
Last EDR Contact: 01/31/2019
Next Scheduled EDR Contact: 05/20/2019
Data Release Frequency: Quarterly

UST SAN FRANCISCO: Underground Storage Tank Information

Underground storage tank sites located in San Francisco county.

Date of Government Version: 11/05/2018
Date Data Arrived at EDR: 11/06/2018
Date Made Active in Reports: 12/14/2018
Number of Days to Update: 38

Source: Department of Public Health
Telephone: 415-252-3920
Last EDR Contact: 01/31/2019
Next Scheduled EDR Contact: 05/20/2019
Data Release Frequency: Quarterly

SAN JOAQUIN COUNTY:

UST SAN JOAQUIN: San Joaquin Co. UST
A listing of underground storage tank locations in San Joaquin county.

Date of Government Version: 06/22/2018
Date Data Arrived at EDR: 06/26/2018
Date Made Active in Reports: 07/11/2018
Number of Days to Update: 15

Source: Environmental Health Department
Telephone: N/A
Last EDR Contact: 03/18/2019
Next Scheduled EDR Contact: 07/01/2019
Data Release Frequency: Semi-Annually

SAN LUIS OBISPO COUNTY:

CUPA SAN LUIS OBISPO: CUPA Facility List
Cupa Facility List.

Date of Government Version: 02/13/2019
Date Data Arrived at EDR: 02/15/2019
Date Made Active in Reports: 03/14/2019
Number of Days to Update: 27

Source: San Luis Obispo County Public Health Department
Telephone: 805-781-5596
Last EDR Contact: 02/13/2019
Next Scheduled EDR Contact: 06/03/2019
Data Release Frequency: Varies

SAN MATEO COUNTY:

BI SAN MATEO: Business Inventory
List includes Hazardous Materials Business Plan, hazardous waste generators, and underground storage tanks.

Date of Government Version: 12/03/2018
Date Data Arrived at EDR: 12/12/2018
Date Made Active in Reports: 01/15/2019
Number of Days to Update: 34

Source: San Mateo County Environmental Health Services Division
Telephone: 650-363-1921
Last EDR Contact: 03/13/2019
Next Scheduled EDR Contact: 06/24/2019
Data Release Frequency: Annually

LUST SAN MATEO: Fuel Leak List
A listing of leaking underground storage tank sites located in San Mateo county.

Date of Government Version: 12/13/2018
Date Data Arrived at EDR: 12/18/2018
Date Made Active in Reports: 01/23/2019
Number of Days to Update: 36

Source: San Mateo County Environmental Health Services Division
Telephone: 650-363-1921
Last EDR Contact: 03/25/2019
Next Scheduled EDR Contact: 06/24/2019
Data Release Frequency: Semi-Annually

SANTA BARBARA COUNTY:

CUPA SANTA BARBARA: CUPA Facility Listing
CUPA Program Listing from the Environmental Health Services division.

Date of Government Version: 09/08/2011
Date Data Arrived at EDR: 09/09/2011
Date Made Active in Reports: 10/07/2011
Number of Days to Update: 28

Source: Santa Barbara County Public Health Department
Telephone: 805-686-8167
Last EDR Contact: 02/13/2019
Next Scheduled EDR Contact: 06/03/2019
Data Release Frequency: Varies

SANTA CLARA COUNTY:

CUPA SANTA CLARA: Cupa Facility List
Cupa facility list

Date of Government Version: 02/13/2019
Date Data Arrived at EDR: 02/19/2019
Date Made Active in Reports: 03/06/2019
Number of Days to Update: 15

Source: Department of Environmental Health
Telephone: 408-918-1973
Last EDR Contact: 02/13/2019
Next Scheduled EDR Contact: 06/03/2019
Data Release Frequency: Varies

HIST LUST SANTA CLARA: HIST LUST - Fuel Leak Site Activity Report
A listing of open and closed leaking underground storage tanks. This listing is no longer updated by the county. Leaking underground storage tanks are now handled by the Department of Environmental Health.

Date of Government Version: 03/29/2005
Date Data Arrived at EDR: 03/30/2005
Date Made Active in Reports: 04/21/2005
Number of Days to Update: 22

Source: Santa Clara Valley Water District
Telephone: 408-265-2600
Last EDR Contact: 03/23/2009
Next Scheduled EDR Contact: 06/22/2009
Data Release Frequency: No Update Planned

LUST SANTA CLARA: LOP Listing
A listing of leaking underground storage tanks located in Santa Clara county.

Date of Government Version: 03/03/2014
Date Data Arrived at EDR: 03/05/2014
Date Made Active in Reports: 03/18/2014
Number of Days to Update: 13

Source: Department of Environmental Health
Telephone: 408-918-3417
Last EDR Contact: 02/21/2019
Next Scheduled EDR Contact: 06/10/2019
Data Release Frequency: Annually

SAN JOSE HAZMAT: Hazardous Material Facilities
Hazardous material facilities, including underground storage tank sites.

Date of Government Version: 01/30/2019
Date Data Arrived at EDR: 02/01/2019
Date Made Active in Reports: 03/07/2019
Number of Days to Update: 34

Source: City of San Jose Fire Department
Telephone: 408-535-7694
Last EDR Contact: 01/31/2019
Next Scheduled EDR Contact: 05/20/2019
Data Release Frequency: Annually

SANTA CRUZ COUNTY:

CUPA SANTA CRUZ: CUPA Facility List
CUPA facility listing.

Date of Government Version: 01/21/2017
Date Data Arrived at EDR: 02/22/2017
Date Made Active in Reports: 05/23/2017
Number of Days to Update: 90

Source: Santa Cruz County Environmental Health
Telephone: 831-464-2761
Last EDR Contact: 02/13/2019
Next Scheduled EDR Contact: 06/03/2019
Data Release Frequency: Varies

SHASTA COUNTY:

CUPA SHASTA: CUPA Facility List
Cupa Facility List.

Date of Government Version: 06/15/2017
Date Data Arrived at EDR: 06/19/2017
Date Made Active in Reports: 08/09/2017
Number of Days to Update: 51

Source: Shasta County Department of Resource Management
Telephone: 530-225-5789
Last EDR Contact: 02/13/2019
Next Scheduled EDR Contact: 06/03/2019
Data Release Frequency: Varies

SOLANO COUNTY:

LUST SOLANO: Leaking Underground Storage Tanks
A listing of leaking underground storage tank sites located in Solano county.

Date of Government Version: 11/29/2018
Date Data Arrived at EDR: 12/04/2018
Date Made Active in Reports: 01/11/2019
Number of Days to Update: 38

Source: Solano County Department of Environmental Management
Telephone: 707-784-6770
Last EDR Contact: 02/27/2019
Next Scheduled EDR Contact: 06/17/2019
Data Release Frequency: Quarterly

UST SOLANO: Underground Storage Tanks
Underground storage tank sites located in Solano county.

Date of Government Version: 03/05/2019
Date Data Arrived at EDR: 03/07/2019
Date Made Active in Reports: 04/03/2019
Number of Days to Update: 27

Source: Solano County Department of Environmental Management
Telephone: 707-784-6770
Last EDR Contact: 02/27/2019
Next Scheduled EDR Contact: 06/17/2019
Data Release Frequency: Quarterly

SONOMA COUNTY:

CUPA SONOMA: Cupa Facility List
Cupa Facility list

Date of Government Version: 12/21/2018
Date Data Arrived at EDR: 12/27/2018
Date Made Active in Reports: 01/15/2019
Number of Days to Update: 19

Source: County of Sonoma Fire & Emergency Services Department
Telephone: 707-565-1174
Last EDR Contact: 03/25/2019
Next Scheduled EDR Contact: 07/08/2019
Data Release Frequency: Varies

LUST SONOMA: Leaking Underground Storage Tank Sites
A listing of leaking underground storage tank sites located in Sonoma county.

Date of Government Version: 01/08/2019
Date Data Arrived at EDR: 01/10/2019
Date Made Active in Reports: 03/06/2019
Number of Days to Update: 55

Source: Department of Health Services
Telephone: 707-565-6565
Last EDR Contact: 04/08/2019
Next Scheduled EDR Contact: 07/08/2019
Data Release Frequency: Quarterly

STANISLAUS COUNTY:

CUPA STANISLAUS: CUPA Facility List
Cupa facility list

Date of Government Version: 12/11/2018
Date Data Arrived at EDR: 12/13/2018
Date Made Active in Reports: 01/15/2019
Number of Days to Update: 33

Source: Stanislaus County Department of Ennvironmental Protection
Telephone: 209-525-6751
Last EDR Contact: 04/15/2019
Next Scheduled EDR Contact: 07/29/2019
Data Release Frequency: Varies

SUTTER COUNTY:

UST SUTTER: Underground Storage Tanks
Underground storage tank sites located in Sutter county.

Date of Government Version: 02/28/2019
Date Data Arrived at EDR: 03/01/2019
Date Made Active in Reports: 04/03/2019
Number of Days to Update: 33

Source: Sutter County Environmental Health Services
Telephone: 530-822-7500
Last EDR Contact: 02/27/2019
Next Scheduled EDR Contact: 06/17/2019
Data Release Frequency: Semi-Annually

TEHAMA COUNTY:

CUPA TEHAMA: CUPA Facility List
Cupa facilities

Date of Government Version: 12/13/2018
Date Data Arrived at EDR: 12/18/2018
Date Made Active in Reports: 01/15/2019
Number of Days to Update: 28

Source: Tehama County Department of Environmental Health
Telephone: 530-527-8020
Last EDR Contact: 01/31/2019
Next Scheduled EDR Contact: 05/20/2019
Data Release Frequency: Varies

TRINITY COUNTY:

CUPA TRINITY: CUPA Facility List
Cupa facility list

Date of Government Version: 01/18/2019
Date Data Arrived at EDR: 01/23/2019
Date Made Active in Reports: 03/06/2019
Number of Days to Update: 42

Source: Department of Toxic Substances Control
Telephone: 760-352-0381
Last EDR Contact: 04/22/2019
Next Scheduled EDR Contact: 08/05/2019
Data Release Frequency: Varies

TULARE COUNTY:

CUPA TULARE: CUPA Facility List
Cupa program facilities

Date of Government Version: 12/26/2018
Date Data Arrived at EDR: 12/27/2018
Date Made Active in Reports: 01/15/2019
Number of Days to Update: 19

Source: Tulare County Environmental Health Services Division
Telephone: 559-624-7400
Last EDR Contact: 01/31/2019
Next Scheduled EDR Contact: 05/20/2019
Data Release Frequency: Varies

TUOLUMNE COUNTY:

CUPA TUOLUMNE: CUPA Facility List
Cupa facility list

Date of Government Version: 04/23/2018
Date Data Arrived at EDR: 04/25/2018
Date Made Active in Reports: 06/25/2018
Number of Days to Update: 61

Source: Divison of Environmental Health
Telephone: 209-533-5633
Last EDR Contact: 04/22/2019
Next Scheduled EDR Contact: 08/05/2019
Data Release Frequency: Varies

VENTURA COUNTY:

BWT VENTURA: Business Plan, Hazardous Waste Producers, and Operating Underground Tanks
The BWT list indicates by site address whether the Environmental Health Division has Business Plan (B), Waste Producer (W), and/or Underground Tank (T) information.

Date of Government Version: 12/26/2018
Date Data Arrived at EDR: 01/24/2019
Date Made Active in Reports: 02/28/2019
Number of Days to Update: 35

Source: Ventura County Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 04/23/2019
Next Scheduled EDR Contact: 08/05/2019
Data Release Frequency: Quarterly

LF VENTURA: Inventory of Illegal Abandoned and Inactive Sites
Ventura County Inventory of Closed, Illegal Abandoned, and Inactive Sites.

Date of Government Version: 12/01/2011
Date Data Arrived at EDR: 12/01/2011
Date Made Active in Reports: 01/19/2012
Number of Days to Update: 49

Source: Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 03/29/2019
Next Scheduled EDR Contact: 07/15/2019
Data Release Frequency: Annually

LUST VENTURA: Listing of Underground Tank Cleanup Sites
Ventura County Underground Storage Tank Cleanup Sites (LUST).

Date of Government Version: 05/29/2008
Date Data Arrived at EDR: 06/24/2008
Date Made Active in Reports: 07/31/2008
Number of Days to Update: 37

Source: Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 02/07/2019
Next Scheduled EDR Contact: 05/27/2019
Data Release Frequency: Quarterly

MED WASTE VENTURA: Medical Waste Program List
To protect public health and safety and the environment from potential exposure to disease causing agents, the Environmental Health Division Medical Waste Program regulates the generation, handling, storage, treatment and disposal of medical waste throughout the County.

Date of Government Version: 12/26/2018
Date Data Arrived at EDR: 01/24/2019
Date Made Active in Reports: 03/07/2019
Number of Days to Update: 42

Source: Ventura County Resource Management Agency
Telephone: 805-654-2813
Last EDR Contact: 04/23/2019
Next Scheduled EDR Contact: 08/05/2019
Data Release Frequency: Quarterly

UST VENTURA: Underground Tank Closed Sites List
Ventura County Operating Underground Storage Tank Sites (UST)/Underground Tank Closed Sites List.

Date of Government Version: 02/26/2019
Date Data Arrived at EDR: 03/13/2019
Date Made Active in Reports: 04/03/2019
Number of Days to Update: 21

Source: Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 03/13/2019
Next Scheduled EDR Contact: 06/24/2019
Data Release Frequency: Quarterly

YOLO COUNTY:

UST YOLO: Underground Storage Tank Comprehensive Facility Report
Underground storage tank sites located in Yolo county.

Date of Government Version: 12/26/2018
Date Data Arrived at EDR: 01/03/2019
Date Made Active in Reports: 01/16/2019
Number of Days to Update: 13

Source: Yolo County Department of Health
Telephone: 530-666-8646
Last EDR Contact: 03/29/2019
Next Scheduled EDR Contact: 07/15/2019
Data Release Frequency: Annually

YUBA COUNTY:

CUPA YUBA: CUPA Facility List
CUPA facility listing for Yuba County.

Date of Government Version: 02/08/2019
Date Data Arrived at EDR: 02/12/2019
Date Made Active in Reports: 03/06/2019
Number of Days to Update: 22

Source: Yuba County Environmental Health Department
Telephone: 530-749-7523
Last EDR Contact: 01/28/2019
Next Scheduled EDR Contact: 05/11/2019
Data Release Frequency: Varies

OTHER DATABASE(S)

Depending on the geographic area covered by this report, the data provided in these specialty databases may or may not be complete. For example, the existence of wetlands information data in a specific report does not mean that all wetlands in the area covered by the report are included. Moreover, the absence of any reported wetlands information does not necessarily mean that wetlands do not exist in the area covered by the report.

CT MANIFEST: Hazardous Waste Manifest Data
Facility and manifest data. Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a tsd facility.

Date of Government Version: 02/11/2019
Date Data Arrived at EDR: 02/12/2019
Date Made Active in Reports: 03/04/2019
Number of Days to Update: 20

Source: Department of Energy & Environmental Protection
Telephone: 860-424-3375
Last EDR Contact: 02/12/2019
Next Scheduled EDR Contact: 05/27/2019
Data Release Frequency: No Update Planned

NJ MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 12/31/2017
Date Data Arrived at EDR: 07/13/2018
Date Made Active in Reports: 08/01/2018
Number of Days to Update: 19

Source: Department of Environmental Protection
Telephone: N/A
Last EDR Contact: 04/10/2019
Next Scheduled EDR Contact: 07/22/2019
Data Release Frequency: Annually

NY MANIFEST: Facility and Manifest Data
Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a TSD facility.

Date of Government Version: 01/01/2019
Date Data Arrived at EDR: 01/30/2019
Date Made Active in Reports: 02/14/2019
Number of Days to Update: 15

Source: Department of Environmental Conservation
Telephone: 518-402-8651
Last EDR Contact: 01/30/2019
Next Scheduled EDR Contact: 05/11/2019
Data Release Frequency: Quarterly

PA MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 12/31/2017
Date Data Arrived at EDR: 10/23/2018
Date Made Active in Reports: 11/27/2018
Number of Days to Update: 35

Source: Department of Environmental Protection
Telephone: 717-783-8990
Last EDR Contact: 04/15/2019
Next Scheduled EDR Contact: 07/29/2019
Data Release Frequency: Annually

RI MANIFEST: Manifest information
Hazardous waste manifest information

Date of Government Version: 12/31/2017
Date Data Arrived at EDR: 02/23/2018
Date Made Active in Reports: 04/09/2018
Number of Days to Update: 45

Source: Department of Environmental Management
Telephone: 401-222-2797
Last EDR Contact: 02/19/2019
Next Scheduled EDR Contact: 06/03/2019
Data Release Frequency: Annually

WI MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 12/31/2017
Date Data Arrived at EDR: 06/15/2018
Date Made Active in Reports: 07/09/2018
Number of Days to Update: 24

Source: Department of Natural Resources
Telephone: N/A
Last EDR Contact: 03/11/2019
Next Scheduled EDR Contact: 06/24/2019
Data Release Frequency: Annually

Oil/Gas Pipelines
Source: PennWell Corporation
Petroleum Bundle (Crude Oil, Refined Products, Petrochemicals, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)) N = Natural Gas Bundle (Natural Gas, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)). This map includes information copyrighted by PennWell Corporation. This information is provided on a best effort basis and PennWell Corporation does not guarantee its accuracy nor warrant its fitness for any particular purpose. Such information has been reprinted with the permission of PennWell.

Electric Power Transmission Line Data
Source: PennWell Corporation
This map includes information copyrighted by PennWell Corporation. This information is provided on a best effort basis and PennWell Corporation does not guarantee its accuracy nor warrant its fitness for any particular purpose. Such information has been reprinted with the permission of PennWell.

Sensitive Receptors: There are individuals deemed sensitive receptors due to their fragile immune systems and special sensitivity to environmental discharges. These sensitive receptors typically include the elderly, the sick, and children. While the location of all sensitive receptors cannot be determined, EDR indicates those buildings and facilities - schools, daycares, hospitals, medical centers, and nursing homes - where individuals who are sensitive receptors are likely to be located.

AHA Hospitals:
Source: American Hospital Association, Inc.
Telephone: 312-280-5991
The database includes a listing of hospitals based on the American Hospital Association's annual survey of hospitals.

Medical Centers: Provider of Services Listing
Source: Centers for Medicare & Medicaid Services
Telephone: 410-786-3000
A listing of hospitals with Medicare provider number, produced by Centers of Medicare & Medicaid Services, a federal agency within the U.S. Department of Health and Human Services.

Nursing Homes
Source: National Institutes of Health
Telephone: 301-594-6248
Information on Medicare and Medicaid certified nursing homes in the United States.

Public Schools
Source: National Center for Education Statistics
Telephone: 202-502-7300
The National Center for Education Statistics' primary database on elementary and secondary public education in the United States. It is a comprehensive, annual, national statistical database of all public elementary and secondary schools and school districts, which contains data that are comparable across all states.

Private Schools
Source: National Center for Education Statistics
Telephone: 202-502-7300
The National Center for Education Statistics' primary database on private school locations in the United States.

Daycare Centers: Licensed Facilities
Source: Department of Social Services
Telephone: 916-657-4041

Flood Zone Data: This data was obtained from the Federal Emergency Management Agency (FEMA). It depicts 100-year and 500-year flood zones as defined by FEMA. It includes the National Flood Hazard Layer (NFHL) which incorporates Flood Insurance Rate Map (FIRM) data and Q3 data from FEMA in areas not covered by NFHL.
Source: FEMA
Telephone: 877-336-2627
Date of Government Version: 2003, 2015

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

State Wetlands Data: Wetland Inventory
Source: Department of Fish and Wildlife
Telephone: 916-445-0411

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Current USGS 7.5 Minute Topographic Map
Source: U.S. Geological Survey

STREET AND ADDRESS INFORMATION

GEOCHECK ®- PHYSICAL SETTING SOURCE ADDENDUM

TARGET PROPERTY ADDRESS

LONE TREE WAY
LONE TREE WAY
BRENTWOOD, CA 94513

TARGET PROPERTY COORDINATES

Latitude (North):	37.961034 - 37˚ 57’ 39.72’’
Longitude (West):	121.719892 - 121˚ 43’ 11.61’’
Universal Tranverse Mercator:	Zone 10
UTM X (Meters):	612454.6
UTM Y (Meters):	4202059.0
Elevation:	91 ft. above sea level

USGS TOPOGRAPHIC MAP

Target Property Map:	5640376 BRENTWOOD, CA
Version Date:	2012

EDR’s GeoCheck Physical Setting Source Addendum is provided to assist the environmental professional in forming an opinion about the impact of potential contaminant migration.

Assessment of the impact of contaminant migration generally has two principle investigative components:

1. Groundwater flow direction, and
2. Groundwater flow velocity.

Groundwater flow direction may be impacted by surface topography, hydrology, hydrogeology, characteristics of the soil, and nearby wells. Groundwater flow velocity is generally impacted by the nature of the geologic strata.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW DIRECTION INFORMATION

Groundwater flow direction for a particular site is best determined by a qualified environmental professional using site-specific well data. If such data is not reasonably ascertainable, it may be necessary to rely on other sources of information, such as surface topographic information, hydrologic information, hydrogeologic data collected on nearby properties, and regional groundwater flow information (from deep aquifers).

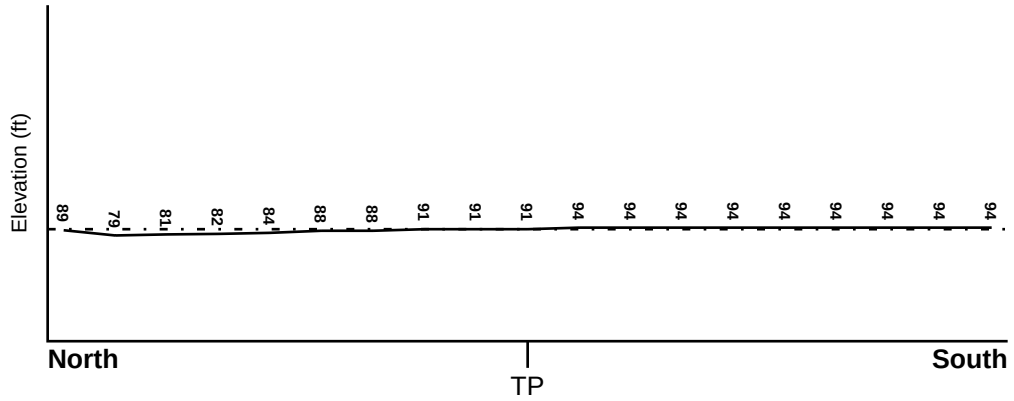
TOPOGRAPHIC INFORMATION

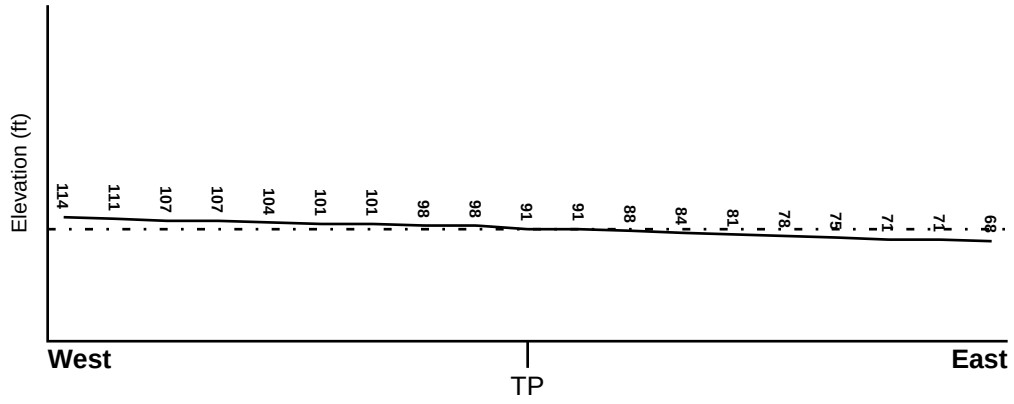
Surface topography may be indicative of the direction of surficial groundwater flow. This information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

TARGET PROPERTY TOPOGRAPHY

General Topographic Gradient: General ENE

SURROUNDING TOPOGRAPHY: ELEVATION PROFILES





Target Property Elevation: 91 ft.

0 1/2 1 Miles

Source: Topography has been determined from the USGS 7.5' Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

HYDROLOGIC INFORMATION

Surface water can act as a hydrologic barrier to groundwater flow. Such hydrologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Refer to the Physical Setting Source Map following this summary for hydrologic information (major waterways and bodies of water).

FEMA FLOOD ZONE

Flood Plain Panel at Target Property	FEMA Source Type
06013C0353F	FEMA FIRM Flood data

Additional Panels in search area:	FEMA Source Type
06013C0355F	FEMA FIRM Flood data
06013C0354F	FEMA FIRM Flood data

NATIONAL WETLAND INVENTORY

NWI Quad at Target Property	NWI Electronic Data Coverage
BRENTWOOD	YES - refer to the Overview Map and Detail Map

HYDROGEOLOGIC INFORMATION

Hydrogeologic information obtained by installation of wells on a specific site can often be an indicator of groundwater flow direction in the immediate area. Such hydrogeologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Site-Specific Hydrogeological Data*:

Search Radius:	1.25 miles
Status:	Not found

AQUIFLOW®

Search Radius: 1.000 Mile.

EDR has developed the AQUIFLOW Information System to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted by environmental professionals to regulatory authorities at select sites and has extracted the date of the report, groundwater flow direction as determined hydrogeologically, and the depth to water table.

MAP ID	LOCATION FROM TP	GENERAL DIRECTION GROUNDWATER FLOW
Not Reported		

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW VELOCITY INFORMATION

Groundwater flow velocity information for a particular site is best determined by a qualified environmental professional using site specific geologic and soil strata data. If such data are not reasonably ascertainable, it may be necessary to rely on other sources of information, including geologic age identification, rock stratigraphic unit and soil characteristics data collected on nearby properties and regional soil information. In general, contaminant plumes move more quickly through sandy-gravelly types of soils than silty-clayey types of soils.

GEOLOGIC INFORMATION IN GENERAL AREA OF TARGET PROPERTY

Geologic information can be used by the environmental professional in forming an opinion about the relative speed at which contaminant migration may be occurring.

ROCK STRATIGRAPHIC UNIT

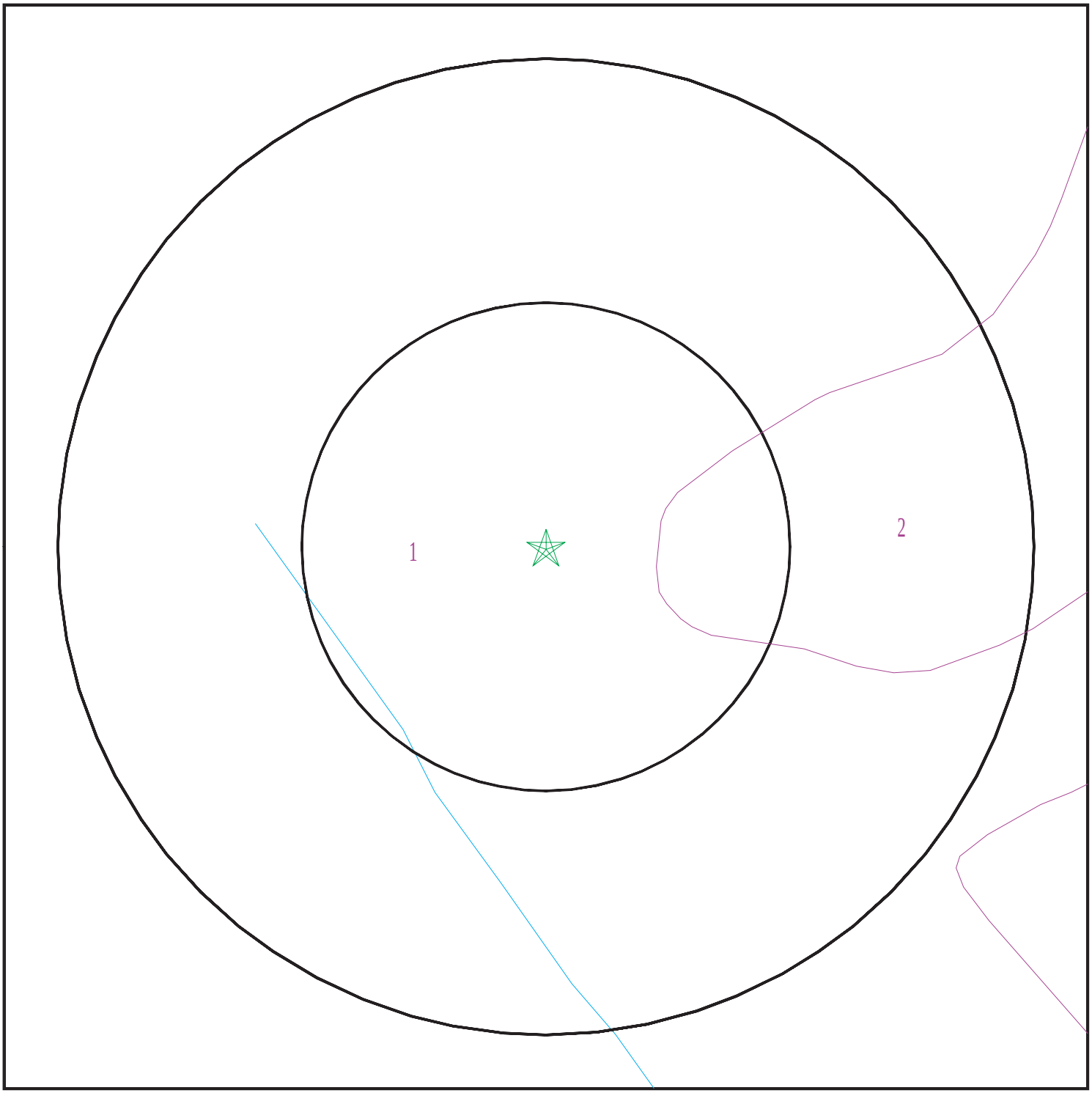
Era:	Cenozoic
System:	Quaternary
Series:	Quaternary
Code:	Q *(decoded above as Era, System & Series)*

GEOLOGIC AGE IDENTIFICATION

Category: Stratifed Sequence

Geologic Age and Rock Stratigraphic Unit Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - a digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

SSURGO SOIL MAP - 5631677.2s



Target Property
SSURGO Soil
Water

0 1/16 1/8 1/4 Miles

N

SITE NAME: Lone Tree Way ADDRESS: LONE TREE WAY BRENTWOOD CA 94513 LAT/LONG: 37.961034 / 121.719892	CLIENT: TRC CONTACT: Glenn Young INQUIRY #: 5631677.2s DATE: April 24, 2019 6:49 pm

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

DOMINANT SOIL COMPOSITION IN GENERAL AREA OF TARGET PROPERTY

The U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) leads the National Cooperative Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. The following information is based on Soil Conservation Service SSURGO data.

Soil Map ID: 1

Soil Component Name: CAPAY

Soil Surface Texture: clay

Hydrologic Group: Class D - Very slow infiltration rates. Soils are clayey, have a high water table, or are shallow to an impervious layer.

Soil Drainage Class: Moderately well drained

Hydric Status: Partially hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	35 inches	clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay	Max: 1.4 Min: 0.42	Max: 8.4 Min: 6.6
2	35 inches	51 inches	clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay	Max: 1.4 Min: 0.42	Max: 8.4 Min: 6.6
3	51 inches	72 inches	silty clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay	Max: 1.4 Min: 0.42	Max: 8.4 Min: 6.6

Soil Map ID: 2

Soil Component Name: RINCON

Soil Surface Texture: clay loam

Hydrologic Group: Class C - Slow infiltration rates. Soils with layers impeding downward movement of water, or soils with moderately fine or fine textures.

Soil Drainage Class: Well drained

Hydric Status: Partially hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	11 inches	clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Clayey sand.	Max: 4 Min: 1.4	Max: 8.4 Min: 7.9
2	11 inches	29 inches	clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Clayey sand.	Max: 4 Min: 1.4	Max: 8.4 Min: 7.9
3	29 inches	59 inches	silty clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Clayey sand.	Max: 4 Min: 1.4	Max: 8.4 Min: 7.9

LOCAL / REGIONAL WATER AGENCY RECORDS

EDR Local/Regional Water Agency records provide water well information to assist the environmental professional in assessing sources that may impact ground water flow direction, and in forming an opinion about the impact of contaminant migration on nearby drinking water wells.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

WELL SEARCH DISTANCE INFORMATION

DATABASE	SEARCH DISTANCE (miles)
Federal USGS	1.000
Federal FRDS PWS	Nearest PWS within 0.001 miles
State Database	1.000

FEDERAL USGS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
1	USGS40000186286	0 - 1/8 Mile SE
5	USGS40000186318	1/2 - 1 Mile NNE
6	USGS40000186305	1/2 - 1 Mile ENE
8	USGS40000186264	1/2 - 1 Mile WSW
9	USGS40000186238	1/2 - 1 Mile SW
10	USGS40000186230	1/2 - 1 Mile SSW

FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
No PWS System Found		

Note: PWS System location is not always the same as well location.

STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
2	61	1/4 - 1/2 Mile East
3	60	1/4 - 1/2 Mile ENE
4	65	1/2 - 1 Mile West
7	80	1/2 - 1 Mile ESE

OTHER STATE DATABASE INFORMATION

STATE OIL/GAS WELL INFORMATION

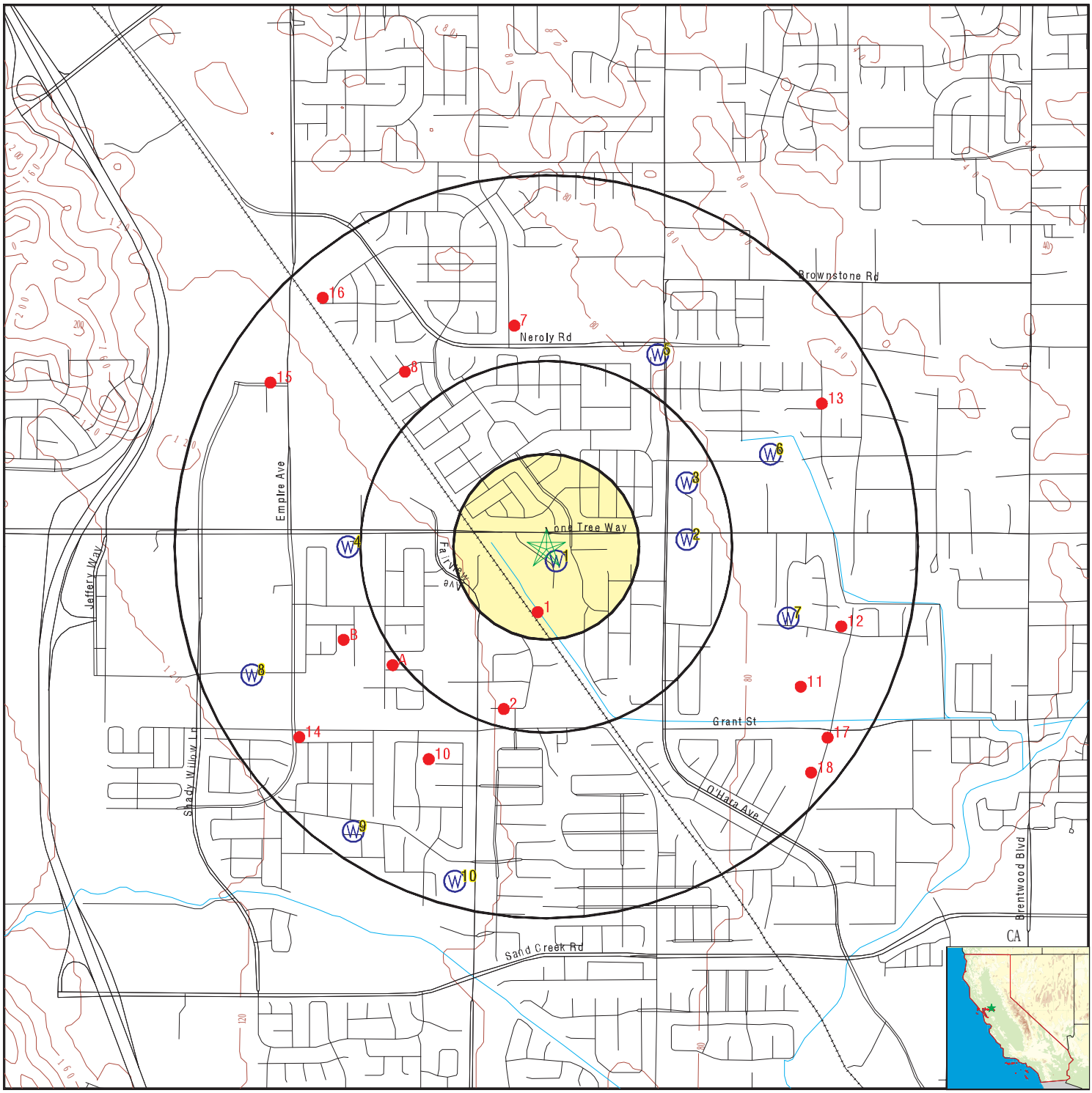
MAP ID	WELL ID	LOCATION FROM TP
1	CAOG11000232766	1/8 - 1/4 Mile South
2	CAOG11000232881	1/4 - 1/2 Mile SSW
A4	CAOG11000232871	1/2 - 1 Mile SW
A3	CAOG11000232873	1/2 - 1 Mile SW
A5	CAOG11000232872	1/2 - 1 Mile SW
B6	CAOG11000232882	1/2 - 1 Mile WSW
7	CAOG11000232768	1/2 - 1 Mile North
8	CAOG11000232540	1/2 - 1 Mile NW
B9	CAOG11000232034	1/2 - 1 Mile WSW
10	CAOG11000232543	1/2 - 1 Mile SSW
11	CAOG11000232539	1/2 - 1 Mile ESE

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

STATE OIL/GAS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
12	CAOG11000232829	1/2 - 1 Mile ESE
13	CAOG11000232538	1/2 - 1 Mile ENE
14	CAOG11000232038	1/2 - 1 Mile SW
15	CAOG11000232376	1/2 - 1 Mile WNW
16	CAOG11000232786	1/2 - 1 Mile NW
17	CAOG11000232596	1/2 - 1 Mile SE
18	CAOG11000232815	1/2 - 1 Mile SE

PHYSICAL SETTING SOURCE MAP - 5631677.2s



0 1/4 1/2 1 Miles

- County Boundary
- Major Roads
- Contour Lines
- Earthquake Fault Lines
- Earthquake epicenter, Richter 5 or greater
- Water Wells
- Public Water Supply Wells
- Cluster of Multiple Icons
- Groundwater Flow Direction
- GI Indeterminate Groundwater Flow at Location
- GV Groundwater Flow Varies at Location
- HD Closest Hydrogeological Data
- Oil, gas or related wells

SITE NAME:	Lone Tree Way	CLIENT:	TRC
ADDRESS:	LONE TREE WAY BRENTWOOD CA 94513	CONTACT:	Glenn Young
		INQUIRY #:	5631677.2s
LAT/LONG:	37.961034 / 121.719892	DATE:	April 24, 2019 6:48 pm

Map ID Direction Distance Elevation	Database	EDR ID Number
1 **SE** **0 - 1/8 Mile** **Higher**	**FED USGS**	**USGS40000186286**

Organization ID:	USGS-CA		
Organization Name:	USGS California Water Science Center		
Monitor Location:	001N002E02K001M	Type:	Well
Description:	Not Reported	HUC:	18040003
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Central Valley aquifer system		
Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	19720519	Well Depth:	92
Well Depth Units:	ft	Well Hole Depth:	190
Well Hole Depth Units:	ft		

Ground water levels,Number of Measurements:	1	Level reading date:	1972-05-19
Feet below surface:	46.00	Feet to sea level:	Not Reported
Note:	Not Reported		

---

2 **East** **1/4 - 1/2 Mile** **Lower**	**CA WELLS**	**61**	

Seq:	61	Prim sta c:	01N/02E-01E03 M
Frds no:	0706023001	County:	07
District:	37	User id:	07C
System no:	0706023	Water type:	G
Source nam:	WELL 01	Station ty:	WELL/AMBNT/MUN/INTAKE
Latitude:	375741.0	Longitude:	1214243.0
Precision:	3	Status:	AR
Comment 1:	Not Reported	Comment 2:	Not Reported
Comment 3:	Not Reported	Comment 4:	Not Reported
Comment 5:	Not Reported	Comment 6:	Not Reported
Comment 7:	Not Reported		

System no:	0706023	System nam:	MULLER UNITS
Hqname:	Not Reported	Address:	Not Reported
City:	Not Reported	State:	Not Reported
Zip:	Not Reported	Zip ext:	Not Reported
Pop serv:	0	Connection:	0
Area serve:	Not Reported		

---

3 **ENE** **1/4 - 1/2 Mile** **Lower**	**CA WELLS**	**60**	

Seq:	60	Prim sta c:	01N/02E-01E02 M
Frds no:	0707538001	County:	07
District:	37	User id:	07C
System no:	0707538	Water type:	G
Source nam:	WELL 01	Station ty:	WELL/AMBNT/MUN/INTAKE
Latitude:	375749.0	Longitude:	1214243.0
Precision:	3	Status:	AR

Comment 1:	Not Reported	Comment 2:	Not Reported
Comment 3:	Not Reported	Comment 4:	Not Reported
Comment 5:	Not Reported	Comment 6:	Not Reported
Comment 7:	Not Reported		
System no:	0707538	System nam:	KUTCH-RAGGEDY A & A PRESCHOOL
Hqname:	Not Reported	Address:	Not Reported
City:	Not Reported	State:	Not Reported
Zip:	Not Reported	Zip ext:	Not Reported
Pop serv:	0	Connection:	0
Area serve:	Not Reported		

4
West
1/2 - 1 Mile
Higher

CA WELLS 65

Seq:	65	Prim sta c:	01N/02E-02M01 M
Frds no:	0706013001	County:	07
District:	37	User id:	07C
System no:	0706013	Water type:	G
Source nam:	WELL 01	Station ty:	WELL/AMBNT/MUN/INTAKE
Latitude:	375740.0	Longitude:	1214343.0
Precision:	3	Status:	AR
Comment 1:	Not Reported	Comment 2:	Not Reported
Comment 3:	Not Reported	Comment 4:	Not Reported
Comment 5:	Not Reported	Comment 6:	Not Reported
Comment 7:	Not Reported		
System no:	0706013	System nam:	LA PALOMA HIGH SCHOOL
Hqname:	Not Reported	Address:	Not Reported
City:	Not Reported	State:	Not Reported
Zip:	Not Reported	Zip ext:	Not Reported
Pop serv:	0	Connection:	0
Area serve:	Not Reported		

5
NNE
1/2 - 1 Mile
Lower

FED USGS USGS40000186318

Organization ID:	USGS-CA		
Organization Name:	USGS California Water Science Center		
Monitor Location:	001N002E02A001M	Type:	Well
Description:	Not Reported	HUC:	18040003
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Central Valley aquifer system		
Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	19750618	Well Depth:	125
Well Depth Units:	ft	Well Hole Depth:	165
Well Hole Depth Units:	ft		

Ground water levels,Number of Measurements:	1	Level reading date:	1975-06-18
Feet below surface:	62.00	Feet to sea level:	Not Reported
Note:	Not Reported		

Map ID Direction Distance Elevation	Database	EDR ID Number
6 **ENE** **1/2 - 1 Mile** **Lower**	**FED USGS**	**USGS40000186305**

Organization ID:	USGS-CA		
Organization Name:	USGS California Water Science Center		
Monitor Location:	001N002E01F001M	Type:	Well
Description:	Not Reported	HUC:	18040003
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Central Valley aquifer system		
Formation Type:	Alluvium of the Coast Range, Younger (Pleistocene-Holocene)		
Aquifer Type:	Not Reported	Construction Date:	19780418
Well Depth:	133	Well Depth Units:	ft
Well Hole Depth:	133	Well Hole Depth Units:	ft

---

7 **ESE** **1/2 - 1 Mile** **Lower**	**CA WELLS**	**80**	

Seq:	80	Prim sta c:	01N/03E-06N03 M
Frds no:	0710004008	County:	07
District:	04	User id:	ENG
System no:	0710004	Water type:	G
Source nam:	WELL 08	Station ty:	WELL/AMBNT/MUN/INTAKE
Latitude:	375730.0	Longitude:	1214225.0
Precision:	4	Status:	AR
Comment 1:	Not Reported	Comment 2:	Not Reported
Comment 3:	Not Reported	Comment 4:	Not Reported
Comment 5:	Not Reported	Comment 6:	Not Reported
Comment 7:	Not Reported		

System no:	0710004	System nam:	CITY OF BRENTWOOD
Hqname:	Not Reported	Address:	708 THIRD STREET
City:	BRENTWOOD	State:	Not Reported
Zip:	94513	Zip ext:	Not Reported
Pop serv:	8255	Connection:	2167
Area serve:	BRENTWOOD		

Sample date:	07-SEP-17	Finding:	1700.
Chemical:	SPECIFIC CONDUCTANCE	Report units:	US
Dlr:	0.		
Sample date:	07-SEP-17	Finding:	1.9
Chemical:	GROSS BETA MDA95	Report units:	PCI/L
Dlr:	0.		
Sample date:	07-SEP-17	Finding:	200.
Chemical:	ALKALINITY (TOTAL) AS CACO3	Report units:	MG/L
Dlr:	0.		
Sample date:	07-SEP-17	Finding:	250.
Chemical:	BICARBONATE ALKALINITY	Report units:	MG/L
Dlr:	0.		
Sample date:	07-SEP-17	Finding:	2.

Chemical:	CARBONATE ALKALINITY	Report units:	MG/L
Dlr:	0.		
Sample date:	07-SEP-17	Finding:	0.79
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	07-SEP-17	Finding:	390.
Chemical:	HARDNESS (TOTAL) AS CACO3	Report units:	MG/L
Dlr:	0.		
Sample date:	07-SEP-17	Finding:	89.
Chemical:	CALCIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	07-SEP-17	Finding:	41.
Chemical:	MAGNESIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	07-SEP-17	Finding:	200.
Chemical:	SODIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	07-SEP-17	Finding:	3.3
Chemical:	POTASSIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	07-SEP-17	Finding:	300.
Chemical:	CHLORIDE	Report units:	MG/L
Dlr:	0.		
Sample date:	07-SEP-17	Finding:	200.
Chemical:	SULFATE	Report units:	MG/L
Dlr:	0.5		
Sample date:	07-SEP-17	Finding:	0.27
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)	Report units:	MG/L
Dlr:	0.1		
Sample date:	07-SEP-17	Finding:	1600.
Chemical:	BORON	Report units:	UG/L
Dlr:	100.		
Sample date:	07-SEP-17	Finding:	6.4
Chemical:	VANADIUM	Report units:	UG/L
Dlr:	3.		
Sample date:	07-SEP-17	Finding:	7.1
Chemical:	SELENIUM	Report units:	UG/L
Dlr:	5.		
Sample date:	07-SEP-17	Finding:	0.35
Chemical:	GROSS ALPHA COUNTING ERROR	Report units:	PCI/L
Dlr:	0.		
Sample date:	07-SEP-17	Finding:	0.61
Chemical:	GROSS BETA COUNTING ERROR	Report units:	PCI/L
Dlr:	0.		
Sample date:	07-SEP-17	Finding:	1000.
Chemical:	TOTAL DISSOLVED SOLIDS	Report units:	MG/L
Dlr:	0.		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample date:	07-SEP-17	Finding:	1.4
Chemical:	LANGELIER INDEX @ 60 C	Report units:	Not Reported
Dlr:	0.		
Sample date:	07-SEP-17	Finding:	13.
Chemical:	AGGRSSIVE INDEX (CORROSIVITY)	Report units:	Not Reported
Dlr:	0.		
Sample date:	07-SEP-17	Finding:	0.79
Chemical:	NITRATE + NITRITE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	07-SEP-17	Finding:	0.15
Chemical:	GROSS ALPHA MDA95	Report units:	PCI/L
Dlr:	0.		
Sample date:	07-SEP-17	Finding:	8.1
Chemical:	PH, LABORATORY	Report units:	Not Reported
Dlr:	0.		
Sample date:	31-MAY-16	Finding:	1700.
Chemical:	SPECIFIC CONDUCTANCE	Report units:	US
Dlr:	0.		
Sample date:	31-MAY-16	Finding:	1.3
Chemical:	GROSS BETA MDA95	Report units:	PCI/L
Dlr:	0.		
Sample date:	31-MAY-16	Finding:	190.
Chemical:	ALKALINITY (TOTAL) AS CACO3	Report units:	MG/L
Dlr:	0.		
Sample date:	31-MAY-16	Finding:	230.
Chemical:	BICARBONATE ALKALINITY	Report units:	MG/L
Dlr:	0.		
Sample date:	31-MAY-16	Finding:	0.84
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	31-MAY-16	Finding:	430.
Chemical:	HARDNESS (TOTAL) AS CACO3	Report units:	MG/L
Dlr:	0.		
Sample date:	31-MAY-16	Finding:	97.
Chemical:	CALCIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	31-MAY-16	Finding:	45.
Chemical:	MAGNESIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	31-MAY-16	Finding:	220.
Chemical:	SODIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	31-MAY-16	Finding:	3.7
Chemical:	POTASSIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	31-MAY-16	Finding:	340.
Chemical:	CHLORIDE	Report units:	MG/L

Dlr:	0.		
Sample date:	31-MAY-16	Finding:	220.
Chemical:	SULFATE	Report units:	MG/L
Dlr:	0.5		
Sample date:	31-MAY-16	Finding:	0.24
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)	Report units:	MG/L
Dlr:	0.1		
Sample date:	31-MAY-16	Finding:	1700.
Chemical:	BORON	Report units:	UG/L
Dlr:	100.		
Sample date:	31-MAY-16	Finding:	6.
Chemical:	VANADIUM	Report units:	UG/L
Dlr:	3.		
Sample date:	31-MAY-16	Finding:	4.4
Chemical:	GROSS ALPHA	Report units:	PCI/L
Dlr:	3.		
Sample date:	31-MAY-16	Finding:	0.25
Chemical:	GROSS ALPHA COUNTING ERROR	Report units:	PCI/L
Dlr:	0.		
Sample date:	31-MAY-16	Finding:	1.4
Chemical:	GROSS BETA COUNTING ERROR	Report units:	PCI/L
Dlr:	0.		
Sample date:	31-MAY-16	Finding:	1000.
Chemical:	TOTAL DISSOLVED SOLIDS	Report units:	MG/L
Dlr:	0.		
Sample date:	31-MAY-16	Finding:	1.2
Chemical:	LANGELIER INDEX @ 60 C	Report units:	Not Reported
Dlr:	0.		
Sample date:	31-MAY-16	Finding:	0.11
Chemical:	TURBIDITY, LABORATORY	Report units:	NTU
Dlr:	0.1		
Sample date:	31-MAY-16	Finding:	13.
Chemical:	AGGRSSIVE INDEX (CORROSIVITY)	Report units:	Not Reported
Dlr:	0.		
Sample date:	31-MAY-16	Finding:	0.84
Chemical:	NITRATE + NITRITE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	31-MAY-16	Finding:	1.6
Chemical:	GROSS ALPHA MDA95	Report units:	PCI/L
Dlr:	0.		
Sample date:	31-MAY-16	Finding:	7.9
Chemical:	PH, LABORATORY	Report units:	Not Reported
Dlr:	0.		
Sample date:	14-APR-15	Finding:	1700.
Chemical:	SPECIFIC CONDUCTANCE	Report units:	US
Dlr:	0.		

Sample date:	14-APR-15	Finding:	1.9
Chemical:	GROSS BETA MDA95	Report units:	PCI/L
Dlr:	0.		
Sample date:	14-APR-15	Finding:	200.
Chemical:	ALKALINITY (TOTAL) AS CACO3	Report units:	MG/L
Dlr:	0.		
Sample date:	14-APR-15	Finding:	250.
Chemical:	BICARBONATE ALKALINITY	Report units:	MG/L
Dlr:	0.		
Sample date:	14-APR-15	Finding:	420.
Chemical:	HARDNESS (TOTAL) AS CACO3	Report units:	MG/L
Dlr:	0.		
Sample date:	14-APR-15	Finding:	94.
Chemical:	CALCIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	14-APR-15	Finding:	44.
Chemical:	MAGNESIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	14-APR-15	Finding:	190.
Chemical:	SODIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	14-APR-15	Finding:	3.5
Chemical:	POTASSIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	14-APR-15	Finding:	300.
Chemical:	CHLORIDE	Report units:	MG/L
Dlr:	0.		
Sample date:	14-APR-15	Finding:	210.
Chemical:	SULFATE	Report units:	MG/L
Dlr:	0.5		
Sample date:	14-APR-15	Finding:	0.25
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)	Report units:	MG/L
Dlr:	0.1		
Sample date:	14-APR-15	Finding:	1500.
Chemical:	BORON	Report units:	UG/L
Dlr:	100.		
Sample date:	14-APR-15	Finding:	6.6
Chemical:	VANADIUM	Report units:	UG/L
Dlr:	3.		
Sample date:	14-APR-15	Finding:	0.33
Chemical:	GROSS ALPHA COUNTING ERROR	Report units:	PCI/L
Dlr:	0.		
Sample date:	14-APR-15	Finding:	2.
Chemical:	GROSS BETA COUNTING ERROR	Report units:	PCI/L
Dlr:	0.		
Sample date:	14-APR-15	Finding:	1000.
Chemical:	TOTAL DISSOLVED SOLIDS	Report units:	MG/L

Dlr:	0.		
Sample date:	14-APR-15	Finding:	1.4
Chemical:	LANGELIER INDEX @ 60 C	Report units:	Not Reported
Dlr:	0.		
Sample date:	14-APR-15	Finding:	3.5
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	14-APR-15	Finding:	8.5e-002
Chemical:	TURBIDITY, LABORATORY	Report units:	NTU
Dlr:	0.1		
Sample date:	14-APR-15	Finding:	13.
Chemical:	AGGRSSIVE INDEX (CORROSIVITY)	Report units:	Not Reported
Dlr:	0.		
Sample date:	14-APR-15	Finding:	780.
Chemical:	NITRATE + NITRITE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	14-APR-15	Finding:	1.3
Chemical:	GROSS ALPHA MDA95	Report units:	PCI/L
Dlr:	0.		
Sample date:	14-APR-15	Finding:	8.
Chemical:	PH, LABORATORY	Report units:	Not Reported
Dlr:	0.		
Sample date:	17-JUN-14	Finding:	0.9
Chemical:	GROSS ALPHA COUNTING ERROR	Report units:	PCI/L
Dlr:	0.		
Sample date:	17-JUN-14	Finding:	0.5
Chemical:	GROSS BETA COUNTING ERROR	Report units:	PCI/L
Dlr:	0.		
Sample date:	17-JUN-14	Finding:	2.4
Chemical:	GROSS ALPHA MDA95	Report units:	PCI/L
Dlr:	0.		
Sample date:	17-JUN-14	Finding:	1.7
Chemical:	GROSS BETA MDA95	Report units:	PCI/L
Dlr:	0.		
Sample date:	17-JUN-14	Finding:	1600.
Chemical:	SPECIFIC CONDUCTANCE	Report units:	US
Dlr:	0.		
Sample date:	17-JUN-14	Finding:	7.8
Chemical:	PH, LABORATORY	Report units:	Not Reported
Dlr:	0.		
Sample date:	17-JUN-14	Finding:	180.
Chemical:	ALKALINITY (TOTAL) AS CACO3	Report units:	MG/L
Dlr:	0.		
Sample date:	17-JUN-14	Finding:	220.
Chemical:	BICARBONATE ALKALINITY	Report units:	MG/L
Dlr:	0.		

Sample date:	17-JUN-14	Finding:	370.
Chemical:	HARDNESS (TOTAL) AS CACO3	Report units:	MG/L
Dlr:	0.		
Sample date:	17-JUN-14	Finding:	84.
Chemical:	CALCIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	17-JUN-14	Finding:	39.
Chemical:	MAGNESIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	17-JUN-14	Finding:	180.
Chemical:	SODIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	17-JUN-14	Finding:	3.8
Chemical:	POTASSIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	17-JUN-14	Finding:	280.
Chemical:	CHLORIDE	Report units:	MG/L
Dlr:	0.		
Sample date:	17-JUN-14	Finding:	200.
Chemical:	SULFATE	Report units:	MG/L
Dlr:	0.5		
Sample date:	17-JUN-14	Finding:	0.25
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)	Report units:	MG/L
Dlr:	0.1		
Sample date:	17-JUN-14	Finding:	1400.
Chemical:	BORON	Report units:	UG/L
Dlr:	100.		
Sample date:	17-JUN-14	Finding:	5.8
Chemical:	VANADIUM	Report units:	UG/L
Dlr:	3.		
Sample date:	17-JUN-14	Finding:	8.8
Chemical:	SELENIUM	Report units:	UG/L
Dlr:	5.		
Sample date:	17-JUN-14	Finding:	1000.
Chemical:	TOTAL DISSOLVED SOLIDS	Report units:	MG/L
Dlr:	0.		
Sample date:	17-JUN-14	Finding:	1.
Chemical:	LANGELIER INDEX @ 60 C	Report units:	Not Reported
Dlr:	0.		
Sample date:	17-JUN-14	Finding:	3.5
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	17-JUN-14	Finding:	5700.
Chemical:	CARBON DIOXIDE	Report units:	UG/L
Dlr:	0.		
Sample date:	17-JUN-14	Finding:	8.1e-002
Chemical:	TURBIDITY, LABORATORY	Report units:	NTU

Dlr:	0.1		
Sample date:	17-JUN-14	Finding:	12.
Chemical:	AGGRSSIVE INDEX (CORROSIVITY)	Report units:	Not Reported
Dlr:	0.		
Sample date:	17-JUN-14	Finding:	790.
Chemical:	NITRATE + NITRITE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	29-MAY-13	Finding:	1600.
Chemical:	SPECIFIC CONDUCTANCE	Report units:	US
Dlr:	0.		
Sample date:	29-MAY-13	Finding:	5.4
Chemical:	PH, LABORATORY	Report units:	Not Reported
Dlr:	0.		
Sample date:	29-MAY-13	Finding:	10.
Chemical:	AGGRSSIVE INDEX (CORROSIVITY)	Report units:	Not Reported
Dlr:	0.		
Sample date:	29-MAY-13	Finding:	5.8e-002
Chemical:	TURBIDITY, LABORATORY	Report units:	NTU
Dlr:	0.1		
Sample date:	29-MAY-13	Finding:	4.8
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	29-MAY-13	Finding:	1000.
Chemical:	TOTAL DISSOLVED SOLIDS	Report units:	MG/L
Dlr:	0.		
Sample date:	29-MAY-13	Finding:	0.26
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)	Report units:	MG/L
Dlr:	0.1		
Sample date:	29-MAY-13	Finding:	220.
Chemical:	SULFATE	Report units:	MG/L
Dlr:	0.5		
Sample date:	29-MAY-13	Finding:	280.
Chemical:	CHLORIDE	Report units:	MG/L
Dlr:	0.		
Sample date:	29-MAY-13	Finding:	3.8
Chemical:	POTASSIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	29-MAY-13	Finding:	190.
Chemical:	SODIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	29-MAY-13	Finding:	46.
Chemical:	MAGNESIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	29-MAY-13	Finding:	97.
Chemical:	CALCIUM	Report units:	MG/L
Dlr:	0.		

Sample date:	29-MAY-13	Finding:	430.
Chemical:	HARDNESS (TOTAL) AS CACO3	Report units:	MG/L
Dlr:	0.		
Sample date:	29-MAY-13	Finding:	240.
Chemical:	BICARBONATE ALKALINITY	Report units:	MG/L
Dlr:	0.		
Sample date:	29-MAY-13	Finding:	200.
Chemical:	ALKALINITY (TOTAL) AS CACO3	Report units:	MG/L
Dlr:	0.		
Sample date:	29-MAY-13	Finding:	1100.
Chemical:	NITRATE + NITRITE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	23-JAN-13	Finding:	6.5
Chemical:	VANADIUM	Report units:	UG/L
Dlr:	3.		
Sample date:	23-JAN-13	Finding:	6.8
Chemical:	SELENIUM	Report units:	UG/L
Dlr:	5.		
Sample date:	23-JAN-13	Finding:	960.
Chemical:	TOTAL DISSOLVED SOLIDS	Report units:	MG/L
Dlr:	0.		
Sample date:	23-JAN-13	Finding:	3.2
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	23-JAN-13	Finding:	1500.
Chemical:	BORON	Report units:	UG/L
Dlr:	100.		
Sample date:	23-JAN-13	Finding:	2.6
Chemical:	ARSENIC	Report units:	UG/L
Dlr:	2.		
Sample date:	23-JAN-13	Finding:	0.22
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)	Report units:	MG/L
Dlr:	0.1		
Sample date:	23-JAN-13	Finding:	200.
Chemical:	SULFATE	Report units:	MG/L
Dlr:	0.5		
Sample date:	23-JAN-13	Finding:	260.
Chemical:	CHLORIDE	Report units:	MG/L
Dlr:	0.		
Sample date:	23-JAN-13	Finding:	3.6
Chemical:	POTASSIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	23-JAN-13	Finding:	170.
Chemical:	SODIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	23-JAN-13	Finding:	46.
Chemical:	MAGNESIUM	Report units:	MG/L

Dlr:	0.		
Sample date:	23-JAN-13	Finding:	95.
Chemical:	CALCIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	23-JAN-13	Finding:	430.
Chemical:	HARDNESS (TOTAL) AS CACO3	Report units:	MG/L
Dlr:	0.		
Sample date:	23-JAN-13	Finding:	250.
Chemical:	BICARBONATE ALKALINITY	Report units:	MG/L
Dlr:	0.		
Sample date:	23-JAN-13	Finding:	200.
Chemical:	ALKALINITY (TOTAL) AS CACO3	Report units:	MG/L
Dlr:	0.		
Sample date:	23-JAN-13	Finding:	7.8
Chemical:	PH, LABORATORY	Report units:	Not Reported
Dlr:	0.		
Sample date:	23-JAN-13	Finding:	1600.
Chemical:	SPECIFIC CONDUCTANCE	Report units:	US
Dlr:	0.		
Sample date:	23-JAN-13	Finding:	5.
Chemical:	COLOR	Report units:	UNITS
Dlr:	0.		
Sample date:	23-JAN-13	Finding:	730.
Chemical:	NITRATE + NITRITE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	23-JAN-13	Finding:	7300.
Chemical:	CARBON DIOXIDE	Report units:	UG/L
Dlr:	0.		
Sample date:	23-JAN-13	Finding:	0.11
Chemical:	TURBIDITY, LABORATORY	Report units:	NTU
Dlr:	0.1		
Sample date:	23-JAN-13	Finding:	13.
Chemical:	AGGRSSIVE INDEX (CORROSIVITY)	Report units:	Not Reported
Dlr:	0.		

8
WSW
1/2 - 1 Mile
Higher

FED USGS **USGS40000186264**

Organization ID:	USGS-CA		
Organization Name:	USGS California Water Science Center		
Monitor Location:	001N002E03R001M	Type:	Well
Description:	Not Reported	HUC:	18040003
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Central Valley aquifer system		
Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	19741028	Well Depth:	90
Well Depth Units:	ft	Well Hole Depth:	102

Well Hole Depth Units:	ft

Ground water levels,Number of Measurements:	1	Level reading date:	1974-10-28
Feet below surface:	29.00	Feet to sea level:	Not Reported
Note:	Not Reported		

9
SW
1/2 - 1 Mile
Higher

FED USGS **USGS40000186238**

Organization ID:	USGS-CA		
Organization Name:	USGS California Water Science Center		
Monitor Location:	001N002E11E001M	Type:	Well
Description:	Not Reported	HUC:	18040003
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Central Valley aquifer system		
Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	19740416	Well Depth:	78
Well Depth Units:	ft	Well Hole Depth:	85
Well Hole Depth Units:	ft		

Ground water levels,Number of Measurements:	1	Level reading date:	1974-04-16
Feet below surface:	38.00	Feet to sea level:	Not Reported
Note:	Not Reported		

10
SSW
1/2 - 1 Mile
Higher

FED USGS **USGS40000186230**

Organization ID:	USGS-CA		
Organization Name:	USGS California Water Science Center		
Monitor Location:	001N002E11F001M	Type:	Well
Description:	Not Reported	HUC:	18040003
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Central Valley aquifer system		
Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	19741011	Well Depth:	65
Well Depth Units:	ft	Well Hole Depth:	78
Well Hole Depth Units:	ft		

Ground water levels,Number of Measurements:	1	Level reading date:	1974-10-11
Feet below surface:	28.00	Feet to sea level:	Not Reported
Note:	Not Reported		

Map ID
Direction
Distance

Database EDR ID Number

1
South
1/8 - 1/4 Mile

OIL_GAS **CAOG11000232766**

Districtnu:	6	Apinumber:	01320181
Blmwell:	N	Redrillcan:	Not Reported
Dryhole:	Y	Wellstatus:	P
Operatorna:	Venada National	Countyname:	Contra Costa
Fieldname:	Any Field	Areaname:	Any Area
Section:	2	Township:	01N
Range:	02E	Basemeridi:	MD
Elevation:	102	Locationde:	Not Reported
Gissourcec:	hud	Comments:	Status Code 007
Leasename:	Fairview	Wellnumber:	2-1
Epawell:	N	Hydraulica:	N
Confidenti:	N	Spuddate:	14-AUG-81
Welldeptha:	6750	Redrillfoo:	0
Abandonedd:	06-SEP-81	Completion:	Not Reported
Directiona:	Directionally drilled	Gissymbol:	PDH
Site id:	CAOG11000232766		

2
SSW
1/4 - 1/2 Mile

OIL_GAS **CAOG11000232881**

Districtnu:	6	Apinumber:	01320288
Blmwell:	N	Redrillcan:	Not Reported
Dryhole:	Y	Wellstatus:	P
Operatorna:	TXO Production Corp.	Countyname:	Contra Costa
Fieldname:	Any Field	Areaname:	Any Area
Section:	2	Township:	01N
Range:	02E	Basemeridi:	MD
Elevation:	Not Reported	Locationde:	Not Reported
Gissourcec:	hud	Comments:	Status Code 007
Leasename:	Shaffer	Wellnumber:	2-1
Epawell:	N	Hydraulica:	N
Confidenti:	N	Spuddate:	21-OCT-89
Welldeptha:	5802	Redrillfoo:	0
Abandonedd:	01-NOV-89	Completion:	Not Reported
Directiona:	Directionally drilled	Gissymbol:	PDH
Site id:	CAOG11000232881		

A4
SW
1/2 - 1 Mile

OIL_GAS **CAOG11000232871**

Districtnu:	6	Apinumber:	01320280
Blmwell:	N	Redrillcan:	Not Reported
Dryhole:	N	Wellstatus:	P
Operatorna:	Western Continental Operating Company		
Countyname:	Contra Costa	Fieldname:	River Break Gas
Areaname:	South	Section:	2
Township:	01N	Range:	02E
Basemeridi:	MD	Elevation:	120
Locationde:	Not Reported	Gissourcec:	gps
Comments:	GPS Date 04/15/1997, Status Code 116		

Leasename:	Martin	Wellnumber:	1
Epawell:	N	Hydraulica:	N
Confidenti:	N	Spuddate:	16-JUN-88
Welldeptha:	5595	Redrillfoo:	0
Abandonedd:	27-DEC-97	Completion:	11-JUL-88
Directiona:	Unknown	Gissymbol:	PDG
Site id:	CAOG11000232871		

A3
SW
1/2 - 1 Mile

OIL_GAS **CAOG11000232873**

Districtnu:	6	Apinumber:	01320280
Blmwell:	N	Redrillcan:	Not Reported
Dryhole:	N	Wellstatus:	P
Operatorna:	Western Continental Operating Company		
Countyname:	Contra Costa	Fieldname:	River Break Gas
Areaname:	South	Section:	2
Township:	01N	Range:	02E
Basemeridi:	MD	Elevation:	120
Locationde:	Not Reported	Gissourcec:	gps
Comments:	GPS Date 04/15/1997, Status Code 116		
Leasename:	Martin	Wellnumber:	1
Epawell:	N	Hydraulica:	N
Confidenti:	N	Spuddate:	16-JUN-88
Welldeptha:	5595	Redrillfoo:	0
Abandonedd:	27-DEC-97	Completion:	11-JUL-88
Directiona:	Unknown	Gissymbol:	PDG
Site id:	CAOG11000232873		

A5
SW
1/2 - 1 Mile

OIL_GAS **CAOG11000232872**

Districtnu:	6	Apinumber:	01320280
Blmwell:	N	Redrillcan:	Not Reported
Dryhole:	N	Wellstatus:	P
Operatorna:	Western Continental Operating Company		
Countyname:	Contra Costa	Fieldname:	River Break Gas
Areaname:	South	Section:	2
Township:	01N	Range:	02E
Basemeridi:	MD	Elevation:	120
Locationde:	Not Reported	Gissourcec:	gps
Comments:	GPS Date 04/15/1997, Status Code 116		
Leasename:	Martin	Wellnumber:	1
Epawell:	N	Hydraulica:	N
Confidenti:	N	Spuddate:	16-JUN-88
Welldeptha:	5595	Redrillfoo:	0
Abandonedd:	27-DEC-97	Completion:	11-JUL-88
Directiona:	Unknown	Gissymbol:	PDG
Site id:	CAOG11000232872		

Map ID
Direction
Distance

Database EDR ID Number

B6
WSW
1/2 - 1 Mile

OIL_GAS **CAOG11000232882**

Districtnu:	6	Apinumber:	01320289
Blmwell:	N	Redrillcan:	Not Reported
Dryhole:	N	Wellstatus:	P
Operatorna:	EOG Resources, Inc.	Countyname:	Contra Costa
Fieldname:	River Break Gas	Areaname:	South
Section:	2	Township:	01N
Range:	02E	Basemeridi:	MD
Elevation:	Not Reported	Locationde:	Not Reported
Gissourcec:	gps	Comments:	GPS Date 04/15/1997, Status Code 006
Leasename:	Sunset-Sleeter	Wellnumber:	1-3
Epawell:	N	Hydraulica:	N
Confidenti:	N	Spuddate:	03-JUN-89
Welldeptha:	6752	Redrillfoo:	0
Abandonedd:	22-SEP-94	Completion:	23-JUN-89
Directiona:	Unknown	Gissymbol:	PDG
Site id:	CAOG11000232882		

7
North
1/2 - 1 Mile

OIL_GAS **CAOG11000232768**

Districtnu:	6	Apinumber:	01320183
Blmwell:	N	Redrillcan:	Not Reported
Dryhole:	Y	Wellstatus:	P
Operatorna:	Natural Gas Corp. of Calif.	Countyname:	Contra Costa
Fieldname:	Any Field	Areaname:	Any Area
Section:	35	Township:	02N
Range:	02E	Basemeridi:	MD
Elevation:	99	Locationde:	Not Reported
Gissourcec:	hud	Comments:	Status Code 006
Leasename:	Transamerica	Wellnumber:	58
Epawell:	N	Hydraulica:	N
Confidenti:	N	Spuddate:	31-JUL-81
Welldeptha:	7413	Redrillfoo:	0
Abandonedd:	26-AUG-81	Completion:	Not Reported
Directiona:	Unknown	Gissymbol:	PDH
Site id:	CAOG11000232768		

8
NW
1/2 - 1 Mile

OIL_GAS **CAOG11000232540**

Districtnu:	6	Apinumber:	01300252
Blmwell:	N	Redrillcan:	Not Reported
Dryhole:	Y	Wellstatus:	P
Operatorna:	Shell Western Exploration & Production Inc.		
Countyname:	Contra Costa	Fieldname:	River Break Gas
Areaname:	South	Section:	2
Township:	01N	Range:	02E
Basemeridi:	MD	Elevation:	Not Reported
Locationde:	Not Reported	Gissourcec:	hud
Comments:	Status Code 006	Leasename:	Carpenter

Wellnumber:	1	Epawell:	N
Hydraulica:	N	Confidenti:	N
Spuddate:	21-DEC-63	Welldeptha:	6565
Redrillfoo:	0	Abandonedd:	02-JAN-64
Completion:	Not Reported	Directiona:	Unknown
Gissymbol:	PDH	Site id:	CAOG11000232540

B9
WSW **OIL_GAS** **CAOG11000232034**
1/2 - 1 Mile

Districtnu:	6	Apinumber:	01320313
Blmwell:	N	Redrillcan:	Not Reported
Dryhole:	N	Wellstatus:	P
Operatorna:	Western Continental Operating Company		
Countyname:	Contra Costa	Fieldname:	River Break Gas
Areaname:	South	Section:	2
Township:	01N	Range:	02E
Basemeridi:	MD	Elevation:	Not Reported
Locationde:	Not Reported	Gissourcec:	hud
Comments:	Status Code 024	Leasename:	Hart
Wellnumber:	2	Epawell:	N
Hydraulica:	N	Confidenti:	N
Spuddate:	14-AUG-92	Welldeptha:	5455
Redrillfoo:	0	Abandonedd:	10-OCT-94
Completion:	26-AUG-92	Directiona:	Unknown
Gissymbol:	PDG	Site id:	CAOG11000232034

10
SSW **OIL_GAS** **CAOG11000232543**
1/2 - 1 Mile

Districtnu:	6	Apinumber:	01300255
Blmwell:	N	Redrillcan:	Not Reported
Dryhole:	Y	Wellstatus:	P
Operatorna:	Shell Western Exploration & Production Inc.		
Countyname:	Contra Costa	Fieldname:	River Break Gas
Areaname:	South	Section:	11
Township:	01N	Range:	02E
Basemeridi:	MD	Elevation:	Not Reported
Locationde:	Not Reported	Gissourcec:	hud
Comments:	Status Code 006	Leasename:	Maggiore
Wellnumber:	1-11	Epawell:	N
Hydraulica:	N	Confidenti:	N
Spuddate:	31-JUL-63	Welldeptha:	6155
Redrillfoo:	0	Abandonedd:	09-AUG-63
Completion:	Not Reported	Directiona:	Unknown
Gissymbol:	PDH	Site id:	CAOG11000232543

11
ESE **OIL_GAS** **CAOG11000232539**
1/2 - 1 Mile

Districtnu:	6	Apinumber:	01300251
Blmwell:	N	Redrillcan:	Not Reported
Dryhole:	Y	Wellstatus:	P

Operatorna:	Shell Western Exploration & Production Inc.		
Countyname:	Contra Costa	Fieldname:	Any Field
Areaname:	Any Area	Section:	1
Township:	01N	Range:	02E
Basemeridi:	MD	Elevation:	Not Reported
Locationde:	Not Reported	Gissourcec:	hud
Comments:	Status Code 006	Leasename:	Prewett
Wellnumber:	3-1	Epawell:	N
Hydraulica:	N	Confidenti:	N
Spuddate:	06-MAR-63	Welldeptha:	7525
Redrillfoo:	0	Abandonedd:	21-MAR-63
Completion:	Not Reported	Directiona:	Unknown
Gissymbol:	PDH	Site id:	CAOG11000232539

12
ESE
1/2 - 1 Mile

OIL_GAS **CAOG11000232829**

Districtnu:	6	Apinumber:	01320239
Blmwell:	N	Redrillcan:	Not Reported
Dryhole:	N	Wellstatus:	P
Operatorna:	Venada National	Countyname:	Contra Costa
Fieldname:	Oakley, South, Gas	Areaname:	Any Area
Section:	1	Township:	01N
Range:	02E	Basemeridi:	MD
Elevation:	Not Reported	Locationde:	Not Reported
Gissourcec:	hud	Comments:	Status Code 007
Leasename:	Prewett-Lamport	Wellnumber:	1-1
Epawell:	N	Hydraulica:	N
Confidenti:	N	Spuddate:	10-SEP-84
Welldeptha:	7496	Redrillfoo:	0
Abandonedd:	27-OCT-85	Completion:	Not Reported
Directiona:	Directionally drilled	Gissymbol:	PDH
Site id:	CAOG11000232829		

13
ENE
1/2 - 1 Mile

OIL_GAS **CAOG11000232538**

Districtnu:	6	Apinumber:	01300250
Blmwell:	N	Redrillcan:	Not Reported
Dryhole:	Y	Wellstatus:	P
Operatorna:	Shell Western Exploration & Production Inc.		
Countyname:	Contra Costa	Fieldname:	Any Field
Areaname:	Any Area	Section:	1
Township:	01N	Range:	02E
Basemeridi:	MD	Elevation:	Not Reported
Locationde:	Not Reported	Gissourcec:	hud
Comments:	Status Code 006	Leasename:	Cunha
Wellnumber:	1-1	Epawell:	N
Hydraulica:	N	Confidenti:	N
Spuddate:	18-SEP-63	Welldeptha:	7694
Redrillfoo:	0	Abandonedd:	02-OCT-63
Completion:	Not Reported	Directiona:	Unknown
Gissymbol:	PDH	Site id:	CAOG11000232538

Map ID
Direction
Distance

Database EDR ID Number

14
SW
1/2 - 1 Mile

OIL_GAS **CAOG11000232038**

Districtnu:	6	Apinumber:	01320317
Blmwell:	N	Redrillcan:	Not Reported
Dryhole:	N	Wellstatus:	P
Operatorna:	Western Continental Operating Company		
Countyname:	Contra Costa	Fieldname:	River Break Gas
Areaname:	South	Section:	11
Township:	01N	Range:	02E
Basemeridi:	MD	Elevation:	134
Locationde:	Not Reported	Gissourcec:	hud
Comments:	Status Code 025	Leasename:	Gas Unit D
Wellnumber:	1-11	Epawell:	N
Hydraulica:	N	Confidenti:	N
Spuddate:	17-MAY-93	Welldeptha:	4849
Redrillfoo:	0	Abandonedd:	18-JUN-94
Completion:	10-JUN-93	Directiona:	Directionally drilled
Gissymbol:	PDG	Site id:	CAOG11000232038

15
WNW
1/2 - 1 Mile

OIL_GAS **CAOG11000232376**

Districtnu:	6	Apinumber:	01300031
Blmwell:	N	Redrillcan:	Not Reported
Dryhole:	Y	Wellstatus:	P
Operatorna:	Shell Western Exploration & Production Inc.		
Countyname:	Contra Costa	Fieldname:	Brentwood (ABD)
Areaname:	Any Area	Section:	3
Township:	01N	Range:	02E
Basemeridi:	MD	Elevation:	Not Reported
Locationde:	Not Reported	Gissourcec:	hud
Comments:	Status Code 006	Leasename:	Continente
Wellnumber:	2-3	Epawell:	N
Hydraulica:	N	Confidenti:	N
Spuddate:	09-SEP-64	Welldeptha:	5912
Redrillfoo:	0	Abandonedd:	19-SEP-64
Completion:	Not Reported	Directiona:	Unknown
Gissymbol:	PDH	Site id:	CAOG11000232376

16
NW
1/2 - 1 Mile

OIL_GAS **CAOG11000232786**

Districtnu:	6	Apinumber:	01320201
Blmwell:	N	Redrillcan:	Not Reported
Dryhole:	Y	Wellstatus:	P
Operatorna:	Natural Gas Corp. of Calif.	Countyname:	Contra Costa
Fieldname:	River Break Gas	Areaname:	Main
Section:	35	Township:	02N
Range:	02E	Basemeridi:	MD
Elevation:	Not Reported	Locationde:	Not Reported
Gissourcec:	hud	Comments:	Status Code 006
Leasename:	Western-Napolitano	Wellnumber:	1-35

Epawell:	N	Hydraulica:	N
Confidenti:	N	Spuddate:	30-JAN-83
Welldeptha:	6197	Redrillfoo:	0
Abandonedd:	09-FEB-83	Completion:	Not Reported
Directiona:	Unknown	Gissymbol:	PDH
Site id:	CAOG11000232786		

17
SE
1/2 - 1 Mile

OIL_GAS **CAOG11000232596**

Districtnu:	6	Apinumber:	01320359
Blmwell:	N	Redrillcan:	Not Reported
Dryhole:	Y	Wellstatus:	P
Operatorna:	Production Specialties Company	Countyname:	Contra Costa
Fieldname:	Any Field	Areaname:	Any Area
Section:	12	Township:	01N
Range:	02E	Basemeridi:	MD
Elevation:	83	Locationde:	Not Reported
Gissourcec:	hud	Comments:	Status Code 007
Leasename:	Disco Inferno	Wellnumber:	1
Epawell:	N	Hydraulica:	N
Confidenti:	N	Spuddate:	16-JAN-01
Welldeptha:	7053	Redrillfoo:	0
Abandonedd:	27-JAN-01	Completion:	Not Reported
Directiona:	Directionally drilled	Gissymbol:	PDH
Site id:	CAOG11000232596		

18
SE
1/2 - 1 Mile

OIL_GAS **CAOG11000232815**

Districtnu:	6	Apinumber:	01320230
Blmwell:	N	Redrillcan:	Not Reported
Dryhole:	Y	Wellstatus:	P
Operatorna:	Reichhold Energy Corp.	Countyname:	Contra Costa
Fieldname:	Any Field	Areaname:	Any Area
Section:	12	Township:	01N
Range:	02E	Basemeridi:	MD
Elevation:	Not Reported	Locationde:	Not Reported
Gissourcec:	hud	Comments:	Status Code 007
Leasename:	S & S Farms	Wellnumber:	12-1
Epawell:	N	Hydraulica:	N
Confidenti:	N	Spuddate:	26-APR-84
Welldeptha:	7254	Redrillfoo:	0
Abandonedd:	22-MAY-84	Completion:	Not Reported
Directiona:	Directionally drilled	Gissymbol:	PDH
Site id:	CAOG11000232815		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS
RADON

AREA RADON INFORMATION

State Database: CA Radon

Radon Test Results

Zipcode	Num Tests	> 4 pCi/L
94513	5	0

Federal EPA Radon Zone for CONTRA COSTA County: 2

Note: Zone 1 indoor average level > 4 pCi/L.
: Zone 2 indoor average level >= 2 pCi/L and <= 4 pCi/L.
: Zone 3 indoor average level < 2 pCi/L.

Federal Area Radon Information for CONTRA COSTA COUNTY, CA

Number of sites tested: 55

Area	Average Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
Living Area - 1st Floor	0.760 pCi/L	100%	0%	0%
Living Area - 2nd Floor	0.300 pCi/L	100%	0%	0%
Basement	0.525 pCi/L	100%	0%	0%

PHYSICAL SETTING SOURCE RECORDS SEARCHED

TOPOGRAPHIC INFORMATION

USGS 7.5' Digital Elevation Model (DEM)
Source: United States Geologic Survey
EDR acquired the USGS 7.5' Digital Elevation Model in 2002 and updated it in 2006. The 7.5 minute DEM corresponds to the USGS 1:24,000- and 1:25,000-scale topographic quadrangle maps. The DEM provides elevation data with consistent elevation units and projection.

Current USGS 7.5 Minute Topographic Map
Source: U.S. Geological Survey

HYDROLOGIC INFORMATION

Flood Zone Data: This data was obtained from the Federal Emergency Management Agency (FEMA). It depicts 100-year and 500-year flood zones as defined by FEMA. It includes the National Flood Hazard Layer (NFHL) which incorporates Flood Insurance Rate Map (FIRM) data and Q3 data from FEMA in areas not covered by NFHL.
Source: FEMA
Telephone: 877-336-2627
Date of Government Version: 2003, 2015

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

State Wetlands Data: Wetland Inventory
Source: Department of Fish and Wildlife
Telephone: 916-445-0411

HYDROGEOLOGIC INFORMATION

AQUIFLOW[R] Information System
Source: EDR proprietary database of groundwater flow information
EDR has developed the AQUIFLOW Information System (AIS) to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted to regulatory authorities at select sites and has extracted the date of the report, hydrogeologically determined groundwater flow direction and depth to water table information.

GEOLOGIC INFORMATION

Geologic Age and Rock Stratigraphic Unit
Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - A digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

STATSGO: State Soil Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Service (NRCS)
The U.S. Department of Agriculture's (USDA) Natural Resources Conservation Service (NRCS) leads the national Conservation Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps.

SSURGO: Soil Survey Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Service (NRCS)
Telephone: 800-672-5559
SSURGO is the most detailed level of mapping done by the Natural Resources Conservation Service, mapping scales generally range from 1:12,000 to 1:63,360. Field mapping methods using national standards are used to construct the soil maps in the Soil Survey Geographic (SSURGO) database. SSURGO digitizing duplicates the original soil survey maps. This level of mapping is designed for use by landowners, townships and county natural resource planning and management.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

LOCAL / REGIONAL WATER AGENCY RECORDS

FEDERAL WATER WELLS

PWS: Public Water Systems
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Public Water System data from the Federal Reporting Data System. A PWS is any water system which provides water to at least 25 people for at least 60 days annually. PWSs provide water from wells, rivers and other sources.

PWS ENF: Public Water Systems Violation and Enforcement Data
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Violation and Enforcement data for Public Water Systems from the Safe Drinking Water Information System (SDWIS) after August 1995. Prior to August 1995, the data came from the Federal Reporting Data System (FRDS).

USGS Water Wells: USGS National Water Inventory System (NWIS)
This database contains descriptive information on sites where the USGS collects or has collected data on surface water and/or groundwater. The groundwater data includes information on wells, springs, and other sources of groundwater.

STATE RECORDS

Water Well Database
Source: Department of Water Resources
Telephone: 916-651-9648

California Drinking Water Quality Database
Source: Department of Public Health
Telephone: 916-324-2319
The database includes all drinking water compliance and special studies monitoring for the state of California since 1984. It consists of over 3,200,000 individual analyses along with well and water system information.

OTHER STATE DATABASE INFORMATION

California Oil and Gas Well Locations
Source: Department of Conservation
Telephone: 916-323-1779
Oil and Gas well locations in the state.

California Earthquake Fault Lines
Source: California Division of Mines and Geology
The fault lines displayed on EDR's Topographic map are digitized quaternary fault lines prepared in 1975 by the United State Geological Survey. Additional information (also from 1975) regarding activity at specific fault lines comes from California's Preliminary Fault Activity Map prepared by the California Division of Mines and Geology.

RADON

State Database: CA Radon
Source: Department of Public Health
Telephone: 916-210-8558
Radon Database for California

Area Radon Information
Source: USGS
Telephone: 703-356-4020
The National Radon Database has been developed by the U.S. Environmental Protection Agency (USEPA) and is a compilation of the EPA/State Residential Radon Survey and the National Residential Radon Survey. The study covers the years 1986 - 1992. Where necessary data has been supplemented by information collected at private sources such as universities and research institutions.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

EPA Radon Zones
Source: EPA
Telephone: 703-356-4020
Sections 307 & 309 of IRAA directed EPA to list and identify areas of U.S. with the potential for elevated indoor radon levels.

OTHER

Airport Landing Facilities: Private and public use landing facilities
Source: Federal Aviation Administration, 800-457-6656

Epicenters: World earthquake epicenters, Richter 5 or greater
Source: Department of Commerce, National Oceanic and Atmospheric Administration

California Earthquake Fault Lines: The fault lines displayed on EDR's Topographic map are digitized quaternary fault lines, prepared in 1975 by the United State Geological Survey. Additional information (also from 1975) regarding activity at specific fault lines comes from California's Preliminary Fault Activity Map prepared by the California Division of Mines and Geology.

STREET AND ADDRESS INFORMATION

APPENDIX B:
USER QUESTIONNAIRE(S)

PHASE I ENVIRONMENTAL SITE ASSESSMENT
USER QUESTIONNAIRE

Pursuant to the American Society for Testing and Materials E 1527-13 *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process* (ASTM E 1527-13), in order to qualify for one of the Landowner Liability Protections (LLPs) offered by the Small Business Liability Relief and Brownfields Revitalization Act of 2001 (the "Brownfields Amendments"), the User must conduct the following inquiries required by 40 CFR 312.25, 312.28, 312.29, 312.30, and 312.31. These inquiries must also be conducted by EPA Brownfield Assessment and Characterization grantees. The User should provide the following information to the environmental professional. Failure to conduct these inquiries could result in a determination that "all appropriate inquiries" is not complete.

The "User" is defined in the ASTM E 1527-13 standard as *the party seeking to use Practice E 1527 to complete an environmental site assessment of the Site. A User may include, without limitation, a potential purchaser of property, a potential tenant of property, an owner of property, a lender, or a property manager.*

Thank you for taking the time to complete this questionnaire. If you have any questions, please call Glenn Young at 510.500.5574 or gyoung@trcsolutions.com

Date: 4-25-19

User Name: Brian S. Kesler

Company: Cyrus Land Investments, LLC

Address: 4021 Port Chicago Hwy
Concord, CA 94520

Telephone No.: (925) 766-5769

E-mail Address: bkesler@seenohomes.com

Signature:

Site Name & Address: Giannini Property
APN 018-080-025
Brentwood, CA 94513

Purpose of ASTM Phase I (potential purchase, potential sale, re-finance, update the environmental condition of the Site, Lease termination or initiation, etc.)

Potential Purchase

(1.) Environmental cleanup liens that are filed or recorded against the Site (40 CFR 312.25)
Did a search of recorded land title records (or judicial records where appropriate, see Note 1 below) identify any environmental liens filed or recorded against the Site under federal, tribal, state or local law?

Yes	No
☐	☒

NOTE 1 — In certain jurisdictions, federal, tribal, state, or local statutes, or regulations specify that environmental liens and AULs be filed in judicial records rather than in land title records. In such cases judicial records must be searched for environmental liens and AULs.

(2.) Activity and land use limitations (AULs) that are in place on the Site or that have been filed or recorded against the Site (40 CFR 312.26(a)(1)(v) and (vi))

Did a search of recorded land title records (or judicial records where appropriate, see Note 1 above) identify any AULs, such as engineering controls, land use restrictions or institutional controls that are in place at the Site and/or have been filed or recorded against the Site under federal, tribal, state or local law?

Yes ☐ No ☒

(3.) Specialized knowledge or experience of the person seeking to qualify for the *Landowner Liability Protection* (LLP) (40 CFR 312.28)

Do you have any specialized knowledge or experience related to the property or nearby properties? For example, are you involved in the same line of business as the current or former occupants of the property or an adjoining property so that you would have specialized knowledge of the chemicals and processes used by this type of business?

Yes ☒ No ☐

(4.) Relationship of the purchase price to the fair market value of the Site property (40 CFR 312.29)

Does the purchase price being paid for the Site property reasonably reflect the fair market value of the property? If you conclude that there is a difference, have you considered whether the lower purchase price is because contamination is known or believed to be present at the property?

Yes ☒ No ☐

(5.) *Commonly known* or *reasonably ascertainable* information regarding the Site property (40 CFR 312.30)

Are you aware of commonly known or reasonably ascertainable information about the Site that would help the environmental professional to identify conditions indicative of releases or threatened releases? For example,

(a.) Can you provide any information regarding the past uses of the Site?

(b.) Can you provide any information regarding specific chemicals that are present or once were present at the Site?

(c.) Can you provide any information regarding spills or other chemical releases that have occurred at the Site?

(d.) Can you provide any information regarding any environmental cleanups that have occurred at the Site?

Yes ☐ No ☒

(6.) **The degree of obviousness of the presence or likely presence of contamination at the Site, and the ability to detect the contamination by appropriate investigation (40 CFR 312.31)**
Based on your knowledge and experience related to the Site are there any obvious indicators that point to the presence or likely presence of releases at the Site?

Yes ☐ No ☒

(7.) **Proceedings Involving the Site**
Are you aware of: (1) any pending, threatened, or past litigation relevant to hazardous substances or petroleum products in, on, or from the Site; (2) any pending, threatened, or past administrative proceedings relevant to hazardous substances or petroleum products in, on or from the Site; and (3) any notices from any governmental entity regarding any possible violation of environmental laws or possible liability relating to hazardous substances or petroleum products at the Site?

Yes ☐ No ☒

(8.) **Questions Regarding Helpful Documents**
Are you aware of the presence of any of the documents listed below and, if so, whether copies can and will be provided to TRC within reasonable time and cost constraints?

	Yes	No
- Environment site assessment reports	☐	☒
- Environment compliance audit reports	☐	☒
- Environmental permits (e.g., solid waste disposal permits; hazardous waste disposal permits; wastewater permits; National Pollutant Discharge Elimination System [NPDES] permits; or underground injection permits)	☐	☒
- Registrations for underground and aboveground storage tanks	☐	☒
- Registrations for underground injection systems	☐	☒
- Material Safety Data Sheets (MSDSs)	☐	☒
- Community Right-To-Know plan(s)	☐	☒
- Safety plans; preparedness and prevention plans; spill prevention, countermeasure, and control plans; etc.,	☐	☒
- Reports regarding hydrogeologic conditions at the Site and surrounding area	☐	☒
- Notices or other correspondence from any government agency regarding current or previous violations of environmental laws with respect to the Site or relating to environmental liens encumbering the Site property	☐	☒
- Hazardous waste generator notices or reports	☐	☒
- Geotechnical studies (adjacent Property)	☒	☐
- Risk assessments	☐	☒
- Recorded AULs.	☐	☒

APPENDIX C:
HISTORICAL RESEARCH DOCUMENTATION

Lone Tree Way

LONE TREE WAY

BRENTWOOD, CA 94513

Inquiry Number: 5631677.8

April 25, 2019

The EDR Aerial Photo Decade Package

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

EDR Aerial Photo Decade Package

04/25/19

Site Name:

Lone Tree Way
LONE TREE WAY
BRENTWOOD, CA 94513
EDR Inquiry # 5631677.8

Client Name:

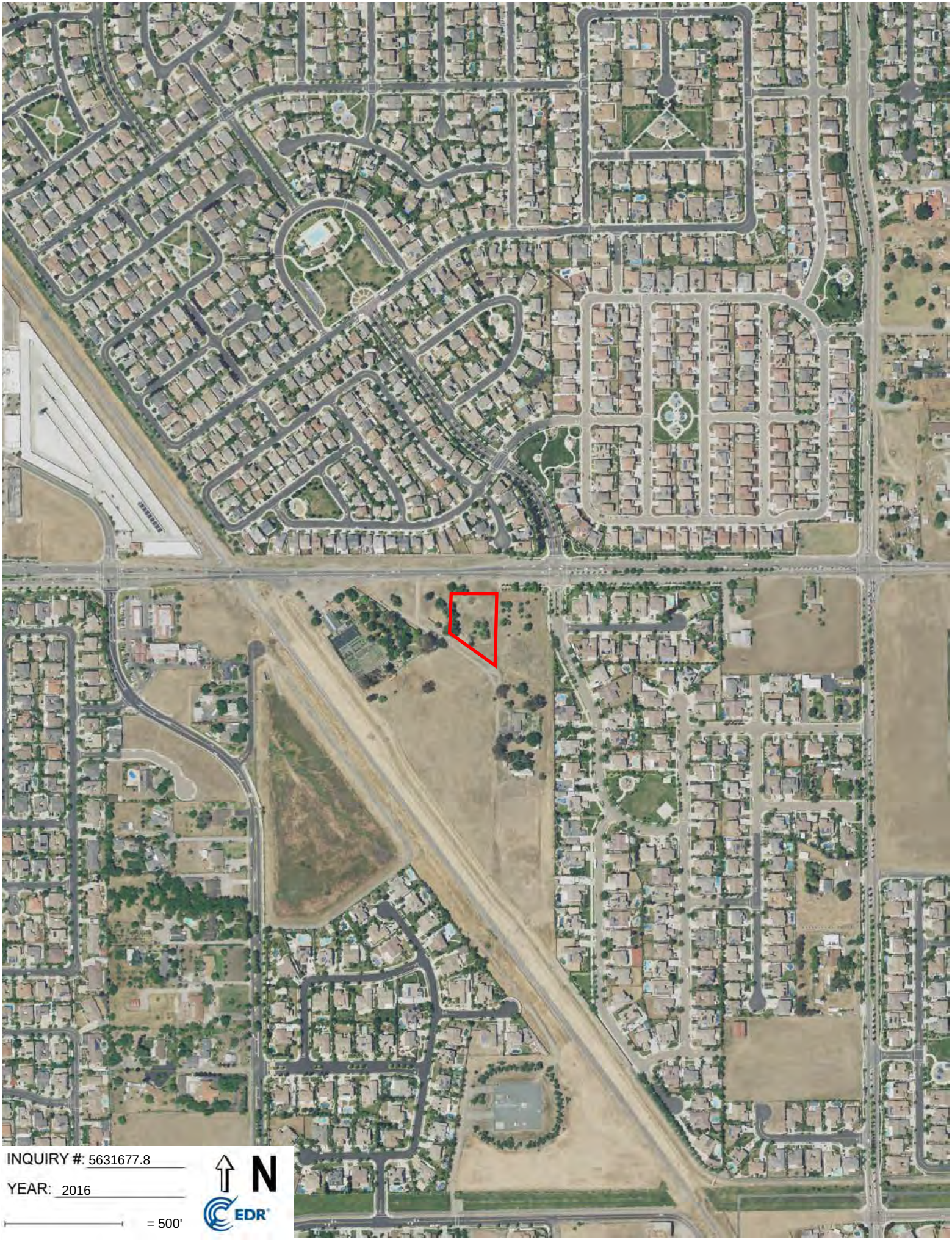
TRC
505 Sansome Street Suite 1600
San Francisco, CA 94111
Contact: Glenn Young

Environmental Data Resources, Inc. (EDR) Aerial Photo Decade Package is a screening tool designed to assist environmental professionals in evaluating potential liability on a target property resulting from past activities. EDR's professional researchers provide digitally reproduced historical aerial photographs, and when available, provide one photo per decade.

Search Results:

Year	***Scale***	***Details***	***Source***
2016	1"=500'	Flight Year: 2016	USDA/NAIP
2012	1"=500'	Flight Year: 2012	USDA/NAIP
2009	1"=500'	Flight Year: 2009	USDA/NAIP
2006	1"=500'	Flight Year: 2006	USDA/NAIP
1998	1"=500'	Flight Date: August 22, 1998	USDA
1993	1"=500'	Acquisition Date: June 16, 1993	USGS/DOQQ
1984	1"=500'	Flight Date: June 29, 1984	USDA
1982	1"=500'	Flight Date: July 05, 1982	USDA
1979	1"=500'	Flight Date: August 16, 1979	USDA
1972	1"=500'	Flight Date: July 06, 1972	USDA
1966	1"=500'	Flight Date: May 16, 1966	USDA
1963	1"=500'	Flight Date: July 15, 1963	EDR Proprietary Aerial Viewpoint
1959	1"=500'	Flight Date: April 11, 1959	USDA
1949	1"=500'	Flight Date: October 13, 1949	USGS
1939	1"=500'	Flight Date: June 28, 1939	USDA

When delivered electronically by EDR, the aerial photo images included with this report are for ONE TIME USE ONLY. Further reproduction of these aerial photo images is prohibited without permission from EDR. For more information contact your EDR Account Executive.


INQUIRY #: 5631677.8
YEAR: 2016
= 500'
N
EDR


INQUIRY #: 5631677.8
YEAR: 2012
= 500'
N
EDR


INQUIRY #: 5631677.8
YEAR: 2009
= 500'
N
EDR

INQUIRY #: 5631677.8

YEAR: 2006

= 500'

N

EDR


INQUIRY #: 5631677.8
YEAR: 1998
= 500'
N
EDR


INQUIRY #: 5631677.8
YEAR: 1993
= 500'
N
EDR


INQUIRY #: 5631677.8
YEAR: 1984
= 500'
N
EDR

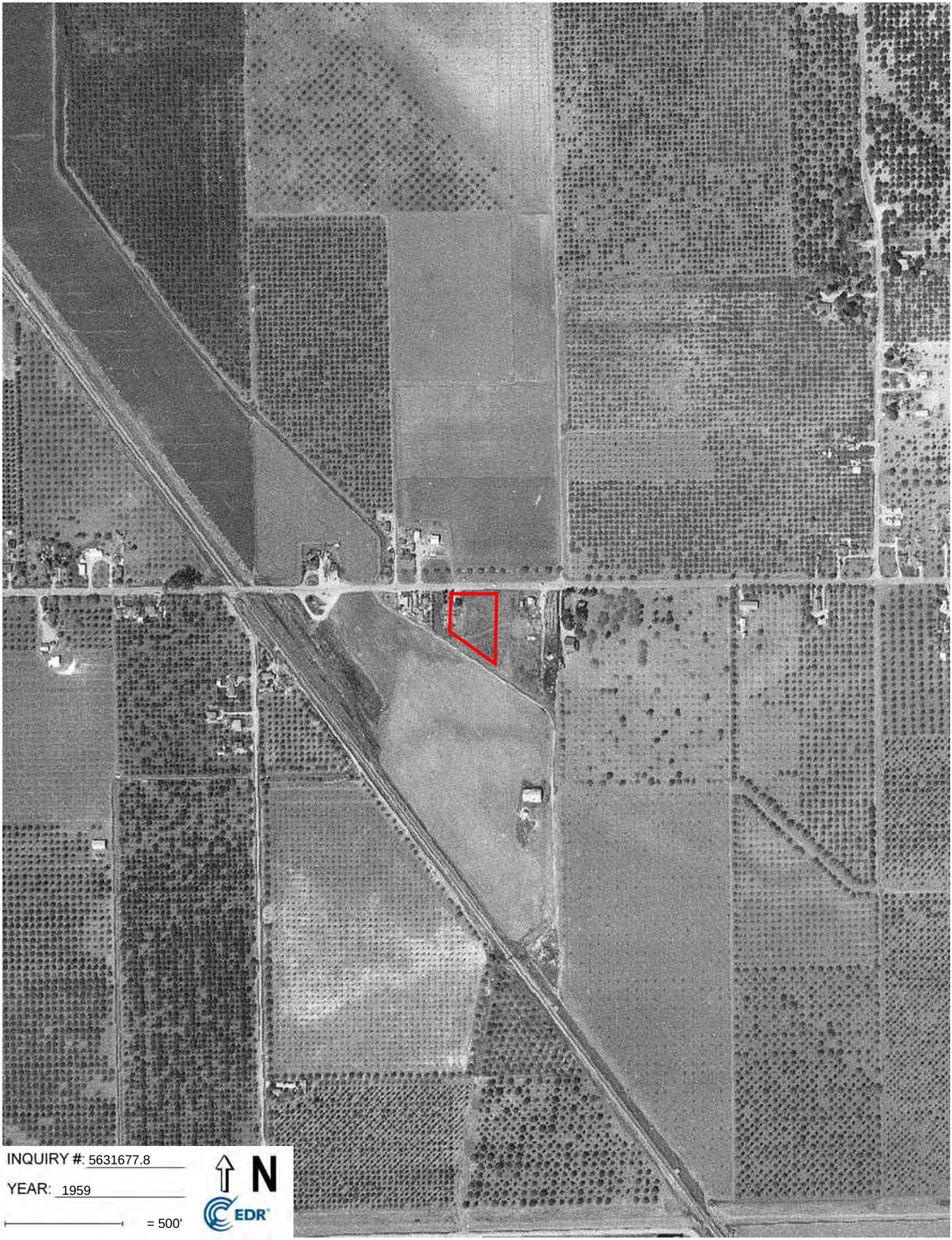

INQUIRY #: 5631677.8
YEAR: 1982
= 500'
N
EDR


INQUIRY #: 5631677.8
YEAR: 1979
= 500'
N
EDR

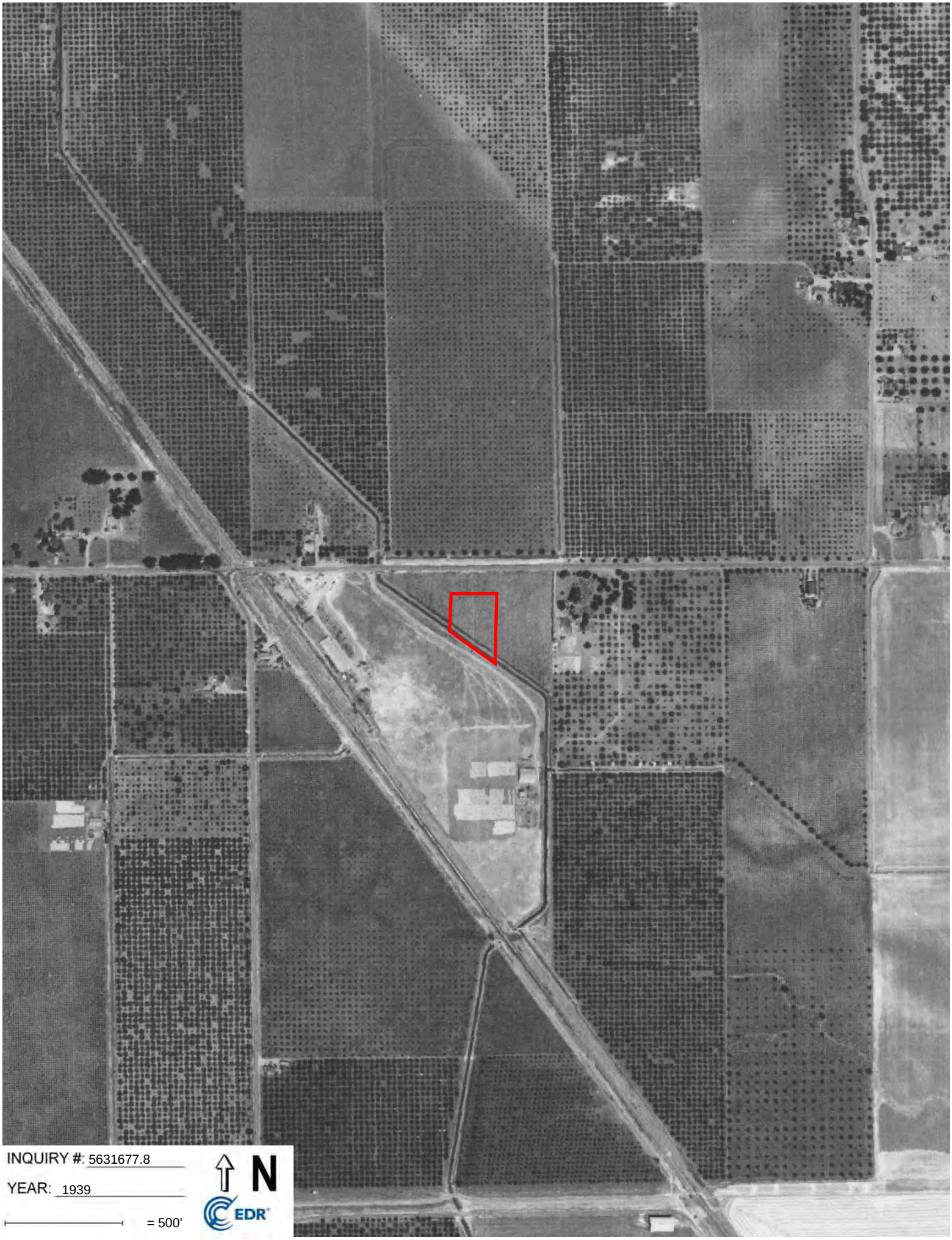

INQUIRY #: 5631677.8
YEAR: 1972
= 500'
N
EDR


INQUIRY #: 5631677.8
YEAR: 1966
= 500'
N
EDR


INQUIRY #: 5631677.8
YEAR: 1963
= 500'
N
EDR


INQUIRY #: 5631677.8
YEAR: 1959
= 500'
N
EDR


INQUIRY #: 5631677.8
YEAR: 1949
= 500'
N
EDR


INQUIRY #: 5631677.8
YEAR: 1939
= 500'
N
EDR

Lone Tree Way

LONE TREE WAY

BRENTWOOD, CA 94513

Inquiry Number: 5631677.4

April 24, 2019

EDR Historical Topo Map Report

with QuadMatch™

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

EDR Historical Topo Map Report

04/24/19

Site Name:	Client Name:
Lone Tree Way	TRC
LONE TREE WAY	505 Sansome Street Suite 1600
BRENTWOOD, CA 94513	San Francisco, CA 94111
EDR Inquiry # 5631677.4	Contact: Glenn Young

EDR Topographic Map Library has been searched by EDR and maps covering the target property location as provided by TRC were identified for the years listed below. EDR's Historical Topo Map Report is designed to assist professionals in evaluating potential liability on a target property resulting from past activities. EDRs Historical Topo Map Report includes a search of a collection of public and private color historical topographic maps, dating back to the late 1800s.

Search Results:		***Coordinates:***	
P.O.#	338571	**Latitude:**	37.961034 37° 57' 40" North
Project:	Lone Tree Way, Brentwood	**Longitude:**	-121.719892 -121° 43' 12" West
		UTM Zone:	Zone 10 North
		UTM X Meters:	612451.80
		UTM Y Meters:	4202264.47
		Elevation:	91.17' above sea level

Maps Provided:

2012
1978
1968
1954
1943
1940
1916
1914

Topo Sheet Key

This EDR Topo Map Report is based upon the following USGS topographic map sheets.

2012 Source Sheets

Brentwood
2012
7.5-minute, 24000

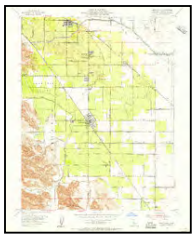
1978 Source Sheets

Brentwood
1978
7.5-minute, 24000
Aerial Photo Revised 1974

1968 Source Sheets

Brentwood
1968
7.5-minute, 24000
Aerial Photo Revised 1968

1954 Source Sheets

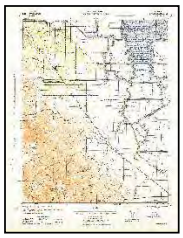


Brentwood
1954
7.5-minute, 24000
Aerial Photo Revised 1949

Topo Sheet Key

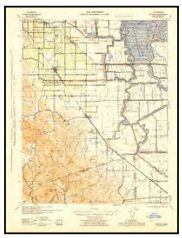
This EDR Topo Map Report is based upon the following USGS topographic map sheets.

1943 Source Sheets



BYRON
1943
15-minute, 62500

1940 Source Sheets

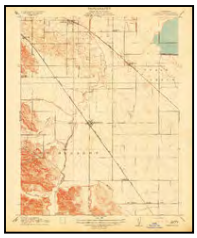


Byron
1940
15-minute, 62500
Aerial Photo Revised 1940

1916 Source Sheets

Byron
1916
15-minute, 62500

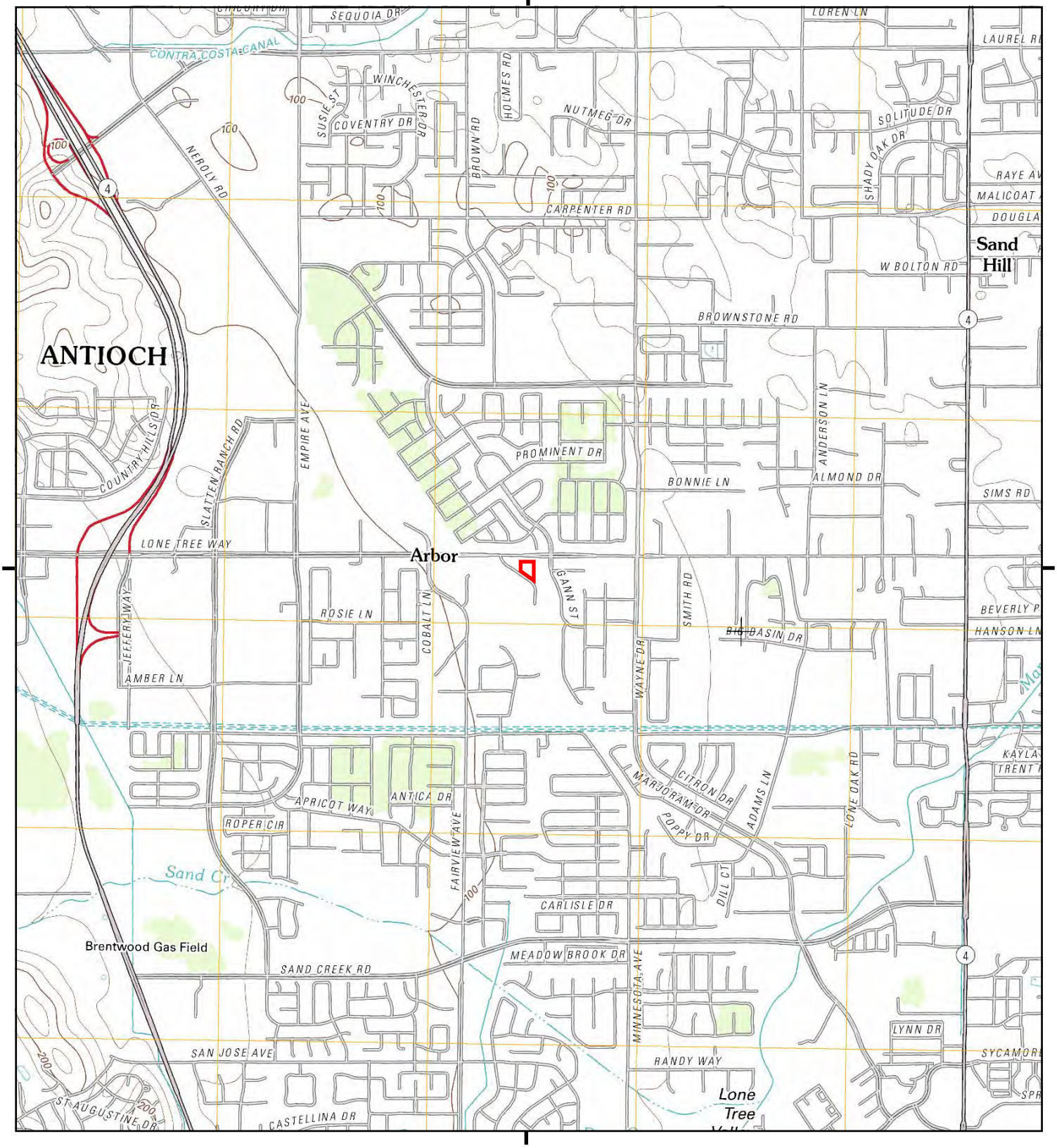
1914 Source Sheets



Brentwood
1914
7.5-minute, 31680

Historical Topo Map

2012



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

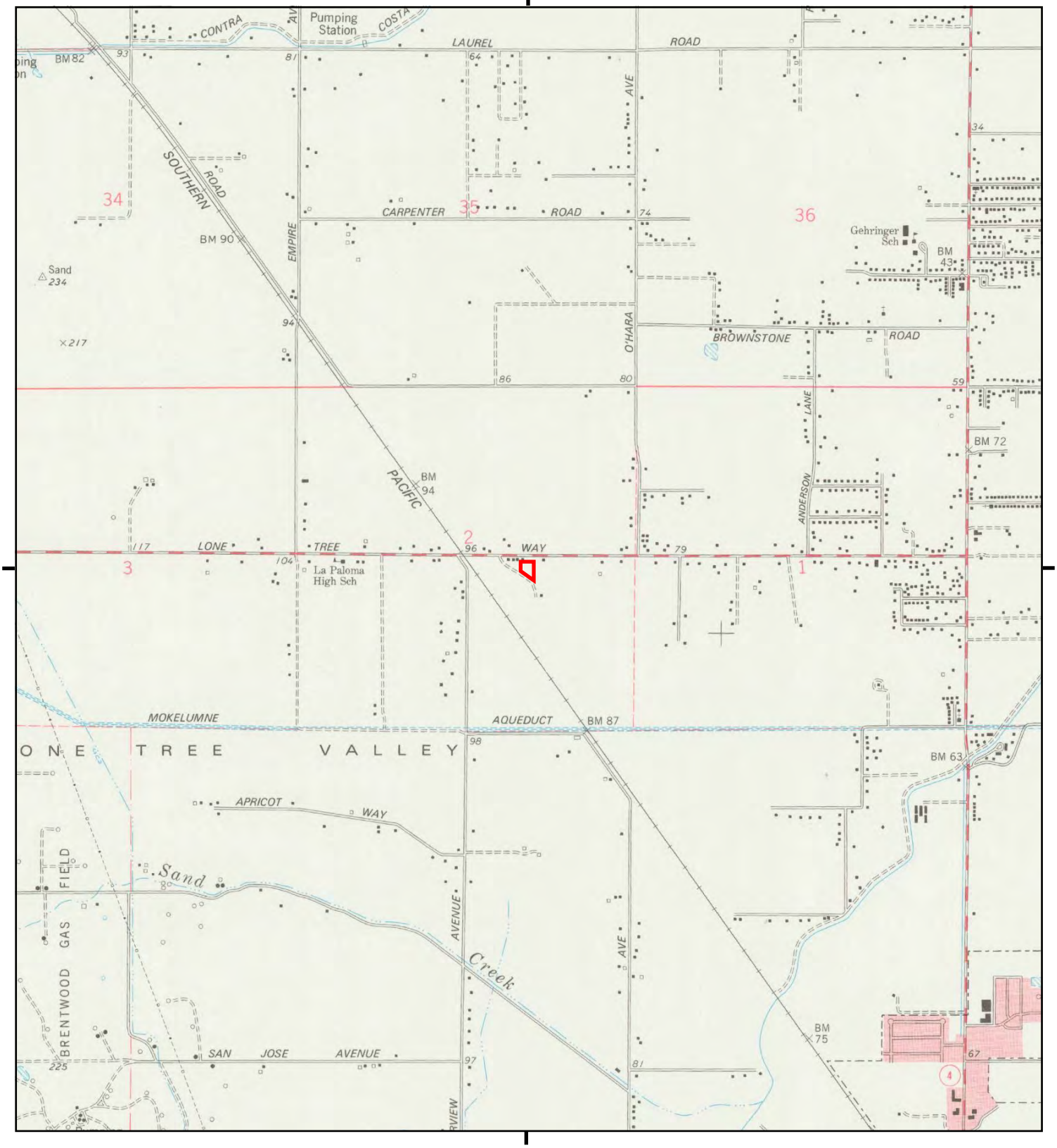
TP, Brentwood, 2012, 7.5-minute

SITE NAME: Lone Tree Way
ADDRESS: LONE TREE WAY
BRENTWOOD, CA 94513
CLIENT: TRC

N

Historical Topo Map

1978



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

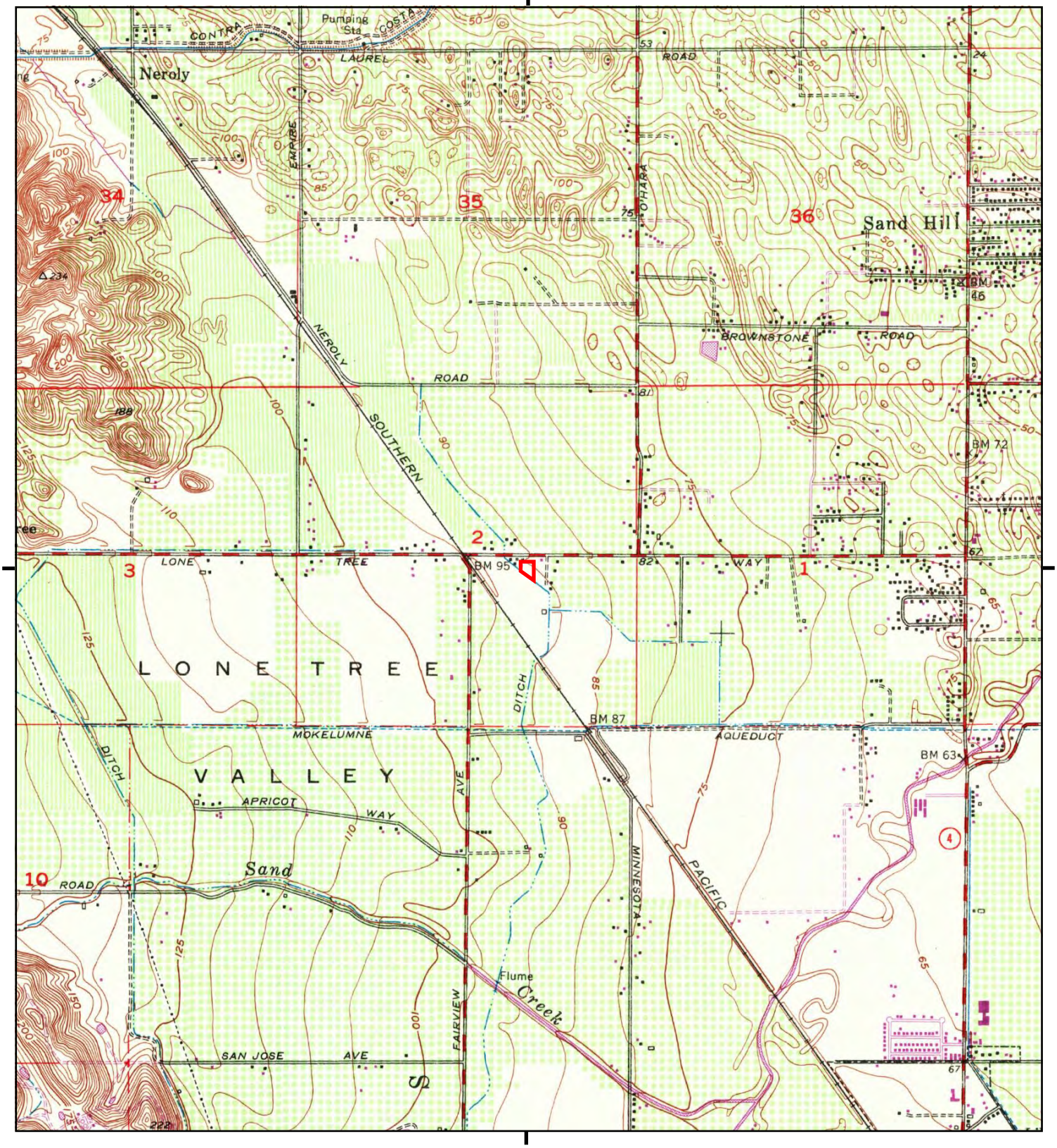
TP, Brentwood, 1978, 7.5-minute

SITE NAME: Lone Tree Way
ADDRESS: LONE TREE WAY
BRENTWOOD, CA 94513
CLIENT: TRC

N

Historical Topo Map

1968



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

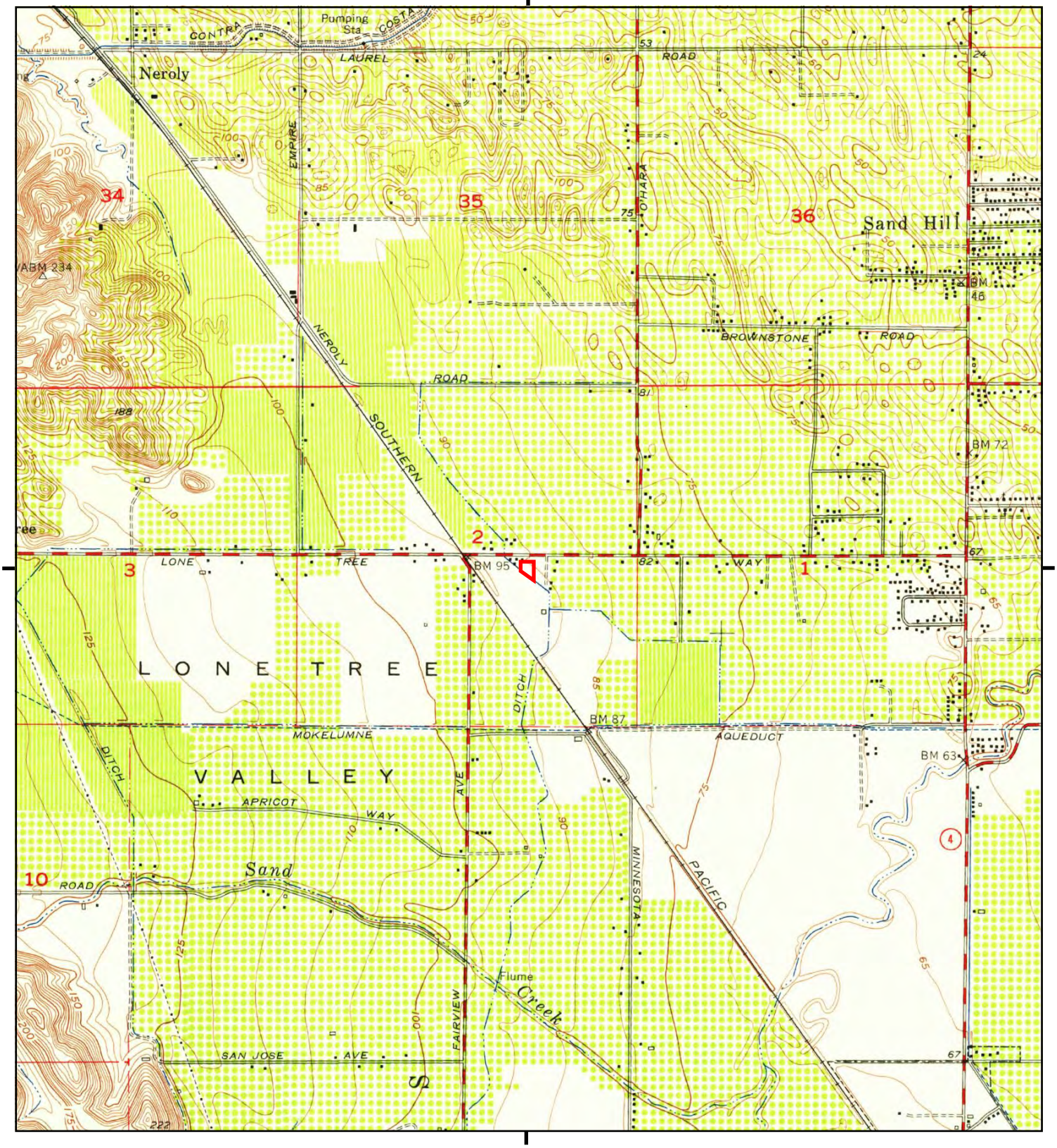
TP, Brentwood, 1968, 7.5-minute

SITE NAME: Lone Tree Way
ADDRESS: LONE TREE WAY
BRENTWOOD, CA 94513
CLIENT: TRC

N

Historical Topo Map

1954



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

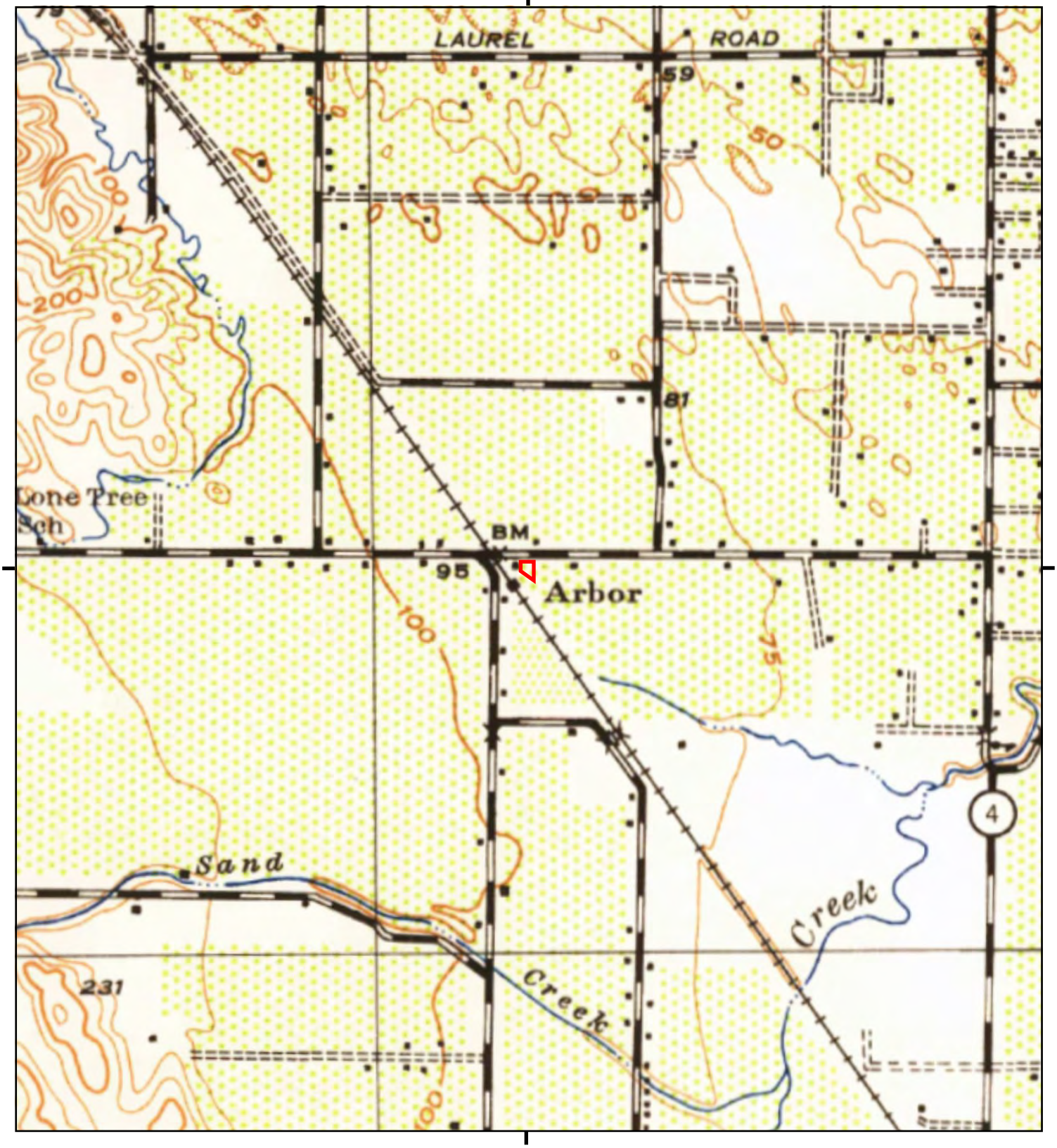
TP, Brentwood, 1954, 7.5-minute

SITE NAME: Lone Tree Way
ADDRESS: LONE TREE WAY
BRENTWOOD, CA 94513
CLIENT: TRC

N

Historical Topo Map

1943



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

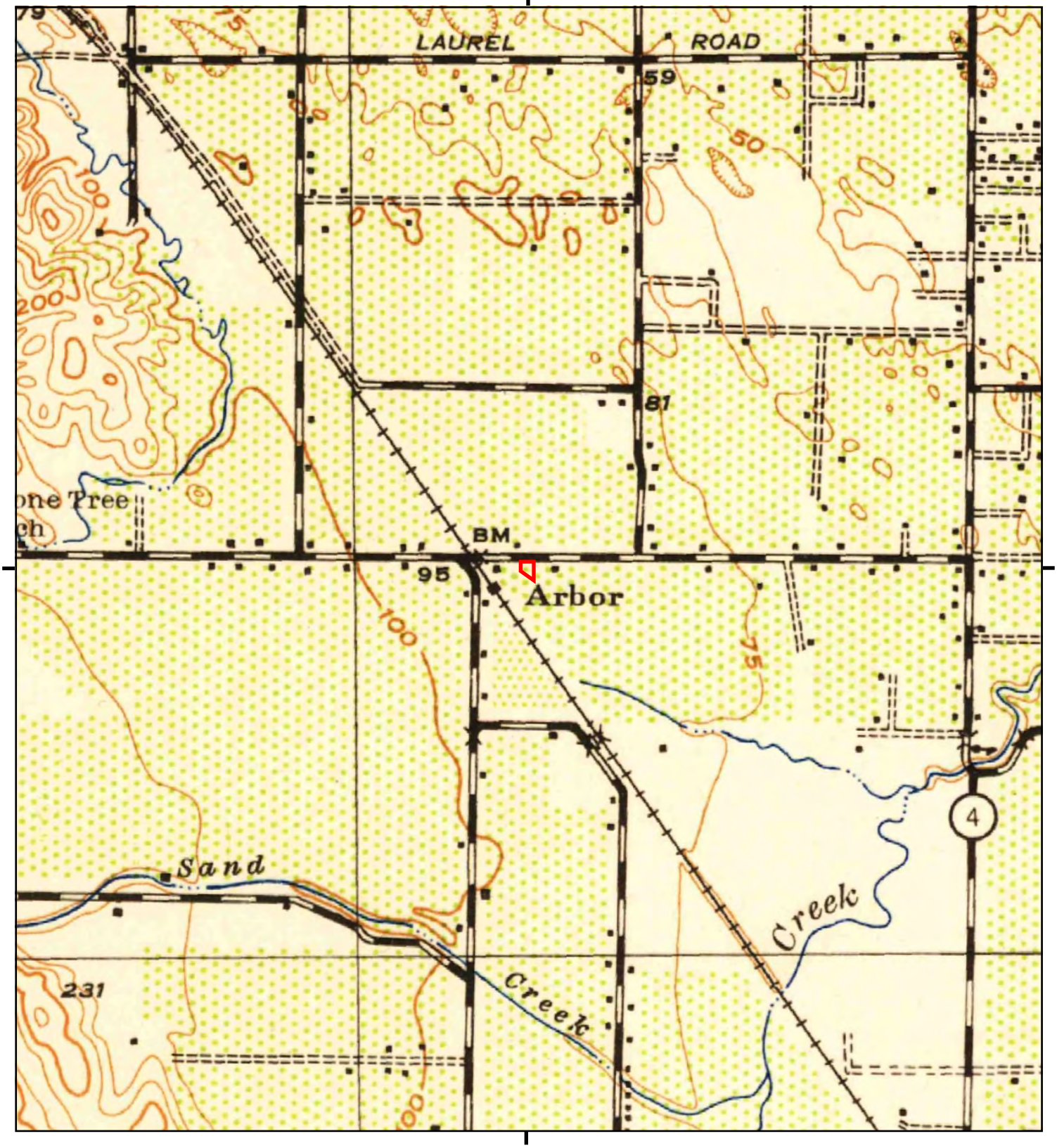
TP, BYRON, 1943, 15-minute

SITE NAME: Lone Tree Way
ADDRESS: LONE TREE WAY
BRENTWOOD, CA 94513
CLIENT: TRC

N

Historical Topo Map

1940



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

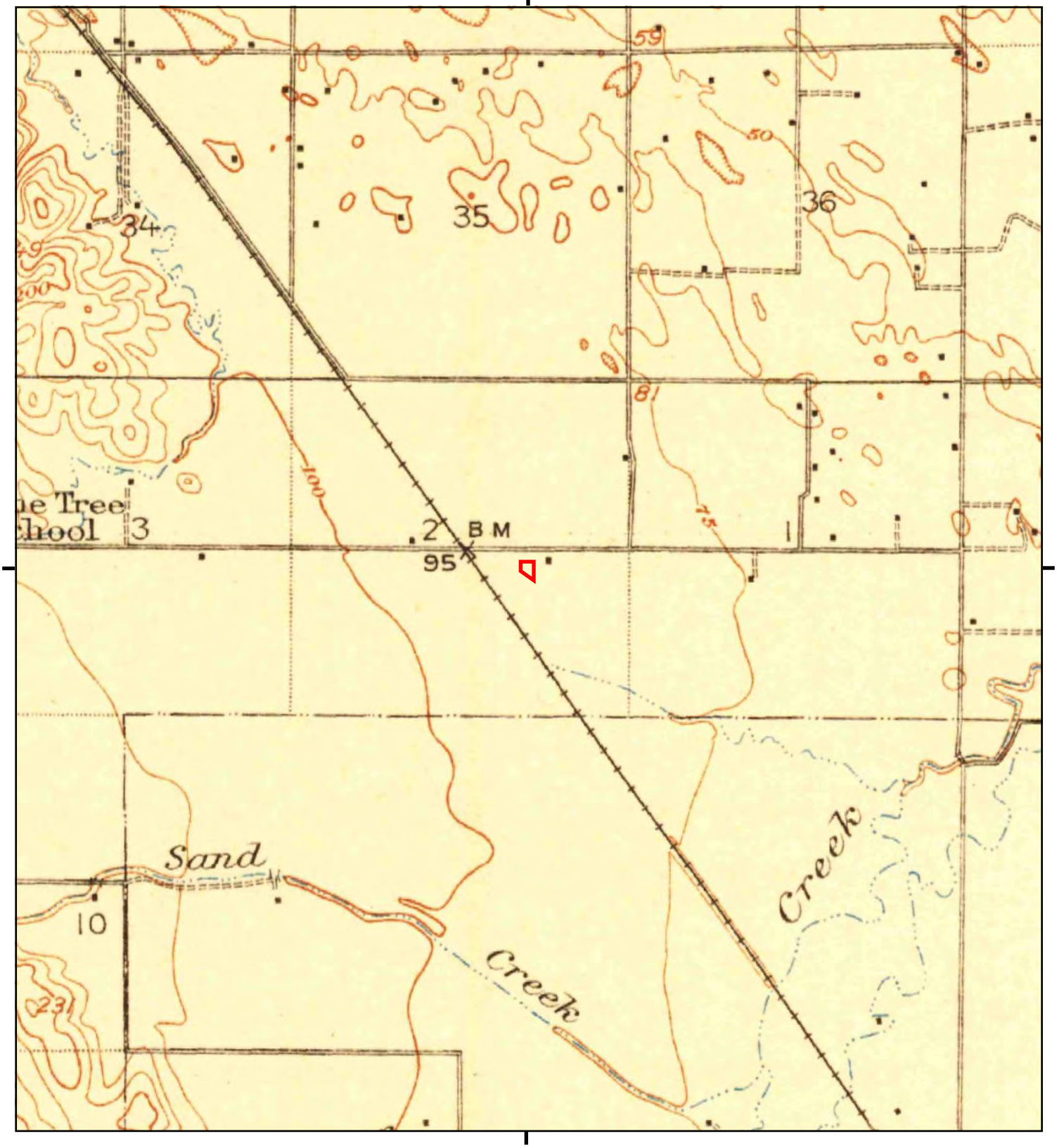
TP, Byron, 1940, 15-minute

SITE NAME: Lone Tree Way
ADDRESS: LONE TREE WAY
BRENTWOOD, CA 94513
CLIENT: TRC

N

Historical Topo Map

1916



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

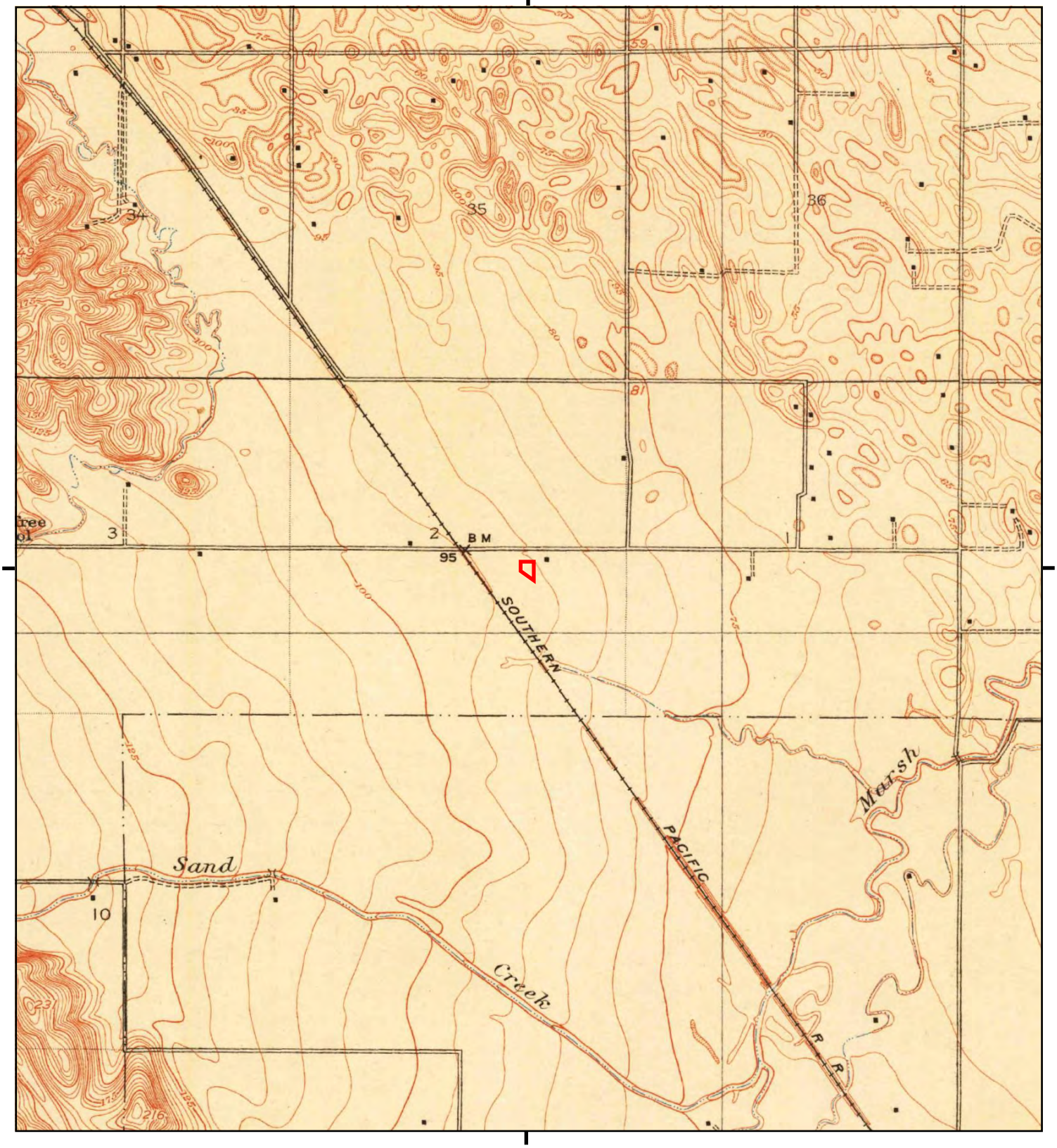
TP, Byron, 1916, 15-minute

SITE NAME: Lone Tree Way
ADDRESS: LONE TREE WAY
BRENTWOOD, CA 94513
CLIENT: TRC

N

Historical Topo Map

1914



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Brentwood, 1914, 7.5-minute

SITE NAME: Lone Tree Way
ADDRESS: LONE TREE WAY
BRENTWOOD, CA 94513
CLIENT: TRC

N

Lone Tree Way
LONE TREE WAY
BRENTWOOD, CA 94513

Inquiry Number: 5631677.5
April 25, 2019

The EDR-City Directory Image Report

Environmental Data Resources Inc

6 Armstrong Road
Shelton, CT 06484
800.352.0050
www.edrnet.com

TABLE OF CONTENTS

SECTION

Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

EXECUTIVE SUMMARY

DESCRIPTION

Environmental Data Resources, Inc.'s (EDR) City Directory Report is a screening tool designed to assist environmental professionals in evaluating potential liability on a target property resulting from past activities. EDR's City Directory Report includes a search of available city directory data at 5 year intervals.

RECORD SOURCES

EDR's Digital Archive combines historical directory listings from sources such as Cole Information and Dun & Bradstreet. These standard sources of property information complement and enhance each other to provide a more comprehensive report.

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Data by infoUSA®

RESEARCH SUMMARY

The following research sources were consulted in the preparation of this report. A check mark indicates where information was identified in the source and provided in this report.

Year	Target Street	Cross Street	Source
2014	☑	☐	EDR Digital Archive
2010	☑	☐	EDR Digital Archive
2005	☑	☐	EDR Digital Archive
2000	☑	☐	EDR Digital Archive
1995	☑	☐	EDR Digital Archive
1992	☑	☐	EDR Digital Archive
1989	☐	☐	Haines Criss-Cross Directory
1985	☐	☐	Haines Criss-Cross Directory
1980	☐	☐	Haines Criss-Cross Directory
1975	☐	☐	Haines Criss-Cross Directory

FINDINGS

TARGET PROPERTY STREET

LONE TREE WAY
BRENTWOOD, CA 94513

Year	CD Image	Source	
LONE TREE WAY			
2014	pg A2	EDR Digital Archive	
2010	pg A6	EDR Digital Archive	
2005	pg A10	EDR Digital Archive	
2000	pg A13	EDR Digital Archive	
1995	pg A16	EDR Digital Archive	
1992	pg A17	EDR Digital Archive	
1989	-	Haines Criss-Cross Directory	Target and Adjoining not listed in Source
1985	-	Haines Criss-Cross Directory	Target and Adjoining not listed in Source
1980	-	Haines Criss-Cross Directory	Target and Adjoining not listed in Source
1975	-	Haines Criss-Cross Directory	Target and Adjoining not listed in Source

FINDINGS

CROSS STREETS

No Cross Streets Identified

City Directory Images

Target Street	Cross Street	Source
✓	-	EDR Digital Archive

LONE TREE WAY 2014

5401	BLUEFIN ENTERPRISES INC
	CHIPOTLE MEXICAN GRILL INC
	LONE TREE THAI CUISINE
5411	5 STAR WIRELESS
	HAMIDULLAH MOJADDEDI
	KINDERS CUSTOM MEATS INC
	PEETS COFFEE & TEA INC
	TAVO INCORPORATED
	TAVOS PIZZERIA RESTAURANT
5421	ALDOS SHOE REPAIR & STORE
	LONE TREE DENTAL GROUP
	SCRUB MED MEDICAL SUPPLY
5451	TRADER JOES COMPANY
5461	BABIES R US
	TOYS R US INC
5471	BROWN GROUP RETAIL INC
5481	PETCO ANIMAL SUPS STORES INC
5491	SMART FINAL 524
5501	MICHAELS STORES INC
5511	KOHLS DEPARTMENT STORES INC
5521	TUESDAY MORNING CORPORATION
5541	BARCHIEL SKIN CARE STUDIO
	SPORT CLIPS
	SUVIA SALON SUITES
5551	SOUTHERN CAL DISC TIRE CO INC
	SOUTHERN CALIFDISCTTIRE COINC
5571	SLEEP TRAIN INC
5581	IN-N-OUT BURGERS
5591	CHEVRON CORPORATION
5601	AY CARAMBA
	LIME WIRELESS LLC
5611	ANGEL NAILS
	ARLENE COTAS DMD A PROF CORP
	CHAMAN KABOB RESTAURANT
	CREASIAN
5631	HOME DEPOT USA INC
6021	EAST BAY EQUIES
6031	AISAN INTL COMMODITIES
	DEVI OIL INC
	SAVINGS CLEANERS
6041	NATIONWIDE INSURANCE THOMAS
	OCCUPANT UNKNOWN,
6051	AJAX UNITED EAST BAY INC
	BUFFALO WILD WINGS INC
6061	DJM RETAIL INC
	LEONG LARRY DDS
	MICHAEL, MARINI
6261	BANK AMERICA NATIONAL ASSN
6271	CENTURY NAIL
	GOODWILL OF SILICON VALLEY

Target Street	Cross Street	Source
✓	-	EDR Digital Archive

LONE TREE WAY 2014 (Cont'd)

6271	MASSAGE SEASON
	ZHU, Z
6281	GOLDEN DRAGON BUFFET
	J AND D INVESTMENT INC
	SINGRONG INC
	ZHENG INVESTMENT INC
6291	CARLS JR
6361	LES SCHWAB TIRE CTRS CAL INC
6367	HO DAVE MUI
	MANCINIS SLEEPWORLD INC
6471	WINGSTOP
6481	B P WEST COAST PRODUCTS
6560	IYOGURT
	NATIONS FOODSERVICE INC
6570	WALGREEN CO
6580	MELOS PIZZA & PASTA
	ORBIUM INC
6590	FIRST BANK
6600	BEST BUY CO INC
6651	CORNERSTONE FELLOWSHIP
6660	FIVE GUYS BURGERS & FRIES
	NORTHERN BURGERS THREE LLC
	OO&A INC
	QUICK CHECK
6670	SMOKE SHOP
6680	LISTEK ENTERPRISES INC
	STRAW HAT PIZZA RESTUARANT
6700	LEONARDIS PIZZA
	WINCO FOODS LLC
6720	OREILLY AUTOMOTIVE STORES INC
6730	HOLIDAY MASSAGE
6830	POWER FOR LIVING MINISTRIES
6836	FIRESTONE COMPLETE AUTO CARE
6900	ACORN SELF STORAGE LLC
	WATERS, JACKIE
6935	LITTLE CEASARS PIZZA LONE TREE
	TRI CITY AUTO PLAZA INC
	VIZ CLEANERS
6945	BRENTWOOD AUTO SPA
7021	VALLEY OAK NURSERY INC
7161	BARRAGAN CANDE LARIO
7357	HINOJOS, JERRY M
7451	SPINELLI, MARY J
7510	FRIZZELL, DAVID B
7540	ONTIVEROS, JOHN
7570	PACIFIC COAST BACKHOE
7590	OCCUPANT UNKNOWN,
7600	MACHADO, FRED M
7650	ZUNIGA, MYRA F
7701	BRODERICK, TIMOTHY S

Target Street	Cross Street	Source
✓	-	EDR Digital Archive

LONE TREE WAY 2014 (Cont'd)

7721	VELEZ, JOSE S
7731	ARELLANO, MARTIN
7765	OCCUPANT UNKNOWN,
7774	OCCUPANT UNKNOWN,
7801	STANCHINA, JUSTIN M
7840	DANNENBERG, HENRY J
7901	TOROS AUTO BODY SHOP
7920	MCGOVERAN, MARK E
7950	GUINN, SHAWN
7960	OCCUPANT UNKNOWN,
8011	OCCUPANT UNKNOWN,
	TYRRELLICUS USA
8020	OCCUPANT UNKNOWN,
8091	JONES, RUBY L
8131	HALFORD, STANLEY T
8145	MACHA, NICANOR
8153	CARDENAS, MARCELA
	GARCIA, MARIA
	GROSSE, LELAND J
	LOPEZ, ABRAHAM
	MARTINEZ, MARIO G
8193	TOMPKINS, VAL H
8215	BERNAL, ARMANDO B
8221	OCCUPANT UNKNOWN,
8261	OCCUPANT UNKNOWN,
8271	CRIST, ROYD
8281	OCCUPANT UNKNOWN,
8291	CHIRAYUNON, KRISTA J
	TROST TODD BBCAT DUMP TRCK SVC
8310	TORRES, EZEQUIEL J
8312	LANGE, CHEYENNE
8318	BECK, ROBIN R
8320	JENNIFER F BIRGE
	VILLASENOR, RODOLFO
8325	VILLICANA, PAUL J
8330	OROZCO, LUIS A
8331	MENDOZA, DANIEL
8335	MARTINEZ, MANUEL L
8340	BLOODWORTH, ALICE M
8350	WHITTERN, ROBERT W
8351	VILLEGAS, LUIS
8360	ORTIZ, AARON
8361	MONTES, ROBERTO
8370	DEPAZ, MAURICIO
	OPORTO TRUCKING INC
8371	OCCUPANT UNKNOWN,
8379	MCGRATH, THOMAS P
8383	LONE TREE DRIVE IN
8400	OCCUPANT UNKNOWN,
8401	CIRCLE E FOOD MART

Target Street	Cross Street	Source
✓	-	EDR Digital Archive

LONE TREE WAY 2014 (Cont'd)

8424	DRISKILL, MIKE W
	JOLENE DRISKILL
8438	KELLEY, TIMOTHY M
8452	AGUILERA, ENRIQUE
	REYES E CONST INC
8466	STERZL, ERIC F
8480	RIVERA, OZZIE
8494	FDRW INC
	LEBEC INC
	OCCUPANT UNKNOWN,
8508	HARTZELL, PEARLETTA
8522	GARLEY, CAROLYN
8524	RAY, JOHN A

Target Street	Cross Street	Source
✓	-	EDR Digital Archive

LONE TREE WAY 2010

5401	LONE TREE THAI CUISINE
	POONSUP INCORPORATED
5411	5 STAR WIRELESS
	CRAZY WIRELESS
	KINDERS CUSTOM MEATS INC
	TAVO INCORPORATED
	TAVOS PIZZERIA RESTAURANT
5421	BARBEQUES GALORE
	CITIFINANCIAL CREDIT COMPANY
	PLANET BEACH
5451	TRADER JOES COMPANY
5471	TWEEN BRANDS INC
5481	PETCO ANIMAL SUPS STORES INC
5501	MICHAELS STORES INC
5511	BRENTWOOD
	KOHLS CORPORATION
5521	TUESDAY MORNING CORPORATION
5541	3 DAY BLINDS CORPORATION
	EAST BAY INVESTMENT AND LN INC
	EVANS, ERIC
	FORECLOSURE FINDER TOURS LLC
	INTERO REAL ESTATE SERVIC
	JOHN-DOUGLAS GROUP INC
	MAVIN GROUP
	NATIONWIDE RE INVESTMENTS
5551	AMERICAS TIRE CO
	SOUTHERN CALIFDISCTTIRE COINC
5561	AARON BROTHERS INC
5571	SLEEP TRAIN INC
5591	CHEVRON CORPORATION
5601	AGUILAR 5 INC
	AT T CALIFORNIA
	G ANTHONY JEWELERS
	LIME WIRELESS LLC
	ORALE ORALE MEXICAN RESTAURANT
5611	ANGEL NAILS
	BIG REDS RESTAURANT INC
	CHOP STICK RESTAURANT
6021	EAST BAY EQUIES
6031	AISAN INTL COMMODITIES
	DEVI OIL INC
6041	CITIBANK NA
	OCCUPANT UNKNOWN,
	SCRUB MED MEDICAL SUPPLY
6048	BOBI VISION LLC
6051	CARVERY AT HARRYS HOFBRAU
6061	DJM RETAIL INC
	MICHAEL, MARINI
	PARK WAY CONSTRUCTION & A
6271	CENTURY NAIL

Target Street	Cross Street	Source
✓	-	EDR Digital Archive

LONE TREE WAY 2010 (Cont'd)

6271	EMS NAILS & SPA
	GOODWILL INDUSTRIES
6281	GOLDEN DRAGON BUFFET
	ZHENG INVESTMENT INC
6291	CARLS JR
6361	LES SCHWAB TIRE CTRS CAL INC
6367	MANCINIS SLEEPWORLD
6471	CELLCO PARTNERSHIP
	WINGSTOP
6481	B P WEST COAST PRODUCTS
6560	IYOGURT
	NATIONS FOODSERVICE INC
6570	WALGREEN CO
6580	MELOS PIZZA & PASTA
	ORBIUM INC
6590	FIRST BANK & TRUST COMPANY
6651	LIBERTY UNION SCHOOL DISTRICT
6660	CHARLEYS GRILL SUBS
	DJEIU, D
	OO&A INC
	QUICK CHECK
6670	RED RHINO ULTRA SPT BAR GRILL
6680	LISTEK ENTERPRISES INC
	STRAW HAT PIZZA RESTUARANT
6700	LEONARDIS PIZZA
	WINCO FOODS LLC
6720	OREILLY AUTOMOTIVE INC
6730	HORIZON GOLF
6836	FIRESTONE COMPLETE AUTO CARE
6900	ACORN 2 SELF STORAGE LLC
	WATERS, JACKIE
6935	LITTLE CEASARS PIZZA LONE TREE
	TRI CITY AUTO PLAZA INC
	VIZ CLEANERS
6945	BRENTWOOD AUTO SPA
	FAMERS INSURANCE
	OSMIS FLOWERS AND GIFT
7021	VALLEY OAK NURSERY INC
7161	BARRAGAN CANDE LARIO
7357	HINOJOS, ROSEMARY G
7451	SPINELLI, GUST
7510	FRIZZELL, DAVID B
7540	ONTIVEROS, JOHN
7560	TURCOTTE, DANIEL A
7570	PACIFIC COAST BACKHOE
	TURCOTTE DANIEL
7590	NICOLETTI, CATERINA
7600	OCCUPANT UNKNOWN,
7650	OCCUPANT UNKNOWN,
7701	BRODERICK, TIMOTHY S

Target Street	Cross Street	Source
✓	-	EDR Digital Archive

LONE TREE WAY 2010 (Cont'd)

7721	CLEOFAS, VELEZ J
7731	ARELLANO, MARTIN
7765	LAST, JEAN D
7772	HERNANDES CARLOS
7774	ACOSTA, EULOGIO
7786	ROBINSON, SUSANNE
7801	OCCUPANT UNKNOWN,
7840	DANNENBERG, HENRY J
7920	MCGOVERAN, MARK E
7950	HERRON, RONALD A
7951	PITTSBURG HOSE AND RUBBER
7960	OCCUPANT UNKNOWN,
8011	GARCIA, SYD E
8091	JONES, CHARLIE R
8131	HALFORD, STANLEY T
8145	MACHA, JHONNY
8153	HERAZ, HUMBERTO P
	LOPEZ, ABRAHAM
8193	TOMPKINS, VAL H
8211	OCCUPANT UNKNOWN,
8215	FIERROS, ELISABETH
8221	CABALLERO, JANET
8251	R R PROPERTIES
	RUDYS CUSTOM CONCRETE & STONE
8261	OCCUPANT UNKNOWN,
8271	TARIN, GILBERT F
8281	OCCUPANT UNKNOWN,
8291	CHIRAYUNON, KRISTA J
	TROST TODD BBCAT DUMP TRCK SVC
8310	OCCUPANT UNKNOWN,
8312	OCCUPANT UNKNOWN,
8318	BECK, KENNETH E
8320	JENNIFER F BIRGE
	VILLASENOR, RODOLFO
8321	ZBOYOVSKY, LISA
8325	ACCURATE LOCATING
	VILLICANA, PAUL J
8330	OROZCO, LUIS A
8331	MENDOZA, DANIEL
8335	MARTINEZ, AUDREY L
8340	BLOODWORTH, ALICE M
8350	WHITTERN, WAYNE D
8351	BARRERAS, JESSICA
8360	GARCIA, JOSUE A
8361	QUINTANILLA, HECTOR N
8370	DEPAZ, MAURICIO
8371	OCCUPANT UNKNOWN,
8379	OCCUPANT UNKNOWN,
8383	LONE TREE DRIVE IN
8400	OCCUPANT UNKNOWN,

Target Street	Cross Street	Source
✓	-	EDR Digital Archive

LONE TREE WAY 2010 (Cont'd)

8401	CIRCLE E FOOD MART
8424	DRISKILL, MIKE W
	JOLENE DRISKILL
8452	HORN, DAUL
8466	STERZL, JESS J
8480	RIVERA, OZZIE
8494	OCCUPANT UNKNOWN,
8508	HARTZELL, PEARL E
8522	CAPUDER, BRIAN
8524	PUTMAN, MELINDA A
	RAY MELINDA

Target Street	Cross Street	Source
✓	-	EDR Digital Archive

LONE TREE WAY 2005

754	PENA, NORMA
5481	PETCO 1311
5511	KOHLS DEPARTMENT STORES INC
5601	WSC FEDEX KINKOS CENTER
5631	HOME DEPOT USA INC
5641	SPORTMART INC
5779	STARBUCKS CORPORATION
6294	SLATTEN RANCH STORE
6390	DURAN & VENABLES INC
6481	AM/PM MINI MARKET
6531	VILLASENOR, JANET
6651	LIBERTY UNION SCHOOL DISTRICT
6670	MOSQUITO LOUNGE LLC
	REALTY WORLD PIGATI & RUSSL
6700	CERDA, LOURDES
	LEONARDIS PIZZA
	SOURCE REFRIGERATION HVAC
	WINCO FOODS LLC
6720	CSK AUTO INC
6730	DOLLARMANIA
	GOLF USA OF BRENTWOOD
	HORIZON GOLF
	NEW LIFE CLEANERS
6820	KILCREASE, DENISE
6860	OCCUPANT UNKNOWN,
6861	BRENTWOOD REGIONAL CMNTY CHEST
6900	ACORN 2 SELF STORAGE LLC
7021	VALLEY OAK NURSERY INC
7101	OCCUPANT UNKNOWN,
7151	CAMACHO, DANNY T
7161	BARRAGAN CANDE LARIO
	OCCUPANT UNKNOWN,
7281	JUSTICE RECOVERY SERVICES
7357	SPINELLI TRUCKING
7450	VILLARREAL, ROBERT D
7451	SPINELLI, GUSTAVO
7460	JOHNS, WAYNE A
	SERNA, RUDOLPH M
7510	FRIZZELL, DAVID B
7560	TURCOTTE, DANIEL A
7570	KERN, MICHELE J
7590	NICOLETTI, CATERINA
7600	OCCUPANT UNKNOWN,
7650	SANCHEZ, THOMAS
7700	FUJII, TAKUMA
7701	BRODERICK, CECILIA J
7721	VELEZ, JOSE S
7731	ONOFRE, ROBERTO
7765	LAST, JEAN D
7772	HERNANDES CARLOS

Target Street	Cross Street	Source
✓	-	EDR Digital Archive

LONE TREE WAY 2005 (Cont'd)

7774	REGALADO, GUADALUPE
7801	MCGUIRE, RAYMOND R
7831	KEARN RANCH INC
	PREWETT, EDWARD A
7840	DANNENBERG, HENRY J
7920	MCGOVERAN, JERRY L
7950	BOOKS BY BRISTER
	BRISTER, ROYCE R
	THERAPEUTIC INTEVENTIONS
7951	LAMPORT, GEORGE J
	PITTSBURG HOSE AND RUBBER
7960	GUZMAN, CARLOS J
8011	GARCIA, SYD E
8091	JONES, CHARLIE R
8120	ORDONIO, TEOFILO
8131	OCCUPANT UNKNOWN,
8145	MACHA, NICANOR
8153	GROSSE, LELAND J
8173	TOMPKINS, VAL H
8193	MEZA YARD MAINTENANCE
	RETANO, CONSUELO
8211	SALGADO, YANIRA
8215	BERNAL, BALBINA
8221	CABALLERO, JANET
8251	R BROTHERS CONCRETE INC
	R R PROPERTIES
	R TS CULTURAL ARTS
	RUBEN SALINAS
8261	OCCUPANT UNKNOWN,
8271	TARIN, GILBERT F
8281	OCCUPANT UNKNOWN,
8291	TROST TODD BBCAT DUMP TRCK SVC
	TROST, TODD
8310	TORRES, EZEKIEL
8318	BECK, KENNETH E
8320	ALVAREZ, ALEJANDRO
	DELTA SANDS FLORIST
	HEITMEYER ROBERT S
8321	NEGRON, NICHOLAS
8325	VILLICANA, PAUL
8330	OCCUPANT UNKNOWN,
8331	MENDOZA, MARY H
8335	MARTINEZ, AUDREY L
8340	BLOODWORTH, LE L
8350	WHITTERN, WAYNE D
8351	MAGANA, FRANCISCO J
8360	DOMINGUEZ, J
8361	QUINTANILLA, ANTEMIA T
8370	BELL, SCOTT
8371	OCCUPANT UNKNOWN,

Target Street	Cross Street	Source
✓	-	EDR Digital Archive

LONE TREE WAY 2005 (Cont'd)

8379	WILSON, GLORIA E
8383	LONE TREE DRIVE IN
8401	CIRCLE E FOOD MART
8424	DRISKILL, MIKE W
8438	KELLEY, TIMOTHY M
8452	SALMON, JAMES W
8466	STERZL, OWEN
8494	VILLEGAS, DAVID R
8508	HARTZELL, PEARL E
8522	PUTMAN, MYRON W
8524	OCCUPANT UNKNOWN, RAY MELINDA

Target Street	Cross Street	Source
✓	-	EDR Digital Archive

LONE TREE WAY 2000

6294	BARNES BOBBY
	ELLINGSON, MELODY M
	SLATTEN RANCH STORE
6361	NOBRIGAS UPHOLSTERY
	OCCUPANT UNKNOWN,
6401	ROENICKE, ROBERT W
6531	VILLASENOR, JANET
6561	DEMARTINI, RUSSELL A
6651	LIBERTY UNION SCHOOL DISTRICT
6685	LEE, ARNOLD
6691	LEE, ARNOLD
6700	OCCUPANT UNKNOWN,
6820	OCCUPANT UNKNOWN,
6860	URMENETA, DANA L
6861	PIERCE, ROSE M
6890	LOPEZ, JOHN
6901	LIMA, JOE
6910	LOPEZ, TONY
6921	SMITH, AMELIA L
7020	GLASS GUYS
	OCCUPANT UNKNOWN,
7021	BACKYARD FACTORY
	VALLEY OAK NURSERY INC
7101	PEREZ, MATTIE L
7131	OCCUPANT UNKNOWN,
7151	OCCUPANT UNKNOWN,
7170	SHIROYAMA, Y J
7281	JIM COOPERS PROPELLER REP
	OCCUPANT UNKNOWN,
7357	SPINELLI TRUCKING
7450	OCCUPANT UNKNOWN,
7451	SPINELLI, GUSTAVO
7560	REGAN, TIMOTHY
7570	OCCUPANT UNKNOWN,
	TURCOTTE DANIEL
7590	NICOLETTI, C
7600	OCCUPANT UNKNOWN,
7650	SANCHEZ, MICHAEL
7701	BRODERICK, CECELIA J
7721	OCCUPANT UNKNOWN,
7731	OCCUPANT UNKNOWN,
7765	LAST CHARLES
	LAST, CHARLES B
	VONFORSTMEYER, M R
7770	DELTA SQUARE DANCERS OF E
	OCCUPANT UNKNOWN,
7772	FIJII TAK
7774	FLORES, REBECA
7801	OCCUPANT UNKNOWN,
7831	OCCUPANT UNKNOWN,

Target Street	Cross Street	Source
✓	-	EDR Digital Archive

LONE TREE WAY 2000 (Cont'd)

7840	DANNENBERG, HENRY J
7901	ANGELES, MARTIN
7920	NICHOLAS, CRAIG A
7950	BRISTER, ROYCE
7951	LAMPORT, GEORGE J
	PITTSBURG HOSE AND RUBBER
7960	OCCUPANT UNKNOWN,
8001	SHAVER, JERRY
8011	GARCIA, SYDNEY E
8020	OCCUPANT UNKNOWN,
8031	OCCUPANT UNKNOWN,
8091	JONES, CHARLIE R
8120	BERNAL, ARMANDO
	BROWNLEE, ALEX
	DE FREMERY J FARM
	DEFREMERY, JAMES
	DORNSELD, JOANNE
8131	HALFORD, NAOMA A
8145	OCCUPANT UNKNOWN,
8193	HERNANDEZ, ARACELI
	MEZA, MANUEL
8215	BERNAL, ARMANDO
8251	HERNANDEZAVALOS, FELIPE
	R BROTHERS CONCRETE INC
8261	OCCUPANT UNKNOWN,
8271	OCCUPANT UNKNOWN,
8291	TROST TODD BBCAT DUMP TRCK SVC
	TROST, TODD
8310	KLIENE, ALBERT A
8318	OCCUPANT UNKNOWN,
8320	DELTA SANDS FLORIST
	HEITMEYER, ROBERT S
	SDC SITE DEVELOPMENT CONSLTS
8321	MCCULLOUGH, ANNETTE
8325	LUNA, ANTONIO
8330	OROZCO, LOUIS
8340	BLOODWORTH, LE E
8350	OCCUPANT UNKNOWN,
8351	MAGANA, F J
8361	OCCUPANT UNKNOWN,
8370	BEST, BREANNA M
8371	OCCUPANT UNKNOWN,
8383	LONE TREE DRIVE IN
8424	DRISKILL, MICHAEL
8438	KELLEY, TIMOTHY M
8452	OCCUPANT UNKNOWN,
8466	OCCUPANT UNKNOWN,
8480	OCCUPANT UNKNOWN,
8494	OCCUPANT UNKNOWN,
8508	OCCUPANT UNKNOWN,

Target Street	Cross Street	Source
✓	-	EDR Digital Archive

LONE TREE WAY 2000 (Cont'd)

8522 CAPUDER, A M

Target Street	Cross Street	Source
✓	-	EDR Digital Archive

LONE TREE WAY 1995

763	R BROS CONCRETE
6294	SLATTEN RANCH STORE
6361	NOBRIGAS UPHOLSTERY
6651	LIBERTY UNION SCHOOL DISTRICT
7021	VALLEY OAK NURSERY INC
7570	TURCOTTE DANIEL
7772	ASAHI NURSERY
7951	PITTSBURG HOSE AND RUBBER
8251	R BROTHERS CONCRETE
8291	TODD TROST BBCAT DUMP TRCK SVC
8320	SDC SITE DEVELOPMENT CONSLTS

Target Street	Cross Street	Source
✓	-	EDR Digital Archive

LONE TREE WAY 1992

225	EAST COUNTY HEAD START CENTER
753	HURTADO, O R
754	GROSSE, LELAND
763	R BROS CONCRETE
787	MELGOZA, B
6221	MARCHANT, WILLIAM T
6294	SLATTEN RANCH STORE
6531	SMITH, ROBERT D
6561	DEMARTINI, RUSSELL A
6651	LIBERTY UNION HIGH SCHOOL DST
6691	LEE, ARNOLD
6820	PIERCE, M F
6910	LOPEZ, TONY
7021	VALLEY OAK NURSERY INC
7570	TURCOTTE TRUCKING
7731	KELLY, ALLAN F
7772	ASAHI NURSERY
7831	PREWETT, EDWARD A
7840	DANNENBERG, HENRY J
8120	DEFREMERY, JAMES
8251	R BROTHERS CONCRETE
8310	KLIENE, ALBERT A
8340	BLOODWORTH, L E
8350	WHITTERN, WAYNE D
8424	DRISKILL, MICHAEL
8452	CHAMPMAN, DEWEY

Lone Tree Way

LONE TREE WAY

BRENTWOOD, CA 94513

Inquiry Number: 5631677.3

April 24, 2019

Certified Sanborn® Map Report

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

Certified Sanborn® Map Report

04/24/19

Site Name:	Client Name:
Lone Tree Way	TRC
LONE TREE WAY	505 Sansome Street Suite 1600
BRENTWOOD, CA 94513	San Francisco, CA 94111
EDR Inquiry # 5631677.3	Contact: Glenn Young

The Sanborn Library has been searched by EDR and maps covering the target property location as provided by TRC were identified for the years listed below. The Sanborn Library is the largest, most complete collection of fire insurance maps. The collection includes maps from Sanborn, Bromley, Perris & Browne, Hopkins, Barlow, and others. Only Environmental Data Resources Inc. (EDR) is authorized to grant rights for commercial reproduction of maps by the Sanborn Library LLC, the copyright holder for the collection. Results can be authenticated by visiting www.edrnet.com/sanborn.

The Sanborn Library is continually enhanced with newly identified map archives. This report accesses all maps in the collection as of the day this report was generated.

Certified Sanborn Results:

Certification # C355-4D45-AE3B

PO # 338571

Project Lone Tree Way, Brentwood

UNMAPPED PROPERTY

This report certifies that the complete holdings of the Sanborn Library, LLC collection have been searched based on client supplied target property information, and fire insurance maps covering the target property were not found.

Sanborn® Library search results

Certification #: C355-4D45-AE3B

The Sanborn Library includes more than 1.2 million fire insurance maps from Sanborn, Bromley, Perris & Browne, Hopkins, Barlow and others which track historical property usage in approximately 12,000 American cities and towns. Collections searched:

- ✔ Library of Congress
- ✔ University Publications of America
- ✔ EDR Private Collection

The Sanborn Library LLC Since 1866™

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APPENDIX D:
PHOTOGRAPH LOG

Photo #1: Valley Oak Nursery located west of Site.

Photo #2: View of Site looking west from northeastern corner of the Site.

Photo #3: View of overhead pwer lines looking west alone Lone Tree Way.

Photo #4: View of Site looking east from northwestern corner of the Site.

Photo #5: View of adjacent property to the west.

Photo #6: View of dilapidated fence on adjacent property to the west.

Photo #7: View of southern property line looking easterd along Double K Road.

Photo #9: View of Site looking north from southern property line.

Photo #10: View of Skipolini Property immediately east of the Site.

Photo #10: View of undeveloped land south of the Site with possible pump house.

Photo #11: Entrance to residential neighborhood north of Site.

Photo #12: View of Site looking southward along eastern property line.

APPENDIX E:
OTHER REFERENCE INFORMATION

CONTRA COSTA
ENVIRONMENTAL HEALTH DIVISION

CONTRA COSTA HEALTH SERVICES

2120 DIAMOND BLVD. SUITE 200. CONCORD. CA 94520-5704
(925) 692-2500 FAX (925) 692-2502 www.cchealth.org/eh/

Soil Boring Permit

Permit Number: 0025857 PE Number: 4301

Date Received: April 25, 2019 WP Number: WP0025857

Issued By: ROBERT GRIBBEN Date Issued: 01-May-2019 Date Expires: 02-Nov-2019

Intended Use: SOIL BORING # of Borings or Well ID: 2 BORINGS

The issuance of this permit by Contra Costa County Environmental Health Division does not guarantee a satisfactory and an indefinite operation of any well. Permit expires in 180 calendar days from date of approval. Permits are non-transferable, and can be suspended or revoked. If more time is required for the project, a time extension may be granted if reasons warrant it in writing.

Project Site Information

Site Address: LONE TREE WY., BRENTWOOD
APN: 018 080 025 Lot/Parcel #:
Subdivisioin #: Minor Subdivision #:

Driller/Consultant Information

Driller: EXPLORATION GEOSERVICES INC Contact Person: JOHN COLLINS
Phone #: 408-280-6822 E-Mail or Fax#: john@explorationgeo.com
Consultant: TRC SOLUTIONS, INC. Contact Person: ALBERT CORTEZ
Phone #: 650-444-0629 E-Mail or Fax#: acortez@trcsolutions.com

Legal Owner Information

Property Owner: CYRUS LAND INVESTMENTS, LLC Responsible Party: SAME AS OWNER
Owner Address: 4021 PORT CHICAGO HWY Address:
City/State/Zip: CONCORD, CA 94520 City/State/Zip:
Phone #: 925-671-7711 Phone #: Not Specified

Prior to any drilling construction or destruction of a well, requests for inspection appointment must be received 48 hours in advance (excluding weekends, holidays, and Mandatory County Furlough Days) by faxing your written request to (925) 692-2502 or e-mail to ehlu@.cchealth.org. Voice mail messages are not acceptable.

Well drillers must possess a valid C-57 license and must have on file a performance bond of $5,000.00 with Contra Costa County before commencing with any well construction, destruction or repairs.

Soil Boring Permit Conditions:

1. Soil Boring shall be destroyed pursuant to County regulations within 30 days of completing monitoring activities.
2. _____
3. _____

Final Approval by: _____ Date: _____

CONTRA COSTA HEALTH SERVICES

CONTRA COSTA COUNTY
ENVIRONMENTAL HEALTH DIVISION
2120 DIAMOND BOULEVARD, SUITE 200
CONCORD CA 94520
Phone (925) 692-2500 Fax (925) 692-2504 www.cchealth.org/eh

CCEH
APR 25 2019
REC'D

SOIL BORING PERMIT APPLICATION

ONE APPLICATION PER PARCEL & TYPE OF WORK

TYPE OF WORK:

- ☒ Soil Boring (01)
- ☐ Soil Boring 11+ (03)
- ☐ CPT (53)
- ☐ CPT 11+ (55)
- ☐ Inclinometer (52)
- ☐ Soil Vapor Probe (02)
- ☐ Soil Vapor Probe 11+ (04)
- ☐ Piezometer w/o casing (66)
- ☐ Piezometer w/o casing 11+ (76)

PLEASE PRINT CLEARLY. * REQUIRED FIELD MUST BE COMPLETED. INCOMPLETE APPLICATIONS WILL BE REJECTED.
THE APPLICATION IS NOT THE PERMIT. ALLOW 5-7 WORKING DAYS FOR PROCESSING.

LEGAL OWNER INFORMATION

*Legal Property Owner/Responsible Party: Cyrus Land Investments, LLC / Seeno Construction Co, Inc.		
*Address: 4021 Port Chicago Highway, Suite H		Phone Number: 925-766-5769
*City: Concord	State: California	Zip code: 94520
*Legal Property Owner (if different from Responsible Party): Same as above	Address/City/State/Zip Code:	
* Site Address (if different from owner address): Lone Tree Way, Brentwood, California		
*Assessor's Parcel Number: 018-080-025	Subdivision/Minor Subdivision #:	Lot/Parcel Number:
*On-site Contact Name: Alberto Cortez	*On-site Contact Cell Number: 650-444-0629	

LICENSED DRILLER INFORMATION

*Business Name: Exploration GeoServices, Inc.	*Contact Name: John Collins	*Business Phone: 408-280-6822
*Mailing Address: 1535 Industrial Ave, San Jose, CA 95112	*C-57 License Number: 484288	Email Address: john@explorationgeo.com

CONSULTANT/ENGINEER INFORMATION

*Business Name: TRC Solutions, Inc.	*Contact Name: Alberto Cortez	*Business Phone: 650-444-0629
*Mailing Address: 1920 Old Middlefield Way, Mountain View, CA 94303	Email Address: acortez@trcsolutions.com	

CONSTRUCTION/DESTRUCTION SPECIFICATIONS

Number of Borings:	Borehole Diameter:	Boring Depth: (b.g.s):	Method of Drilling/Destruction/Other:	Proposed Drill Date(s):
Two (2)	(8) inches	30 feet	Hollow-Stem Auger	May 10, 2019

Type of Material for annular seal/destruction (specify mix or product): ☐ Bentonite ☐ Concrete ☒ Cement **(Bentonite chips for transition seal only)**

☒ PLOT MAP ☒ HEALTH & SAFETY PLAN ☐ ENCROACHMENT PERMIT (If in right of way) ☐ RIGHT OF ACCESS AGREEMENT

PERFORMANCE BOND REQUIREMENT: Contra Costa County Ordinance, Title 4 Health and Safety, Article 414-4.10; Section 414-4.1023(a) Prior to the issuance of a permit, the applicant shall post with the health officer a cash deposit or bond guaranteeing compliance with the terms of this chapter and the applicable permit, such bond to be in an amount deemed necessary by the health officer to remedy improper work but not in excess of five thousand dollars.

I hereby certify that the above information and submitted plans are true and correct and that the proposed work will comply with all permit conditions and applicable laws and regulations. I agree to obtain all required inspections, maintain a copy of the approved permit and plans at the job site until final approval, and obtain written authorization prior to deviating from the approved permit or plans.

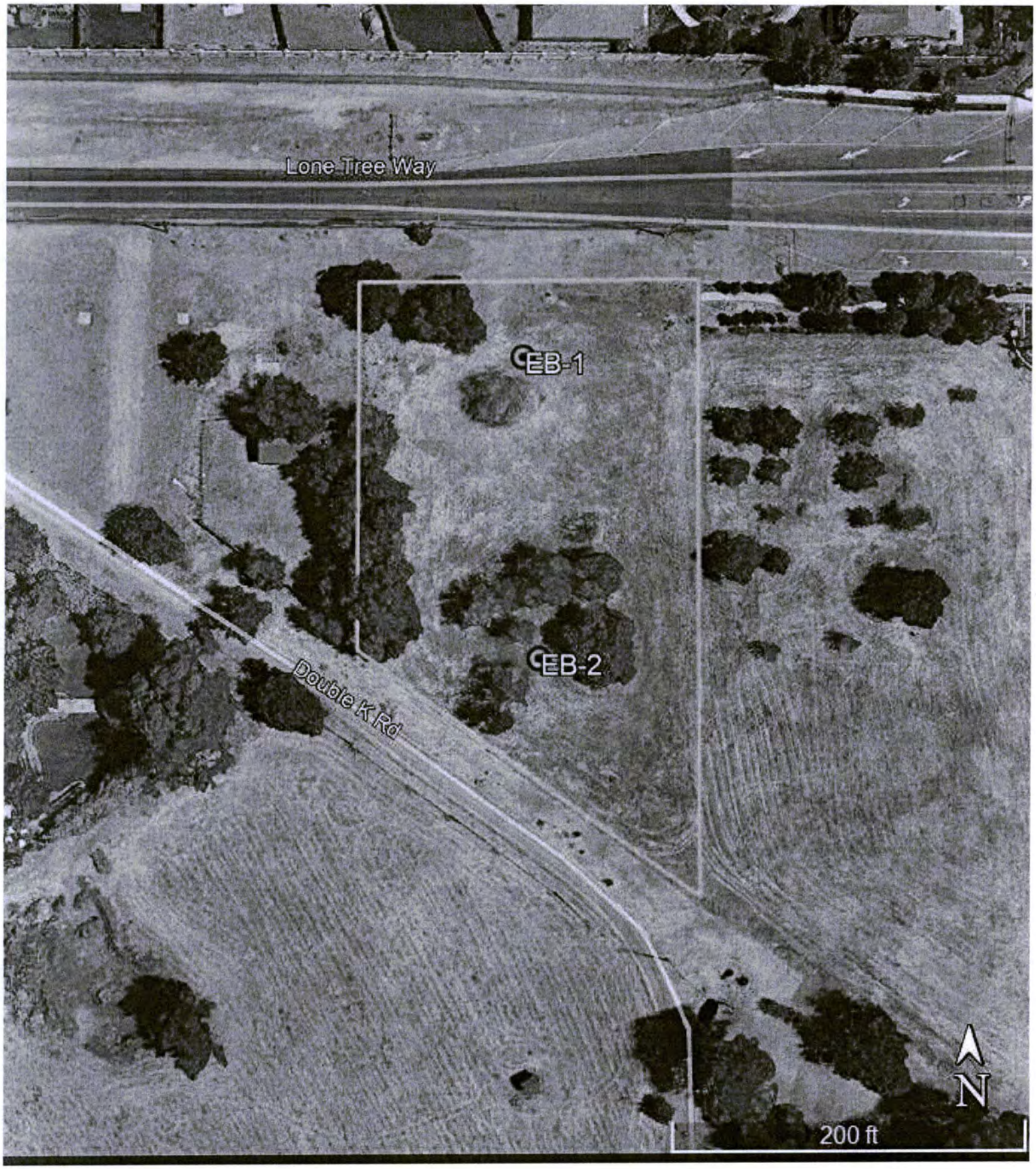
Signature of C-57 Licensed Driller

Date: 04/24/19

FOR OFFICE USE ONLY

FA#: 43031	Permit #: 25857	P/E: 43 01	WP #:	DATE RECEIVED: 4.25.19	REHS: RG	SUPERVISOR: JW
AMOUNT DUE: $ 560.50	AMOUNT PAID: $ 560.50	CHECK #:		CASH CREDIT CARD: ☐ MC ☒ VISA		XR 120511
INITIAL:	DATE APPROVED: 5-1-19	☐ CONDITIONS				

AR 46015


Lone Tree Way
EB-1
EB-2
Double K Rd
N
200 ft

APPENDIX F:
LABORATORY ANALYTICAL REPORTS

McCampbell Analytical, Inc.

"When Quality Counts"

Analytical Report

WorkOrder: 1906C96

Report Created for: TRC

2300 Clayton Road, Suite 610
Concord, CA 94520

Project Contact: Glenn Young
Project P.O.: 338571.1
Project: Lone Tree Way

Project Received: 06/26/2019

Analytical Report reviewed & approved for release on 07/05/2019 by:

Yen Cao
Project Manager

The report shall not be reproduced except in full, without the written approval of the laboratory. The analytical results relate only to the items tested. Results reported conform to the most current NELAP standards, where applicable, unless otherwise stated in the case narrative.

1534 Willow Pass Rd. Pittsburg, CA 94565 ♦ TEL: (877) 252-9262 ♦ FAX: (925) 252-9269 ♦ www.mccampbell.com
CA ELAP 1644 ♦ NELAP 4033 ORELAP

McCampbell Analytical, Inc.
"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

Glossary of Terms & Qualifier Definitions

Client: TRC
Project: Lone Tree Way
WorkOrder: 1906C96

Glossary Abbreviation

%D	Serial Dilution Percent Difference
95% Interval	95% Confident Interval
DF	Dilution Factor
DI WET	(DISTLC) Waste Extraction Test using DI water
DISS	Dissolved (direct analysis of 0.45 µm filtered and acidified water sample)
DLT	Dilution Test (Serial Dilution)
DUP	Duplicate
EDL	Estimated Detection Limit
ERS	External reference sample. Second source calibration verification.
ITEF	International Toxicity Equivalence Factor
LCS	Laboratory Control Sample
MB	Method Blank
MB % Rec	% Recovery of Surrogate in Method Blank, if applicable
MDL	Method Detection Limit
ML	Minimum Level of Quantitation
MS	Matrix Spike
MSD	Matrix Spike Duplicate
N/A	Not Applicable
ND	Not detected at or above the indicated MDL or RL
NR	Data Not Reported due to matrix interference or insufficient sample amount.
PDS	Post Digestion Spike
PDSD	Post Digestion Spike Duplicate
PF	Prep Factor
RD	Relative Difference
RL	Reporting Limit (The RL is the lowest calibration standard in a multipoint calibration.)
RPD	Relative Percent Deviation
RRT	Relative Retention Time
SPK Val	Spike Value
SPKRef Val	Spike Reference Value
SPLP	Synthetic Precipitation Leachate Procedure
ST	Sorbent Tube
TCLP	Toxicity Characteristic Leachate Procedure
TEQ	Toxicity Equivalents
TZA	TimeZone Net Adjustment for sample collected outside of MAI's UTC.
WET (STLC)	Waste Extraction Test (Soluble Threshold Limit Concentration)

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Glossary of Terms & Qualifier Definitions

Client: TRC
Project: Lone Tree Way
WorkOrder: 1906C96

Analytical Qualifiers

P	Agreement between quantitative confirmation results exceed method recommended limits

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Analytical Report

Client:	TRC	**WorkOrder:**	1906C96
Date Received:	6/26/19 13:03	**Extraction Method:**	SW3550B/3640Am/3630Cm
Date Prepared:	6/27/19	**Analytical Method:**	SW8081A
Project:	Lone Tree Way	**Unit:**	mg/kg

Organochlorine Pesticides

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
S1-0	**1906C96-001A**	**Soil**	**06/26/2019 11:43**	**GC23 06271942.d**	**180506**

Analytes	Result	Qualifiers	RL	DF	Date Analyzed
Aldrin	ND		0.00010	1	06/28/2019 03:15
a-BHC	ND		0.00010	1	06/28/2019 03:15
b-BHC	ND		0.00030	1	06/28/2019 03:15
d-BHC	ND		0.00020	1	06/28/2019 03:15
g-BHC	ND		0.00010	1	06/28/2019 03:15
Chlordane (Technical)	ND		0.0025	1	06/28/2019 03:15
a-Chlordane	ND		0.00010	1	06/28/2019 03:15
g-Chlordane	**0.00022**	P	0.00010	1	06/28/2019 03:15
p,p-DDD	**0.00033**		0.00010	1	06/28/2019 03:15
p,p-DDE	**0.061**		0.0010	10	06/28/2019 21:53
p,p-DDT	**0.0078**		0.00010	1	06/28/2019 03:15
Dieldrin	**0.00037**		0.00010	1	06/28/2019 03:15
Endosulfan I	**0.00012**		0.00010	1	06/28/2019 03:15
Endosulfan II	ND		0.00010	1	06/28/2019 03:15
Endosulfan sulfate	ND		0.00010	1	06/28/2019 03:15
Endrin	ND		0.00010	1	06/28/2019 03:15
Endrin aldehyde	ND		0.00010	1	06/28/2019 03:15
Endrin ketone	ND		0.00010	1	06/28/2019 03:15
Heptachlor	ND		0.00010	1	06/28/2019 03:15
Heptachlor epoxide	ND		0.00010	1	06/28/2019 03:15
Hexachlorobenzene	ND		0.0010	1	06/28/2019 03:15
Hexachlorocyclopentadiene	ND		0.0020	1	06/28/2019 03:15
Methoxychlor	ND		0.00020	1	06/28/2019 03:15
Toxaphene	ND		0.0050	1	06/28/2019 03:15

Surrogates	REC (%)	Limits	
Decachlorobiphenyl	81	20-145	06/28/2019 03:15

Analyst(s): LT

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Analytical Report

Client:	TRC	**WorkOrder:**	1906C96
Date Received:	6/26/19 13:03	**Extraction Method:**	SW3550B/3640Am/3630Cm
Date Prepared:	6/27/19	**Analytical Method:**	SW8081A
Project:	Lone Tree Way	**Unit:**	mg/kg

Organochlorine Pesticides

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
S2-0	**1906C96-003A**	**Soil**	**06/26/2019 11:54**	**GC23 06271943.d**	**180506**

Analytes	Result	Qualifiers	RL	DF	Date Analyzed
Aldrin	ND		0.00010	1	06/28/2019 03:30
a-BHC	ND		0.00010	1	06/28/2019 03:30
b-BHC	ND		0.00030	1	06/28/2019 03:30
d-BHC	ND		0.00020	1	06/28/2019 03:30
g-BHC	ND		0.00010	1	06/28/2019 03:30
Chlordane (Technical)	ND		0.0025	1	06/28/2019 03:30
a-Chlordane	ND		0.00010	1	06/28/2019 03:30
g-Chlordane	ND		0.00010	1	06/28/2019 03:30
p,p-DDD	ND		0.00010	1	06/28/2019 03:30
p,p-DDE	**0.042**		0.0010	10	06/28/2019 22:08
p,p-DDT	**0.0056**		0.00010	1	06/28/2019 03:30
Dieldrin	**0.00025**		0.00010	1	06/28/2019 03:30
Endosulfan I	**0.00015**	P	0.00010	1	06/28/2019 03:30
Endosulfan II	**0.00017**		0.00010	1	06/28/2019 03:30
Endosulfan sulfate	ND		0.00010	1	06/28/2019 03:30
Endrin	ND		0.00010	1	06/28/2019 03:30
Endrin aldehyde	ND		0.00010	1	06/28/2019 03:30
Endrin ketone	ND		0.00010	1	06/28/2019 03:30
Heptachlor	ND		0.00010	1	06/28/2019 03:30
Heptachlor epoxide	ND		0.00010	1	06/28/2019 03:30
Hexachlorobenzene	ND		0.0010	1	06/28/2019 03:30
Hexachlorocyclopentadiene	ND		0.0020	1	06/28/2019 03:30
Methoxychlor	ND		0.00020	1	06/28/2019 03:30
Toxaphene	ND		0.0050	1	06/28/2019 03:30

Surrogates	REC (%)	Limits	
Decachlorobiphenyl	85	20-145	06/28/2019 03:30

Analyst(s): LT

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Analytical Report

Client:	TRC	**WorkOrder:**	1906C96
Date Received:	6/26/19 13:03	**Extraction Method:**	SW3550B/3640Am/3630Cm
Date Prepared:	6/27/19	**Analytical Method:**	SW8081A
Project:	Lone Tree Way	**Unit:**	mg/kg

Organochlorine Pesticides

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
S3-0	**1906C96-005A**	**Soil**	**06/26/2019 12:04**	**GC23 06271944.d**	**180506**

Analytes	Result	Qualifiers	RL	DF	Date Analyzed
Aldrin	ND		0.00010	1	06/28/2019 03:46
a-BHC	ND		0.00010	1	06/28/2019 03:46
b-BHC	ND		0.00030	1	06/28/2019 03:46
d-BHC	ND		0.00020	1	06/28/2019 03:46
g-BHC	ND		0.00010	1	06/28/2019 03:46
Chlordane (Technical)	ND		0.0025	1	06/28/2019 03:46
a-Chlordane	ND		0.00010	1	06/28/2019 03:46
g-Chlordane	**0.00041**	P	0.00010	1	06/28/2019 03:46
p,p-DDD	ND		0.00010	1	06/28/2019 03:46
p,p-DDE	**0.094**		0.0010	10	06/28/2019 22:24
p,p-DDT	**0.010**		0.00010	1	06/28/2019 03:46
Dieldrin	**0.00023**		0.00010	1	06/28/2019 03:46
Endosulfan I	**0.00022**		0.00010	1	06/28/2019 03:46
Endosulfan II	ND		0.00010	1	06/28/2019 03:46
Endosulfan sulfate	ND		0.00010	1	06/28/2019 03:46
Endrin	**0.00021**		0.00010	1	06/28/2019 03:46
Endrin aldehyde	ND		0.00010	1	06/28/2019 03:46
Endrin ketone	ND		0.00010	1	06/28/2019 03:46
Heptachlor	ND		0.00010	1	06/28/2019 03:46
Heptachlor epoxide	ND		0.00010	1	06/28/2019 03:46
Hexachlorobenzene	ND		0.0010	1	06/28/2019 03:46
Hexachlorocyclopentadiene	ND		0.0020	1	06/28/2019 03:46
Methoxychlor	ND		0.00020	1	06/28/2019 03:46
Toxaphene	ND		0.0050	1	06/28/2019 03:46

Surrogates	REC (%)	Limits	
Decachlorobiphenyl	91	20-145	06/28/2019 03:46

Analyst(s): LT

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Analytical Report

Client:	TRC	**WorkOrder:**	1906C96
Date Received:	6/26/19 13:03	**Extraction Method:**	SW3050B
Date Prepared:	6/26/19-7/3/19	**Analytical Method:**	SW6020
Project:	Lone Tree Way	**Unit:**	mg/Kg

Arsenic

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
S1-0	**1906C96-001A**	**Soil**	**06/26/2019 11:43**	**ICP-MS3 073SMPL.D**	**180389**

Analytes	Result	RL	DF	Date Analyzed
Arsenic	**7.2**	0.50	1	06/27/2019 17:04

Surrogates	REC (%)	Limits	
Terbium	98	70-130	06/27/2019 17:04

Analyst(s): MIG

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
S2-0	**1906C96-003A**	**Soil**	**06/26/2019 11:54**	**ICP-MS2 058SMPL.D**	**180926**

Analytes	Result	RL	DF	Date Analyzed
Arsenic	**7.1**	0.50	1	07/05/2019 16:47

Surrogates	REC (%)	Limits	
Terbium	108	70-130	07/05/2019 16:47

Analyst(s): ND

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
S3-0	**1906C96-005A**	**Soil**	**06/26/2019 12:04**	**ICP-MS3 074SMPL.D**	**180389**

Analytes	Result	RL	DF	Date Analyzed
Arsenic	**9.1**	0.50	1	06/27/2019 17:10

Surrogates	REC (%)	Limits	
Terbium	96	70-130	06/27/2019 17:10

Analyst(s): MIG

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Analytical Report

Client:	TRC	**WorkOrder:**	1906C96
Date Received:	6/26/19 13:03	**Extraction Method:**	SW3050B
Date Prepared:	6/26/19	**Analytical Method:**	SW6020
Project:	Lone Tree Way	**Unit:**	mg/Kg

Lead

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
S1-2	1906C96-002A	Soil	06/26/2019 11:51	ICP-MS2 236SMPL.D	180389

Analytes	Result	RL	DF	Date Analyzed
Lead	**14**	0.50	1	06/27/2019 15:36

Surrogates	REC (%)	Limits	
Terbium	113	70-130	06/27/2019 15:36

Analyst(s): MIG

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
S2-2	1906C96-004A	Soil	06/26/2019 12:00	ICP-MS2 237SMPL.D	180389

Analytes	Result	RL	DF	Date Analyzed
Lead	**8.7**	0.50	1	06/27/2019 15:42

Surrogates	REC (%)	Limits	
Terbium	106	70-130	06/27/2019 15:42

Analyst(s): MIG

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
S3-2	1906C96-006A	Soil	06/26/2019 12:12	ICP-MS3 080SMPL.D	180389

Analytes	Result	RL	DF	Date Analyzed
Lead	**8.9**	0.50	1	06/27/2019 17:46

Surrogates	REC (%)	Limits	
Terbium	99	70-130	06/27/2019 17:46

Analyst(s): ND

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
S4-0	1906C96-007A	Soil	06/26/2019 09:52	ICP-MS3 081SMPL.D	180389

Analytes	Result	RL	DF	Date Analyzed
Lead	**39**	0.50	1	06/27/2019 17:52

Surrogates	REC (%)	Limits	
Terbium	101	70-130	06/27/2019 17:52

Analyst(s): ND

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Analytical Report

Client:	TRC	**WorkOrder:**	1906C96
Date Received:	6/26/19 13:03	**Extraction Method:**	SW3050B
Date Prepared:	6/26/19	**Analytical Method:**	SW6020
Project:	Lone Tree Way	**Unit:**	mg/Kg

Lead

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
S5-0	1906C96-009A	Soil	06/26/2019 10:01	ICP-MS3 082SMPL.D	180389

Analytes	Result	RL	DF	Date Analyzed
Lead	**20**	0.50	1	06/27/2019 17:58

Surrogates	REC (%)	Limits	
Terbium	98	70-130	06/27/2019 17:58

Analyst(s): ND

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
S6-0	1906C96-011A	Soil	06/26/2019 11:12	ICP-MS2 190SMPL.D	180407

Analytes	Result	RL	DF	Date Analyzed
Lead	**18**	0.50	1	06/27/2019 10:53

Surrogates	REC (%)	Limits	
Terbium	100	70-130	06/27/2019 10:53

Analyst(s): ND

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
S7-0	1906C96-013A	Soil	06/26/2019 11:01	ICP-MS3 083SMPL.D	180407

Analytes	Result	RL	DF	Date Analyzed
Lead	**18**	0.50	1	06/27/2019 18:04

Surrogates	REC (%)	Limits	
Terbium	98	70-130	06/27/2019 18:04

Analyst(s): ND

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
S8-0	1906C96-015A	Soil	06/26/2019 10:52	ICP-MS2 238SMPL.D	180407

Analytes	Result	RL	DF	Date Analyzed
Lead	**13**	0.50	1	06/27/2019 15:48

Surrogates	REC (%)	Limits	
Terbium	106	70-130	06/27/2019 15:48

Analyst(s): MIG

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Analytical Report

Client:	TRC	**WorkOrder:**	1906C96
Date Received:	6/26/19 13:03	**Extraction Method:**	SW3050B
Date Prepared:	6/26/19	**Analytical Method:**	SW6020
Project:	Lone Tree Way	**Unit:**	mg/Kg

Lead

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
S9-0	**1906C96-017A**	**Soil**	**06/26/2019 11:31**	**ICP-MS3 084SMPL.D**	**180407**

Analytes	Result	RL	DF	Date Analyzed
Lead	**24**	0.50	1	06/27/2019 18:10

Surrogates	REC (%)	Limits	
Terbium	99	70-130	06/27/2019 18:10

Analyst(s): ND

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Quality Control Report

Client:	TRC	**WorkOrder:**	1906C96
Date Prepared:	6/27/19	**BatchID:**	180506
Date Analyzed:	6/27/19 - 6/28/19	**Extraction Method:**	SW3550B/3640Am/3630Cm
Instrument:	GC23	**Analytical Method:**	SW8081A
Matrix:	Soil	**Unit:**	mg/kg
Project:	Lone Tree Way	**Sample ID:**	MB/LCS/LCSD-180506

QC Summary Report for SW8081A/8082

Analyte	MB Result	MDL	RL	SPK Val	MB SS %REC	MB SS Limits
Aldrin	ND	0.000036	0.00010	-	-	-
a-BHC	ND	0.000025	0.00010	-	-	-
b-BHC	ND	0.00025	0.00030	-	-	-
d-BHC	ND	0.00013	0.00020	-	-	-
g-BHC	ND	0.000066	0.00010	-	-	-
Chlordane (Technical)	ND	0.00043	0.0025	-	-	-
a-Chlordane	ND	0.000095	0.00010	-	-	-
g-Chlordane	ND	0.000047	0.00010	-	-	-
p,p-DDD	ND	0.000043	0.00010	-	-	-
p,p-DDE	ND	0.000094	0.00010	-	-	-
p,p-DDT	ND	0.000092	0.00010	-	-	-
Dieldrin	ND	0.000061	0.00010	-	-	-
Endosulfan I	ND	0.000048	0.00010	-	-	-
Endosulfan II	ND	0.000076	0.00010	-	-	-
Endosulfan sulfate	ND	0.000078	0.00010	-	-	-
Endrin	ND	0.000035	0.00010	-	-	-
Endrin aldehyde	ND	0.000067	0.00010	-	-	-
Endrin ketone	ND	0.000084	0.00010	-	-	-
Heptachlor	ND	0.000040	0.00010	-	-	-
Heptachlor epoxide	ND	0.000054	0.00010	-	-	-
Hexachlorobenzene	ND	0.00011	0.0010	-	-	-
Hexachlorocyclopentadiene	ND	0.00034	0.0020	-	-	-
Methoxychlor	ND	0.00013	0.00020	-	-	-
Toxaphene	ND	0.0034	0.0050	-	-	-
Surrogate Recovery						
Decachlorobiphenyl	0.0050			0.0050	100	28-170

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Quality Control Report

Client:	TRC	**WorkOrder:**	1906C96
Date Prepared:	6/27/19	**BatchID:**	180506
Date Analyzed:	6/27/19 - 6/28/19	**Extraction Method:**	SW3550B/3640Am/3630Cm
Instrument:	GC23	**Analytical Method:**	SW8081A
Matrix:	Soil	**Unit:**	mg/kg
Project:	Lone Tree Way	**Sample ID:**	MB/LCS/LCSD-180506

QC Summary Report for SW8081A/8082

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
Aldrin	0.0048	0.0050	0.0050	96	99	31-155	2.90	20
a-BHC	0.0048	0.0049	0.0050	97	99	32-160	2.01	20
b-BHC	0.0046	0.0046	0.0050	92	92	44-149	0	20
d-BHC	0.0053	0.0055	0.0050	107	110	37-157	3.38	20
g-BHC	0.0050	0.0052	0.0050	101	104	43-154	3.09	20
a-Chlordane	0.0042	0.0046	0.0050	84	92	39-150	9.03	20
g-Chlordane	0.0044	0.0048	0.0050	89	96	39-151	8.12	20
p,p-DDD	0.0034	0.0037	0.0050	69	73	30-158	6.94	20
p,p-DDE	0.0042	0.0045	0.0050	83	90	47-149	7.34	20
p,p-DDT	0.0044	0.0048	0.0050	87	96	56-166	10.2	20
Dieldrin	0.0043	0.0046	0.0050	86	93	50-163	7.18	20
Endosulfan I	0.0041	0.0044	0.0050	83	88	45-159	6.25	20
Endosulfan II	0.0037	0.0040	0.0050	73	79	41-155	8.06	20
Endosulfan sulfate	0.0042	0.0046	0.0050	84	91	45-156	7.89	20
Endrin	0.0046	0.0049	0.0050	91	98	54-154	7.59	20
Endrin aldehyde	0.0042	0.0046	0.0050	84	91	27-159	7.89	20
Endrin ketone	0.0042	0.0045	0.0050	85	90	40-147	6.47	20
Heptachlor	0.0055	0.0056	0.0050	109	112	52-165	2.47	20
Heptachlor epoxide	0.0042	0.0043	0.0050	83	85	46-145	2.46	20
Hexachlorobenzene	0.0049	0.0050	0.0050	98	100	22-156	2.41	20
Hexachlorocyclopentadiene	0.0051	0.0048	0.0050	102	96	43-173	6.28	20
Methoxychlor	0.0047	0.0050	0.0050	93	99	49-150	6.12	20
Surrogate Recovery								
Decachlorobiphenyl	0.0047	0.0051	0.0050	95	102	28-170	6.99	20

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Quality Control Report

Client:	TRC	**WorkOrder:**	1906C96
Date Prepared:	6/26/19	**BatchID:**	180389
Date Analyzed:	6/27/19	**Extraction Method:**	SW3050B
Instrument:	ICP-MS3	**Analytical Method:**	SW6020
Matrix:	Soil	**Unit:**	mg/Kg
Project:	Lone Tree Way	**Sample ID:**	MB/LCS/LCSD-180389

QC Summary Report for Metals

Analyte	MB Result	MDL	RL	SPK Val	MB SS %REC	MB SS Limits
Arsenic	ND	0.14	0.50	-	-	-
Surrogate Recovery						
Terbium	500			500	100	70-130

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
Arsenic	57	49	50	114	99	75-125	14.5	20
Surrogate Recovery								
Terbium	580	500	500	117	101	70-130	14.8	20

(Cont.)

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Quality Control Report

Client:	TRC	**WorkOrder:**	1906C96
Date Prepared:	7/3/19	**BatchID:**	180926
Date Analyzed:	7/5/19	**Extraction Method:**	SW3050B
Instrument:	ICP-MS1	**Analytical Method:**	SW6020
Matrix:	Soil	**Unit:**	mg/Kg
Project:	Lone Tree Way	**Sample ID:**	MB/LCS/LCSD-180926

QC Summary Report for Metals

Analyte	MB Result	MDL	RL	SPK Val	MB SS %REC	MB SS Limits
Arsenic	ND	0.14	0.50	-	-	-
Surrogate Recovery						
Terbium	570			500	114	70-130

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
Arsenic	53	53	50	105	105	75-125	0	20
Surrogate Recovery								
Terbium	570	570	500	115	115	70-130	0	20

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Quality Control Report

Client:	TRC	**WorkOrder:**	1906C96
Date Prepared:	6/26/19	**BatchID:**	180389
Date Analyzed:	6/27/19	**Extraction Method:**	SW3050B
Instrument:	ICP-MS3	**Analytical Method:**	SW6020
Matrix:	Soil	**Unit:**	mg/Kg
Project:	Lone Tree Way	**Sample ID:**	MB/LCS/LCSD-180389

QC Summary Report for Metals

Analyte	MB Result	MDL	RL	SPK Val	MB SS %REC	MB SS Limits
Lead	ND	0.094	0.50	-	-	-
Surrogate Recovery						
Terbium	500			500	100	70-130

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
Lead	57	49	50	113	98	75-125	14.9	20
Surrogate Recovery								
Terbium	580	500	500	117	101	70-130	14.8	20

(Cont.)

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Quality Control Report

Client:	TRC	**WorkOrder:**	1906C96
Date Prepared:	6/26/19	**BatchID:**	180407
Date Analyzed:	6/27/19	**Extraction Method:**	SW3050B
Instrument:	ICP-MS2	**Analytical Method:**	SW6020
Matrix:	Soil	**Unit:**	mg/Kg
Project:	Lone Tree Way	**Sample ID:**	MB/LCS/LCSD-180407 1906C96-011AMS/MSD

QC Summary Report for Metals

Analyte	MB Result	MDL	RL	SPK Val	MB SS %REC	MB SS Limits
Lead	ND	0.094	0.50	-	-	-
Surrogate Recovery						
Terbium	520			500	103	70-130

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
Lead	51	52	50	102	105	75-125	3.04	20
Surrogate Recovery								
Terbium	510	520	500	102	105	70-130	2.86	20

Analyte	MS DF	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
Lead	1	68	71	50	17.81	101	107	75-125	4.15	20
Surrogate Recovery										
Terbium	1	500	520	500		100	104	70-130	3.31	20

Analyte	DLT Result	DLTRef Val	%D	%D Limit
Lead	18	17.81	1.07	20

%D Control Limit applied to analytes with concentrations greater than 25 times the reporting limits.

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Pittsburg, CA 94565-1701
(925) 252-9262

CHAIN-OF-CUSTODY RECORD

WorkOrder: 1906C96 **ClientCode: TRCC**

☐ WaterTrax ☐ WriteOn ☐ EDF ☐ Excel ☐ EQuIS ☑ Email ☐ HardCopy ☐ ThirdParty ☐ J-flag
☐ Detection Summary ☐ Dry-Weight

Report to:
Glenn Young
TRC
2300 Clayton Road, Suite 610
Concord, CA 94520
(925) 688-2479 FAX: (925) 688-0388

Email: Gyoung@trccompanies.com
cc/3rd Party:
PO: 338571.1
Project: Lone Tree Way

Bill to:
Accounts Payable
TRC
21 Griffin Road North
Windsor, CT 06095
apinvoiceapproval@trccompanies.com

Requested TAT: 5 days;

Date Received: **06/26/2019**
Date Logged: **06/26/2019**

Lab ID	Client ID	Matrix	Collection Date	Hold	Requested Tests (See legend below) 1	2	3	4	5	6	7	8	9	10	11	12
1906C96-001	S1-0	Soil	6/26/2019 11:43	☐	A	A										
1906C96-002	S1-2	Soil	6/26/2019 11:51	☐			A									
1906C96-003	S2-0	Soil	6/26/2019 11:54	☐	A	A										
1906C96-004	S2-2	Soil	6/26/2019 12:00	☐			A									
1906C96-005	S3-0	Soil	6/26/2019 12:04	☐	A	A										
1906C96-006	S3-2	Soil	6/26/2019 12:12	☐			A									
1906C96-007	S4-0	Soil	6/26/2019 09:52	☐			A									
1906C96-009	S5-0	Soil	6/26/2019 10:01	☐			A									
1906C96-011	S6-0	Soil	6/26/2019 11:12	☐			A									
1906C96-013	S7-0	Soil	6/26/2019 11:01	☐			A									
1906C96-015	S8-0	Soil	6/26/2019 10:52	☐			A									
1906C96-017	S9-0	Soil	6/26/2019 11:31	☐			A									

Test Legend:

1	8081_ESL_LL_S	2	ASMS_6020_TTLC_S	3	PBMS_TTLC_S	4	
5		6		7		8	
9		10		11		12	

Project Manager: Angela Rydelius

Prepared by: Agustina Venegas

Comments: Needs Linko EDD and J-Flag for GBF Landfill

NOTE: Soil samples are discarded 60 days after results are reported unless other arrangements are made (Water samples are 30 days).
Hazardous samples will be returned to client or disposed of at client expense.

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WORK ORDER SUMMARY

Client Name: TRC
Client Contact: Glenn Young
Contact's Email: Gyoung@trccompanies.com

Project: Lone Tree Way
Comments: Needs Linko EDD and J-Flag for GBF Landfill

Work Order: 1906C96
QC Level: LEVEL 2
Date Logged: 6/26/2019

☐ WaterTrax ☐ WriteOn ☐ EDF ☐ Excel ☐ EQuIS ☑ Email ☐ HardCopy ☐ ThirdParty ☐ J-flag

Lab ID	Client ID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	De-chlorinated	Collection Date & Time	TAT	Sediment Content	Hold	SubOut
1906C96-001A	S1-0	Soil	SW6020 (Arsenic)	1	8OZ GJ, Unpres	☐	6/26/2019 11:43	5 days		☐	
			SW8081A (OC Pesticides) ESLs			☐		5 days		☐	
1906C96-002A	S1-2	Soil	SW6020 (Lead)	1	8OZ GJ, Unpres	☐	6/26/2019 11:51	5 days		☐	
1906C96-003A	S2-0	Soil	SW6020 (Arsenic)	1	8OZ GJ, Unpres	☐	6/26/2019 11:54	5 days		☐	
			SW8081A (OC Pesticides) ESLs			☐		5 days		☐	
1906C96-004A	S2-2	Soil	SW6020 (Lead)	1	8OZ GJ, Unpres	☐	6/26/2019 12:00	5 days		☐	
1906C96-005A	S3-0	Soil	SW6020 (Arsenic)	1	8OZ GJ, Unpres	☐	6/26/2019 12:04	5 days		☐	
			SW8081A (OC Pesticides) ESLs			☐		5 days		☐	
1906C96-006A	S3-2	Soil	SW6020 (Lead)	1	8OZ GJ, Unpres	☐	6/26/2019 12:12	5 days		☐	
1906C96-007A	S4-0	Soil	SW6020 (Lead)	1	8OZ GJ, Unpres	☐	6/26/2019 9:52	5 days		☐	
1906C96-009A	S5-0	Soil	SW6020 (Lead)	1	8OZ GJ, Unpres	☐	6/26/2019 10:01	5 days		☐	
1906C96-011A	S6-0	Soil	SW6020 (Lead)	1	8OZ GJ, Unpres	☐	6/26/2019 11:12	5 days		☐	
1906C96-013A	S7-0	Soil	SW6020 (Lead)	1	8OZ GJ, Unpres	☐	6/26/2019 11:01	5 days		☐	
1906C96-015A	S8-0	Soil	SW6020 (Lead)	1	8OZ GJ, Unpres	☐	6/26/2019 10:52	5 days		☐	
1906C96-017A	S9-0	Soil	SW6020 (Lead)	1	8OZ GJ, Unpres	☐	6/26/2019 11:31	5 days		☐	

NOTES: - STLC and TCLP extractions require 2 days to complete; therefore, all TATs begin after the extraction is completed (i.e., One-day TAT yields results in 3 days from sample submission).

- MAI assumes that all material present in the provided sampling container is considered part of the sample - MAI does not exclude any material from the sample prior to sample preparation unless requested in writing by the client.

TRC

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2300 Clayton Road, Suite 610
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Fax: 925.688.0388

☐ **Mountain View Office**
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Mountain View 94043
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Fax: 650.967.2785

☐ **San Francisco**
505 Sansome Street, Suite 1600
San Francisco, CA 94111
Tel: 415.644.3000
Fax: 415.541.9378

1906C96

CHAIN OF CUSTODY RECORD

Project Name: Lone Tree Way

Job No.: P.O. #: 338571.1

Report To: gyoung@trccompanies.com

Sampler (print): Emery Anderson-Merritt

Sampler (signature):

Electronic Deliverable Format Required: ☑ YES ☐ NO

EDF LOGCODE: ☐ TRCO ☐ TRCC

Global ID # :

Sample Type: ☑ Soil ☐ Groundwater

Turnaround Requirements
- ☐ 5 Working Days
- ☐ 72 Hours
- ☐ 24 Hours
- ☐ 2-3 Hours RUSH
- ☑ STANDARD

QC Requirement:
- ☐ Level IV
- ☐ EDF
- ☐ Excel/EDD

Sample I.D. (Field Point Name)	Date	Time	Lab I.D.	Sample Matrix	# of cont	Preserved?	☐ TPH EPA 8015 ☐ Gas ☐ BTEX ☐ MTBE ☐ Fuel Oxygenates	☐ TPH EPA 8015 ☐ Silica Gel ☐ Diesel ☐ Motor Oil ☐ Other	☐ 8260 VOCs ☐ Full Suite	☐ 8270 SVOCs ☐ with SIM	☑ Total arsenic	☑ Total lead	☑ Archive (#01D)	☐	Metals: ☐ CAM 17 (6010)	☑ Organochlorine Pesticides (8081) *	☐ PCBs (8082)	☐ Asbestos CARB 435	Comments
S1-0	6/26/19	1143		Soil	1	ice					X					X			
S1-2	6/26/19	1151			1							X							
S2-0		1154			1						X					X			
S2-2		1200			1							X							
S3-0		1204			1						X					X			
S3-2		1212			1							X							
S4-0		0952			1							X							
S4-2		0958			1								X						
S5-0		1001			1							X							
S5-2		1011			1								X						
S6-0		1112			1							X							
S6-2		1118			1								X						

Relinquished By:	Date: 6/26/19	Time: 13:03	Received By: Date: 6/26/19 Time: 13:03
Relinquished By:	Date:	Time:	Received By: Date: Time:
Relinquished By:	Date:	Time:	Lab of Record:
			Received by Lab: Date: Time:

PM Initial:

Temp: A.L.C. 1/3

*TSLs added 6/26/19 PER G.Y.

TRC

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Fax: 650.967.2785

☐ **San Francisco**
505 Sansome Street, Suite 1600
San Francisco, CA 94111
Tel: 415.644.3000
Fax: 415.541.9378

CHAIN OF CUSTODY RECORD

Project Name: Lone Tree Way

Job No.: P.O. #: 338571.1

Report To: gyoung@trccompanies.com

Sampler (print): Emery Anderson-Merritt

Sampler (signature):

Electronic Deliverable Format Required: ☑ YES ☐ NO

EDF LOGCODE: ☐ TRCO ☐ TRCC

Global ID # :

Sample Type: ☑ Soil ☐ Groundwater

Turnaround Requirements
- ☐ 5 Working Days
- ☐ 72 Hours
- ☐ 24 Hours
- ☐ 2-3 Hours RUSH
- ☑ STANDARD

QC Requirement:
- ☐ Level IV
- ☐ EDF
- ☐ Excel/EDD

Sample I.D. (Field Point Name)	Date	Time	Lab I.D.	Sample Matrix	# of cont	Preserved?	☐ TPH EPA 8015 ☐ Gas ☐ BTEX ☐ MTBE ☐ Fuel Oxygenates	☐ TPH EPA 8015 ☐ Silica Gel ☐ Diesel ☐ Motor Oil ☐ Other	☐ 8260 VOCs ☐ Full Suite	☐ 8270 SVOCs ☐ with SIM	☑ Total arsenic	☑ Total lead	☑ Archive (HOID)	☐	Metals: ☐ CAM 17 (6010)	☑ Organochlorine Pesticides (8081)	☐ PCBs (8082)	☐ Asbestos CARB 435	Comments
S7-0	6/26/19	1101		Soil	1	ice						X							
S7-2	↓	1107		↓	1	↓							X						
S8-0		1052			1							X							
S8-2		1057			1								X						
S9-0		1131			1							X							
S9-2		1139			1								X						
S10-0		1013			1								X						
S10-2		1018			1								X						
S11-0		1022			1								X						
S11-2		1027			1								X						
S12-0		1031			1								X						
S12-2	↓	1038		↓	1	↓							X						

Relinquished By:	Date: 6/26/19	Time: 13:03	Received By: Date: 6/26/19 Time: 13:03
Relinquished By:	Date:	Time:	Received By: Date: Time:
Relinquished By:	Date:	Time:	Lab of Record:
			Received by Lab: Date: Time:

PM Initial:

Temp:

2/3

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Tel: 415.644.3000
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CHAIN OF CUSTODY RECORD

Project Name: Lone Tree Way

Job No.: P.O. #: 338571.1

Report To: gyoung@trccompanies.com

Sampler (print): Emery Anderson-Merritt

Sampler (signature):

Electronic Deliverable Format Required: ☑ YES ☐ NO

EDF LOGCODE: ☐ TRCO ☐ TRCC

Global ID # :

Sample Type: ☑ Soil ☐ Groundwater

Turnaround Requirements
- ☐ 5 Working Days
- ☐ 72 Hours
- ☐ 24 Hours
- ☐ 2-3 Hours RUSH
- ☑ STANDARD

QC Requirement:
- ☐ Level IV
- ☐ EDF
- ☐ Excel/EDD

Sample I.D. (Field Point Name)	Date	Time	Lab I.D.	Sample Matrix	# of cont	Preserved?	☐ TPH EPA 8015 ☐ Gas ☐ BTEX ☐ MTBE ☐ Fuel Oxygenates	☐ TPH EPA 8015 ☐ Silica Gel ☐ Diesel ☐ Motor Oil ☐ Other	☐ 8260 VOCs ☐ Full Suite	☐ 8270 SVOCs ☐ with SIM	☑ Total arsenic	☑ Total lead	☑ Archive (HOID)	☐	Metals: ☐ CAM 17 (6010)	☑ Organochlorine Pesticides (8081)	☐ PCBs (8082)	☐ Asbestos CARB 435	Comments
S13-0	6/26/19	1043		Soil	1	ice							X						
S13-2	6/26/19	1048		Soil	1	ice							X						

Relinquished By:	Date: 6/26/19	13:03	Received By:	Date: 6/26/19	Time: 13:03
Relinquished By:	Date:	Time:	Received By:	Date:	Time:
Relinquished By:	Date:	Time:	Lab of Record:		
			Received by Lab:	Date:	Time:

PM Initial:

Temp:

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Sample Receipt Checklist

Client Name:	**TRC**	Date and Time Received	**6/26/2019 13:03**
Project:	**Lone Tree Way**	Date Logged:	**6/26/2019**
		Received by:	Tina Perez
WorkOrder №:	**1906C96** Matrix: Soil	Logged by:	Agustina Venegas
Carrier:	Client Drop-In		

Chain of Custody (COC) Information

	Yes	No	NA
Chain of custody present?	☑	☐	
Chain of custody signed when relinquished and received?	☑	☐	
Chain of custody agrees with sample labels?	☑	☐	
Sample IDs noted by Client on COC?	☑	☐	
Date and Time of collection noted by Client on COC?	☑	☐	
Sampler's name noted on COC?	☑	☐	
COC agrees with Quote?	☐	☐	☑

Sample Receipt Information

	Yes	No	NA
Custody seals intact on shipping container/cooler?	☐	☐	☑
Shipping container/cooler in good condition?	☑	☐	
Samples in proper containers/bottles?	☑	☐	
Sample containers intact?	☑	☐	
Sufficient sample volume for indicated test?	☑	☐	

Sample Preservation and Hold Time (HT) Information

	Yes	No	NA
All samples received within holding time?	☑	☐	☐
Samples Received on Ice?	☑	☐	
(Ice Type: WET ICE)			
Sample/Temp Blank temperature	Temp: 4.6°C		☐
Water - VOA vials have zero headspace / no bubbles?	☐	☐	☑
Sample labels checked for correct preservation?	☑	☐	
pH acceptable upon receipt (Metal: <2; Nitrate 353.2/4500NO3: <2; 522: <4; 218.7: >8)?	☐	☐	☑
UCMR Samples:			
pH tested and acceptable upon receipt (200.8: ≤2; 525.3: ≤4; 530: ≤7; 541: <3; 544: <6.5 & 7.5)?	☐	☐	☑
Free Chlorine tested and acceptable upon receipt (<0.1mg/L)?	☐	☐	☑

Comments:

McCampbell Analytical, Inc.

"When Quality Counts"

Analytical Report

WorkOrder: 1906C96 A

Report Created for: TRC

2300 Clayton Road, Suite 610
Concord, CA 94520

Project Contact: Glenn Young
Project P.O.: 338571.1
Project: Lone Tree Way

Project Received: 06/26/2019

Analytical Report reviewed & approved for release on 07/19/2019 by:

Yen Cao
Project Manager

The report shall not be reproduced except in full, without the written approval of the laboratory. The analytical results relate only to the items tested. Results reported conform to the most current NELAP standards, where applicable, unless otherwise stated in the case narrative.

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Glossary of Terms & Qualifier Definitions

Client: TRC
Project: Lone Tree Way
WorkOrder: 1906C96 A

Glossary Abbreviation

%D	Serial Dilution Percent Difference
95% Interval	95% Confident Interval
DF	Dilution Factor
DI WET	(DISTLC) Waste Extraction Test using DI water
DISS	Dissolved (direct analysis of 0.45 µm filtered and acidified water sample)
DLT	Dilution Test (Serial Dilution)
DUP	Duplicate
EDL	Estimated Detection Limit
ERS	External reference sample. Second source calibration verification.
ITEF	International Toxicity Equivalence Factor
LCS	Laboratory Control Sample
MB	Method Blank
MB % Rec	% Recovery of Surrogate in Method Blank, if applicable
MDL	Method Detection Limit
ML	Minimum Level of Quantitation
MS	Matrix Spike
MSD	Matrix Spike Duplicate
N/A	Not Applicable
ND	Not detected at or above the indicated MDL or RL
NR	Data Not Reported due to matrix interference or insufficient sample amount.
PDS	Post Digestion Spike
PDSD	Post Digestion Spike Duplicate
PF	Prep Factor
RD	Relative Difference
RL	Reporting Limit (The RL is the lowest calibration standard in a multipoint calibration.)
RPD	Relative Percent Deviation
RRT	Relative Retention Time
SPK Val	Spike Value
SPKRef Val	Spike Reference Value
SPLP	Synthetic Precipitation Leachate Procedure
ST	Sorbent Tube
TCLP	Toxicity Characteristic Leachate Procedure
TEQ	Toxicity Equivalents
TZA	TimeZone Net Adjustment for sample collected outside of MAI's UTC.
WET (STLC)	Waste Extraction Test (Soluble Threshold Limit Concentration)

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Analytical Report

Client:	TRC	**WorkOrder:**	1906C96
Date Received:	6/26/19 13:03	**Extraction Method:**	SW3050B
Date Prepared:	7/12/19	**Analytical Method:**	SW6020
Project:	Lone Tree Way	**Unit:**	mg/Kg

Lead

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
S10-0	**1906C96-019A**	**Soil**	**06/26/2019 10:13**	**ICP-MS2 053SMPL.D**	**181509**

Analytes	Result	RL	DF	Date Analyzed
Lead	**34**	0.50	1	07/19/2019 14:34

Surrogates	REC (%)	Limits	
Terbium	102	70-130	07/19/2019 14:34

Analyst(s): MIG

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
S11-0	**1906C96-021A**	**Soil**	**06/26/2019 10:22**	**ICP-MS2 093SMPL.D**	**181509**

Analytes	Result	RL	DF	Date Analyzed
Lead	**18**	0.50	1	07/19/2019 07:13

Surrogates	REC (%)	Limits	
Terbium	100	70-130	07/19/2019 07:13

Analyst(s): ND

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
S12-0	**1906C96-023A**	**Soil**	**06/26/2019 10:31**	**ICP-MS2 156SMPL.D**	**181509**

Analytes	Result	RL	DF	Date Analyzed
Lead	**17**	0.50	1	07/18/2019 13:44

Surrogates	REC (%)	Limits	
Terbium	99	70-130	07/18/2019 13:44

Analyst(s): MIG

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
S13-0	**1906C96-025A**	**Soil**	**06/26/2019 10:43**	**ICP-MS2 157SMPL.D**	**181509**

Analytes	Result	RL	DF	Date Analyzed
Lead	**12**	0.50	1	07/18/2019 13:51

Surrogates	REC (%)	Limits	
Terbium	101	70-130	07/18/2019 13:51

Analyst(s): MIG

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Quality Control Report

Client:	TRC	**WorkOrder:**	1906C96
Date Prepared:	7/12/19	**BatchID:**	181509
Date Analyzed:	7/16/19 - 7/17/19	**Extraction Method:**	SW3050B
Instrument:	ICP-MS3	**Analytical Method:**	SW6020
Matrix:	Soil	**Unit:**	mg/Kg
Project:	Lone Tree Way	**Sample ID:**	MB/LCS/LCSD-181509

QC Summary Report for Metals

Analyte	MB Result	MDL	RL	SPK Val	MB SS %REC	MB SS Limits
Lead	ND	0.094	0.50	-	-	-
Surrogate Recovery						
Terbium	520			500	104	70-130

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
Lead	51	51	50	102	103	75-125	0.605	20
Surrogate Recovery								
Terbium	520	520	500	103	105	70-130	1.38	20

McCampbell Analytical, Inc.
1534 Willow Pass Rd
Pittsburg, CA 94565-1701
(925) 252-9262

CHAIN-OF-CUSTODY RECORD

WorkOrder: 1906C96 A **ClientCode: TRCC**

☐ WaterTrax ☐ WriteOn ☐ EDF ☐ Excel ☒ EQuIS ☑ Email ☐ HardCopy ☐ ThirdParty ☐ J-flag
☒ Detection Summary ☒ Dry-Weight

Report to:
Glenn Young
TRC
2300 Clayton Road, Suite 610
Concord, CA 94520
(925) 688-2479 FAX: (925) 688-0388

Email: Gyoung@trccompanies.com
cc/3rd Party:
PO: 338571.1
Project: Lone Tree Way

Bill to:
Accounts Payable
TRC
21 Griffin Road North
Windsor, CT 06095
apinvoiceapproval@trccompanies.com

Requested TAT: 5 days;

Date Received: 06/26/2019
Date Logged: 06/26/2019
Date Add-On: 07/12/2019

Lab ID	Client ID	Matrix	Collection Date	Hold	Requested Tests (See legend below) 1	2	3	4	5	6	7	8	9	10	11	12
1906C96-019	S10-0	Soil	6/26/2019 10:13	☐	A											
1906C96-021	S11-0	Soil	6/26/2019 10:22	☐	A											
1906C96-023	S12-0	Soil	6/26/2019 10:31	☐	A											
1906C96-025	S13-0	Soil	6/26/2019 10:43	☐	A											

Test Legend:

1	PBMS_TTLC_S	2		3		4	
5		6		7		8	
9		10		11		12	

Project Manager: Angela Rydelius

Prepared by: Agustina Venegas

Add-On Prepared By: Lilly Ortiz

Comments: Needs Linko EDD and J-Flag for GBF Landfill. Total Pb added STAT 7/12/19

NOTE: Soil samples are discarded 60 days after results are reported unless other arrangements are made (Water samples are 30 days).
Hazardous samples will be returned to client or disposed of at client expense.

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WORK ORDER SUMMARY

Client Name: TRC
Client Contact: Glenn Young
Contact's Email Gyoung@trccompanies.com

Project: Lone Tree Way
Comments: Needs Linko EDD and J-Flag for GBF Landfill. Total Pb added STAT 7/12/19

Work Order: 1906C96
QC Level: LEVEL 2
Date Logged: 6/26/2019
Date Add-On: 7/12/2019

Lab ID	Client ID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	Collection Date & Time	TAT	Sediment Content	Hold	SubOut
1906C96-019A	S10-0	Soil	SW6020 (Lead)	1	8OZ GJ, Unpres	6/26/2019 10:13	5 days		☐	
1906C96-021A	S11-0	Soil	SW6020 (Lead)	1	8OZ GJ, Unpres	6/26/2019 10:22	5 days		☐	
1906C96-023A	S12-0	Soil	SW6020 (Lead)	1	8OZ GJ, Unpres	6/26/2019 10:31	5 days		☐	
1906C96-025A	S13-0	Soil	SW6020 (Lead)	1	8OZ GJ, Unpres	6/26/2019 10:43	5 days		☐	

NOTES: - STLC and TCLP extractions require 2 days to complete; therefore, all TATs begin after the extraction is completed (i.e., One-day TAT yields results in 3 days from sample submission).

- MAI assumes that all material present in the provided sampling container is considered part of the sample - MAI does not exclude any material from the sample prior to sample preparation unless requested in writing by the client.

TRC

☑ **Concord Office**
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☐ **Mountain View Office**
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Mountain View 94043
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Fax: 650.967.2785

☐ **San Francisco**
505 Sansome Street, Suite 1600
San Francisco, CA 94111
Tel: 415.644.3000
Fax: 415.541.9378

1906C96

CHAIN OF CUSTODY RECORD

Project Name: Lone Tree Way

Job No.: P.O. #: 338571.1

Report To: gyoung@trccompanies.com

Sampler (print): Emery Anderson-Merritt

Sampler (signature):

Electronic Deliverable Format Required: ☑ YES ☐ NO

EDF LOGCODE: ☐ TRCO ☐ TRCC

Global ID # :

Sample Type: ☑ Soil ☐ Groundwater

Turnaround Requirements
- ☐ 5 Working Days
- ☐ 72 Hours
- ☐ 24 Hours
- ☐ 2-3 Hours RUSH
- ☑ STANDARD

QC Requirement:
- ☐ Level IV
- ☐ EDF
- ☐ Excel/EDD

Sample I.D. (Field Point Name)	Date	Time	Lab I.D.	Sample Matrix	# of cont	Preserved?	☐ TPH EPA 8015 ☐ Gas ☐ BTEX ☐ MTBE ☐ Fuel Oxygenates	☐ TPH EPA 8015 ☐ Silica Gel ☐ Diesel ☐ Motor Oil ☐ Other	☐ 8260 VOCs ☐ Full Suite	☐ 8270 SVOCs ☐ with SIM	☑ Total arsenic	☑ Total lead	☑ Archive (HOID)	☐	Metals: ☐ CAM 17 (6010)	☑ Organochlorine Pesticides (8081) *	☐ PCBs (8082)	☐ Asbestos CARB 435	Comments
S1-0	6/26/19	1143		Soil	1	ice					X					X			
S1-2	6/26/19	1151			1							X							
S2-0		1154			1						X					X			
S2-2		1200			1							X							
S3-0		1204			1						X					X			
S3-2		1212			1							X							
S4-0		0952			1							X							
S4-2		0958			1								X						
S5-0		1001			1							X							
S5-2		1011			1								X						
S6-0		1112			1							X							
S6-2		1118			1								X						

Relinquished By:	Date: 6/26/19	13:03	Received By:	Date: 6/26/19	Time: 13:03
Relinquished By:	Date:	Time:	Received By:	Date:	Time:
Relinquished By:	Date:	Time:	Lab of Record:		
			Received by Lab:	Date:	Time:

PM Initial:

Temp: A.C. Wet

*TSLs added 6/26/19 PER G.Y. *Added Standard TAT 7/12/19

TRC

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San Francisco, CA 94111
Tel: 415.644.3000
Fax: 415.541.9378

CHAIN OF CUSTODY RECORD

Project Name: Lone Tree Way

Job No.: P.O. #: 338571.1

Report To: gyoung@trccompanies.com

Sampler (print): Emery Anderson-Merritt

Sampler (signature):

Electronic Deliverable Format Required: ☑ YES ☐ NO

EDF LOGCODE: ☐ TRCO ☐ TRCC

Global ID # :

Sample Type: ☑ Soil ☐ Groundwater

Turnaround Requirements
- ☐ 5 Working Days
- ☐ 72 Hours
- ☐ 24 Hours
- ☐ 2-3 Hours RUSH
- ☑ STANDARD

QC Requirement:
- ☐ Level IV
- ☐ EDF
- ☐ Excel/EDD

Sample I.D. (Field Point Name)	Date	Time	Lab I.D.	Sample Matrix	# of cont	Preserved?	☐TPH EPA 8015 ☐ Gas ☐ BTEX ☐ MTBE ☐ Fuel Oxygenates	☐ TPH EPA 8015 ☐ Silica Gel ☐Diesel ☐ Motor Oil ☐ Other	☐8260 VOCs ☐ Full Suite	☐ 8270 SVOCs ☐with SIM	☑ Total arsenic	☑ Total lead	☑ Archive (HOID)	☐	Metals: ☐ CAM 17 (6010)	☑ Organochlorine Pesticides (8081)	☐ PCBs (8082)	☐ Asbestos CARB 435	Comments
S7-0	6/26/19	1101		Soil	1	ice						X							
S7-2	↓	1107		↓	1	↓							X						
S8-0		1052			1							X							
S8-2		1057			1								X						
S9-0		1131			1							X							
S9-2		1139			1								X						
S10-0		1013			1							X	X						
S10-2		1018			1								X						
S11-0		1022			1							X	X						
S11-2		1027			1								X						
S12-0		1031			1							X	X						
S12-2	↓	1038		↓	1	↓							X						

Relinquished By:	Date: 6/26/19	Time: 13:03	Received By: Date: 6/26/19 Time: 13:03
Relinquished By:	Date:	Time:	Received By: Date: Time:
Relinquished By:	Date:	Time:	Lab of Record:
			Received by Lab: Date: Time:

PM Initial:

Temp:

TRC

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Fax: 415.541.9378

CHAIN OF CUSTODY RECORD

Project Name: Lone Tree Way

Job No.: P.O. #: 338571.1

Report To: gyoung@trccompanies.com

Sampler (print): Emery Anderson-Merritt

Sampler (signature):

Electronic Deliverable Format Required: ☑ YES ☐ NO

EDF LOGCODE: ☐ TRCO ☐ TRCC

Global ID # :

Sample Type: ☑ Soil ☐ Groundwater

Turnaround Requirements
- ☐ 5 Working Days
- ☐ 72 Hours
- ☐ 24 Hours
- ☐ 2-3 Hours RUSH
- ☑ STANDARD

QC Requirement:
- ☐ Level IV
- ☐ EDF
- ☐ Excel/EDD

Sample I.D. (Field Point Name)	Date	Time	Lab I.D.	Sample Matrix	# of cont	Preserved?	☐ TPH EPA 8015 ☐ Gas ☐ BTEX ☐ MTBE ☐ Fuel Oxygenates	☐ TPH EPA 8015 ☐ Silica Gel ☐ Diesel ☐ Motor Oil ☐ Other	☐ 8260 VOCs ☐ Full Suite	☐ 8270 SVOCs ☐ with SIM	☑ Total arsenic	☑ Total lead	☑ Archive (HOID)	☐	Metals: ☐ CAM 17 (6010)	☑ Organochlorine Pesticides (8081)	☐ PCBs (8082)	☐ Asbestos CARB 435	Comments
S13-0	6/26/19	1043		Soil	1	ice						X	X						
S13-2	6/26/19	1048		Soil	1	ice							X						

Relinquished By:	Date: 6/26/19	Time: 13:03	Received By: Date: 6/26/19 Time: 13:03
Relinquished By:	Date:	Time:	Received By: Date: Time:
Relinquished By:	Date:	Time:	Lab of Record:
			Received by Lab: Date: Time:

PM Initial:

Temp:

3/3

McCampbell Analytical, Inc.

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Analytical Report

WorkOrder: 1905E83

Report Created for: TRC

2300 Clayton Road, Suite 610
Concord, CA 94520

Project Contact: Glenn Young
Project P.O.: 338571.1
Project: 338571.1; Giannini Lone Tree Way

Project Received: 05/29/2019

Analytical Report reviewed & approved for release on 06/04/2019 by:

Yen Cao
Project Manager

The report shall not be reproduced except in full, without the written approval of the laboratory. The analytical results relate only to the items tested. Results reported conform to the most current NELAP standards, where applicable, unless otherwise stated in the case narrative.

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CA ELAP 1644 ♦ NELAP 4033 ORELAP

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Glossary of Terms & Qualifier Definitions

Client: TRC
Project: 338571.1; Giannini Lone Tree Way
WorkOrder: 1905E83

Glossary Abbreviation

%D	Serial Dilution Percent Difference
95% Interval	95% Confident Interval
DF	Dilution Factor
DI WET	(DISTLC) Waste Extraction Test using DI water
DISS	Dissolved (direct analysis of 0.45 µm filtered and acidified water sample)
DLT	Dilution Test (Serial Dilution)
DUP	Duplicate
EDL	Estimated Detection Limit
ERS	External reference sample. Second source calibration verification.
ITEF	International Toxicity Equivalence Factor
LCS	Laboratory Control Sample
MB	Method Blank
MB % Rec	% Recovery of Surrogate in Method Blank, if applicable
MDL	Method Detection Limit
ML	Minimum Level of Quantitation
MS	Matrix Spike
MSD	Matrix Spike Duplicate
N/A	Not Applicable
ND	Not detected at or above the indicated MDL or RL
NR	Data Not Reported due to matrix interference or insufficient sample amount.
PDS	Post Digestion Spike
PDSD	Post Digestion Spike Duplicate
PF	Prep Factor
RD	Relative Difference
RL	Reporting Limit (The RL is the lowest calibration standard in a multipoint calibration.)
RPD	Relative Percent Deviation
RRT	Relative Retention Time
SPK Val	Spike Value
SPKRef Val	Spike Reference Value
SPLP	Synthetic Precipitation Leachate Procedure
ST	Sorbent Tube
TCLP	Toxicity Characteristic Leachate Procedure
TEQ	Toxicity Equivalents
TZA	TimeZone Net Adjustment for sample collected outside of MAI's UTC.
WET (STLC)	Waste Extraction Test (Soluble Threshold Limit Concentration)

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Analytical Report

Client:	TRC	**WorkOrder:**	1905E83
Date Received:	5/29/19 11:44	**Extraction Method:**	SW3050B
Date Prepared:	5/29/19	**Analytical Method:**	SW6020
Project:	338571.1; Giannini Lone Tree Way	**Unit:**	mg/Kg

Lead

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
S1	**1905E83-001A**	**Soil**	**05/29/2019 10:50**	**ICP-MS2 030SMPL.D**	**178670**

Analytes	Result	RL	DF	Date Analyzed
Lead	**89**	0.50	1	05/30/2019 16:31

Surrogates	REC (%)	Limits	
Terbium	110	70-130	05/30/2019 16:31

Analyst(s): MIG

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
S2	**1905E83-002A**	**Soil**	**05/29/2019 10:56**	**ICP-MS2 048SMPL.D**	**178670**

Analytes	Result	RL	DF	Date Analyzed
Lead	**150**	0.50	1	05/30/2019 18:20

Surrogates	REC (%)	Limits	
Terbium	104	70-130	05/30/2019 18:20

Analyst(s): MIG

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
S3	**1905E83-003A**	**Soil**	**05/29/2019 11:02**	**ICP-MS2 049SMPL.D**	**178670**

Analytes	Result	RL	DF	Date Analyzed
Lead	**110**	0.50	1	05/30/2019 18:26

Surrogates	REC (%)	Limits	
Terbium	113	70-130	05/30/2019 18:26

Analyst(s): MIG

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Quality Control Report

Client:	TRC	**WorkOrder:**	1905E83
Date Prepared:	5/29/19	**BatchID:**	178670
Date Analyzed:	5/30/19	**Extraction Method:**	SW3050B
Instrument:	ICP-MS3	**Analytical Method:**	SW6020
Matrix:	Soil	**Unit:**	mg/Kg
Project:	338571.1; Giannini Lone Tree Way	**Sample ID:**	MB/LCS/LCSD-178670

QC Summary Report for Metals

Analyte	MB Result	MDL	RL	SPK Val	MB SS %REC	MB SS Limits
Lead	ND	0.094	0.50	-	-	-
Surrogate Recovery						
Terbium	550			500	110	70-130

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
Lead	50	50	50	100	99	75-125	0.841	20
Surrogate Recovery								
Terbium	550	550	500	109	109	70-130	0	20

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CHAIN-OF-CUSTODY RECORD

WorkOrder: 1905E83 **ClientCode: TRCC**

☐ WaterTrax ☐ WriteOn ☐ EDF ☐ Excel ☒ EQuIS ☑ Email ☐ HardCopy ☐ ThirdParty ☐ J-flag
☒ Detection Summary ☒ Dry-Weight

Report to:
Glenn Young
TRC
2300 Clayton Road, Suite 610
Concord, CA 94520
(925) 688-2479 FAX: (925) 688-0388

Email: Gyoung@trccompanies.com
cc/3rd Party: eandersonmerritt@trccompanies.com;
PO: 338571.1
Project: 338571.1; Giannini Lone Tree Way

Bill to:
Accounts Payable
TRC
21 Griffin Road North
Windsor, CT 06095
apinvoiceapproval@trccompanies.com

Requested TAT: 5 days;

Date Received: 05/29/2019
Date Logged: 05/29/2019

Lab ID	Client ID	Matrix	Collection Date	Hold	Requested Tests (See legend below) 1	2	3	4	5	6	7	8	9	10	11	12
1905E83-001	S1	Soil	5/29/2019 10:50	☐	A											
1905E83-002	S2	Soil	5/29/2019 10:56	☐	A											
1905E83-003	S3	Soil	5/29/2019 11:02	☐	A											

Test Legend:

1	PBMS_TTLC_S	2		3		4	
5		6		7		8	
9		10		11		12	

Project Manager: Angela Rydelius

Prepared by: Tina Perez

Comments: Needs Linko EDD and J-Flag for GBF Landfill

NOTE: Soil samples are discarded 60 days after results are reported unless other arrangements are made (Water samples are 30 days).
Hazardous samples will be returned to client or disposed of at client expense.

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http://www.mccampbell.com / E-mail: main@mccampbell.com

WORK ORDER SUMMARY

Client Name: TRC
Client Contact: Glenn Young
Contact's Email: Gyoung@trccompanies.com

Project: 338571.1; Giannini Lone Tree Way
Comments: Needs Linko EDD and J-Flag for GBF Landfill

Work Order: 1905E83
QC Level: LEVEL 2
Date Logged: 5/29/2019

☐ WaterTrax ☐ WriteOn ☐ EDF ☐ Excel ☐ EQuIS ☑ Email ☐ HardCopy ☐ ThirdParty ☐ J-flag

Lab ID	Client ID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	De-chlorinated	Collection Date & Time	TAT	Sediment Content	Hold	SubOut
1905E83-001A	S1	Soil	SW6020 (Lead)	1	8OZ GJ, Unpres	☐	5/29/2019 10:50	5 days		☐	
1905E83-002A	S2	Soil	SW6020 (Lead)	1	8OZ GJ, Unpres	☐	5/29/2019 10:56	5 days		☐	
1905E83-003A	S3	Soil	SW6020 (Lead)	1	8OZ GJ, Unpres	☐	5/29/2019 11:02	5 days		☐	

NOTES: - STLC and TCLP extractions require 2 days to complete; therefore, all TATs begin after the extraction is completed (i.e., One-day TAT yields results in 3 days from sample submission).

- MAI assumes that all material present in the provided sampling container is considered part of the sample - MAI does not exclude any material from the sample prior to sample preparation unless requested in writing by the client.

TRC

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☐ **San Francisco**
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San Francisco, CA 94111
Tel: 415.644.3000
Fax: 415.541.9378

1905E83

CHAIN OF CUSTODY RECORD

Project Name: **Giannini Lone Tree Way**

Job No.: 338571.1 P.O. #: 338571.1

Report To: gyoung@trccompanies.com, eandersonmerritt@trccompanies.com

Sampler (print): Emery Anderson-Merritt

Sampler (signature):

Electronic Deliverable Format Required: ☐ YES ☐ NO

EDF LOGCODE: ☐ TRCO ☐ TRCC

Global ID # :

Sample Type: ☑ Soil ☐ Groundwater

Turnaround Requirements
- ☐ 5 Working Days
- ☐ 72 Hours
- ☐ 24 Hours
- ☐ 2-3 Hours RUSH
- ☑ STANDARD

QC Requirement:
- ☐ Level IV
- ☐ EDF
- ☐ Excel/EDD

Sample I.D. (Field Point Name)	Date	Time	Lab I.D.	Sample Matrix	# of cont	Preserved?	☐TPH EPA 8015 ☐ Gas ☐ BTEX ☐ MTBE ☐ Fuel Oxygenates	☐ TPH EPA 8015 ☐ Silica Gel ☐Diesel ☐ Motor Oil ☐ Other	☐8260 VOCs ☐ Full Suite	☐ 8270 SVOCs ☐with SIM	☒ TOTAL LEAD (6010/6020)	☐	☐	☐	Metals: ☐ CAM 17 (6010)	☐ Organochlorine Pesticides (8081)	☐ PCBs (8082)	☐ Asbestos CARB 435	Comments
S1	5/29	10:50 A		soil	1	ICE					X							
S2	5/29	10:56 A		soil	1	ice					X							
S3	5/29	11:02 A		soil	1	ice					X							

Relinquished By:	Date: 5/29		Received By:	Date: 5/29/19	Time: 11:44
Relinquished By:	Date:	Time:	Received By:	Date:	Time:
Relinquished By:	Date:	Time:	Lab of Record:		
			Received by Lab:	Date:	Time:

PM Initial:

Temp: 7.2°C wet

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Sample Receipt Checklist

Client Name:	**TRC**	Date and Time Received:	**5/29/2019 11:44**
Project:	**338571.1; Giannini Lone Tree Way**	Date Logged:	**5/29/2019**
		Received by:	Tina Perez
WorkOrder №:	**1905E83** Matrix: Soil	Logged by:	Tina Perez
Carrier:	Client Drop-In		

Chain of Custody (COC) Information

Chain of custody present?	Yes ☑	No ☐	
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☑	No ☐	
Sample IDs noted by Client on COC?	Yes ☑	No ☐	
Date and Time of collection noted by Client on COC?	Yes ☑	No ☐	
Sampler's name noted on COC?	Yes ☑	No ☐	
COC agrees with Quote?	Yes ☐	No ☐	NA ☑

Sample Receipt Information

Custody seals intact on shipping container/cooler?	Yes ☐	No ☐	NA ☑
Shipping container/cooler in good condition?	Yes ☑	No ☐	
Samples in proper containers/bottles?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	

Sample Preservation and Hold Time (HT) Information

All samples received within holding time?	Yes ☑	No ☐	NA ☐
Samples Received on Ice?	Yes ☑	No ☐	
	(Ice Type: WET ICE)		
Sample/Temp Blank temperature	Temp: 7.2°C		NA ☐
Water - VOA vials have zero headspace / no bubbles?	Yes ☐	No ☐	NA ☑
Sample labels checked for correct preservation?	Yes ☑	No ☐	
pH acceptable upon receipt (Metal: <2; Nitrate 353.2/4500NO3: <2; 522: <4; 218.7: >8)?	Yes ☐	No ☐	NA ☑
UCMR Samples:			
pH tested and acceptable upon receipt (200.8: ≤2; 525.3: ≤4; 530: ≤7; 541: <3; 544: <6.5 & 7.5)?	Yes ☐	No ☐	NA ☑
Free Chlorine tested and acceptable upon receipt (<0.1mg/L)?	Yes ☐	No ☐	NA ☑

Comments:

APPENDIX G:
UCL STATISTICS FOR LEAD RESULTS

	A	B	C	D	E	F	G	H	I	J	K	L
1	**UCL Statistics for Data Sets with Non-Detects**											
2												
3	User Selected Options											
4	Date/Time of Computation			ProUCL 5.17/24/2019 4:36:27 PM								
5	From File			WorkSheet.xls								
6	Full Precision			OFF								
7	Confidence Coefficient			95%								
8	Number of Bootstrap Operations			2000								
9												
10												
11	**Lead**											
12												
13	**General Statistics**											
14	Total Number of Observations					13	Number of Distinct Observations					11
15							Number of Missing Observations					0
16	Minimum					12	Mean					43.23
17	Maximum					150	Median					20
18	SD					44.21	Std. Error of Mean					12.26
19	Coefficient of Variation					1.023	Skewness					1.671
20												
21	**Normal GOF Test**											
22	Shapiro Wilk Test Statistic					0.712	**Shapiro Wilk GOF Test**					
23	5% Shapiro Wilk Critical Value					0.866	Data Not Normal at 5% Significance Level					
24	Lilliefors Test Statistic					0.307	**Lilliefors GOF Test**					
25	5% Lilliefors Critical Value					0.234	Data Not Normal at 5% Significance Level					
26	**Data Not Normal at 5% Significance Level**											
27												
28	**Assuming Normal Distribution**											
29	**95% Normal UCL**						**95% UCLs (Adjusted for Skewness)**					
30	95% Student's-t UCL					65.08	95% Adjusted-CLT UCL (Chen-1995)					69.47
31							95% Modified-t UCL (Johnson-1978)					66.03
32												
33	**Gamma GOF Test**											
34	A-D Test Statistic					1.169	**Anderson-Darling Gamma GOF Test**					
35	5% A-D Critical Value					0.751	Data Not Gamma Distributed at 5% Significance Level					
36	K-S Test Statistic					0.258	**Kolmogorov-Smirnov Gamma GOF Test**					
37	5% K-S Critical Value					0.241	Data Not Gamma Distributed at 5% Significance Level					
38	**Data Not Gamma Distributed at 5% Significance Level**											
39												
40	**Gamma Statistics**											
41	k hat (MLE)					1.486	k star (bias corrected MLE)					1.194
42	Theta hat (MLE)					29.1	Theta star (bias corrected MLE)					36.21
43	nu hat (MLE)					38.62	nu star (bias corrected)					31.04
44	MLE Mean (bias corrected)					43.23	MLE Sd (bias corrected)					39.56
45							Approximate Chi Square Value (0.05)					19.32
46	Adjusted Level of Significance					0.0301	Adjusted Chi Square Value					18.01
47												
48	**Assuming Gamma Distribution**											
49	95% Approximate Gamma UCL (use when n>=50))					69.48	95% Adjusted Gamma UCL (use when n<50)					74.53
50												
51	**Lognormal GOF Test**											
52	Shapiro Wilk Test Statistic					0.855	**Shapiro Wilk Lognormal GOF Test**					
53	5% Shapiro Wilk Critical Value					0.866	Data Not Lognormal at 5% Significance Level					
54	Lilliefors Test Statistic					0.221	**Lilliefors Lognormal GOF Test**					
55	5% Lilliefors Critical Value					0.234	Data appear Lognormal at 5% Significance Level					
56	**Data appear Approximate Lognormal at 5% Significance Level**											
57												
58	**Lognormal Statistics**											
59	Minimum of Logged Data					2.485	Mean of logged Data					3.394
60	Maximum of Logged Data					5.011	SD of logged Data					0.837
61												
62	**Assuming Lognormal Distribution**											
63	95% H-UCL					78.76	90% Chebyshev (MVUE) UCL					71.02
64	95% Chebyshev (MVUE) UCL					84.69	97.5% Chebyshev (MVUE) UCL					103.7
65	99% Chebyshev (MVUE) UCL					140.9						
66												
67	**Nonparametric Distribution Free UCL Statistics**											
68	**Data appear to follow a Discernible Distribution at 5% Significance Level**											
69												
70	**Nonparametric Distribution Free UCLs**											
71	95% CLT UCL					63.4	95% Jackknife UCL					65.08
72	95% Standard Bootstrap UCL					62.48	95% Bootstrap-t UCL					81.65
73	95% Hall's Bootstrap UCL					62.28	95% Percentile Bootstrap UCL					64.15
74	95% BCA Bootstrap UCL					67.77						
75	90% Chebyshev(Mean, Sd) UCL					80.01	95% Chebyshev(Mean, Sd) UCL					96.68
76	97.5% Chebyshev(Mean, Sd) UCL					119.8	99% Chebyshev(Mean, Sd) UCL					165.2
77												
78	**Suggested UCL to Use**											
79	95% H-UCL					78.76						
80												
81	Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.											
82	Recommendations are based upon data size, data distribution, and skewness.											
83	These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).											
84	However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.											
85												
86	**ProUCL computes and outputs H-statistic based UCLs for historical reasons only.**											
87	**H-statistic often results in unstable (both high and low) values of UCL95 as shown in examples in the Technical Guide.**											
88	**It is therefore recommended to avoid the use of H-statistic based 95% UCLs.**											
89	**Use of nonparametric methods are preferred to compute UCL95 for skewed data sets which do not follow a gamma distribution.**											
90												

APPENDIX H:
TRC STAFF AND ENVIRONMENTAL PROFESSIONAL QUALIFICATIONS/RESUMES

Glenn S. Young, PG, LEED AP

EDUCATION

M.S., Environmental Management, University of San Francisco, 1993
B.S., Geology, University of Colorado, Boulder, 1987

PROFESSIONAL REGISTRATIONS

Professional Geologist, California #6406

AREAS OF EXPERTISE

Mr. Young has expertise in the following areas:

- Environmental Site Assessments, Phase I & Phase II
- Remedial Investigations and Site Characterization
- Vapor Intrusion and Soil Vapor Characterization
- Soil and Groundwater Remediation
- Brownfield Redevelopment
- Risk-Based Site Closures

REPRESENTATIVE EXPERIENCE

Mr. Young has over 25 years environmental consulting experience focusing on geologic and hydrogeologic characterization, risk management, and remediation for public, private, and governmental sector clients. He has a history of providing safe, timely, and fiscally responsible consulting services for contaminated soil, soil-vapor, and groundwater sites.

Mr. Young has managed a full range of environmental consulting projects, including large and small multi-disciplinary projects, planning, estimating, contract procurement, construction management, public outreach, and the negotiations with both clients, regulatory, and various resource agencies. Projects typically involve Brownfield redevelopment, infrastructure support, facility improvement and/or closures, firing ranges, dry cleaners, UST sites, park lands, and wetland restoration. Mr. Young has also served as Program Manager for several high profile As-Needed environmental consultation projects, including contracts for SFIA, SFDPW, SFPUC, and OPWD. Recent peer review services have required significant strategic and timely discussion with a variety of stakeholders, responsible parties, resource agencies (Coastal Commission, USDFW, NOAA, CDFG, USCOE), as well as State and local regulators (DTSC and RWQCB).

The following are example projects for Mr. Young.

San Francisco As-Needed Risk Management Services, SFDPW, California. As Program Manager for several “on-call” contract with the City of San Francisco Department of Public Works, Mr. Young has managed hazardous materials investigations for water distribution, roadway improvement, library, school, park, and redevelopment projects. He was instrumental in negotiating the cleanup approach with DTSC and

successfully managed the Remedial Action at the former Sharp Park Rifle Range Project in Pacifica. Other projects completed on behalf of the SFDPW include, the Octavia Boulevard Improvement Project; hydrogeologic and water quality investigation at the Upper Islais Valley and the Westside Basin for SFPUC's Groundwater Protection Division; stormwater program consultation, habitat restoration, and UST investigations and closure for a dozen SFFD stations. Recent investigations include Maher characterizations for the Civic Center Plaza and proposed Office of the Chief Medical Examiner.

Georgia Pacific Mill Site, Fort Bragg, California. Peer review services to the City of Fort Bragg regarding the hazardous materials investigation, remedial, risk assessment, remediation, and redevelopment activities at the former Mill Site. This property is approximately 25 percent of the total land currently incorporated within the City of Fort Bragg. Mr. Young is also participating in regular stakeholder meetings as well as community workshops designed to inform the general public of findings and answer questions regarding the chemicals detected at the site

Oakland As-Needed Environmental Services, Oakland, California. Program Manager for several "as-needed" contracts with the City of Oakland. Mr. Young has managed numerous traffic improvement, school, library, infrastructure improvement, and redevelopment projects requiring Phase I and II site assessments, UST upgrade, and risk assessment services. He has managed site assessments, groundwater investigations, remedial actions, facility closures, and UST projects. Directed numerous environmental projects involving community participation and has routinely negotiated with State and local regulatory agencies regarding all phases of investigation, risk assessment, remediation, and case closure.

Taylor Yard Redevelopment Parcel, Los Angeles, California. Coordinated the Phase II soil and soil-vapor site characterization for this mixed-use redevelopment at the former Metropolitan Transportation Authority (MTA) property. Results of the investigation identified "hot spots" that warranted remediation. Remedial action to remove soil with elevated PAHs, hydrocarbons, arsenic, and lead resulted in No Further Action determination from the DTSC.

Stulsaft Park Mercury Mine, Redwood City, California. Conducted the comprehensive records review, site investigation, and risk assessment of this former open pit mercury mining operation. City and neighborhood groups were preparing to build a tot-lot within the City park when they discovered the historical mercury mine operations. Mr. Young fast-tracked the investigation by coordinating with the USGS, DTSC, and San Mateo County to confirm that residual mercury impacts in soil, sediment, and ambient air posed no significant risk to the community. Investigation included air monitoring for volatile mercury at the tot-lot and proposed ball fields as well as participation in public meetings.

Caterpillar Inc., San Leandro, California. Managed operations, maintenance, and groundwater treatment systems at a former heavy equipment manufacturing facility. He conducted high-resolution subsurface evaluations for contaminant delineation, well siting, and hydraulic containment activities. He operated and maintained three treatment systems in accordance with NPDES and BAAQMD permits. Mr. Young conducted routine and non-routine maintenance activities, including evaluation of pump curves, and contaminant loading on GAC and resin adsorption vessels.

PG&E Gas Gathering Facilities – Northern California. Investigation manager responsible for implementing the Site Characterization Work Plans at numerous gas gathering facilities in the Delta and northern California regions. Investigations involved coordination with local PG&E staff to locate, access, implement programmatic soil and groundwater sampling activities. Interpreted results and prepared reports for review and consideration by PG&E technical staff. Managed field staff and drilling contractors, sample handling, laboratory reporting, and waste characterization to meet PG&E requirements.

Former Mission Village Dry Cleaners, Fairfield, California. Managed the investigation, strategic planning, corrective action plan and implementation, and groundwater remediation services. Services included high-resolution site characterization using CPT and MIP technologies, preparation of the Conceptual Site Model and Feasibility Study to determine the cost and effectiveness of in situ enhancement for the biodegradation of dry cleaner solvents at the site, and Corrective Action Plan. Procured Case Closure using the RWQCB's low risk closure process for chlorinated solvents.

City of Livermore Downtown Redevelopment Area – Brownfields Grant, Livermore, California. Assisted the City of Livermore with the Brownfields Grants from the USEPA that they had won to characterize the Downtown Redevelopment Area. Managed the project that included a number of Phase 1 ESAs for prioritized sites. Based on those findings, Mr. Young developed a scope of soil, groundwater, and soil-gas testing to evaluate the presence, extent, and potential human health risk associated with historical sites uses. Key to the process was negotiating with Alameda County Health Services, the RWQCB, and the USEPA to provide the City with efficient consulting services as well as to strategize about the various agency concerns in the Downtown Core area. Prepared the detailed Sampling and Analysis Plan (SAP) as required by the EPA, including the appropriate discussion regarding Data Quality Objectives (DQOs) and Indicators (DQIs).

Exxon Company, U.S.A, Benicia, California. Project manager for the soil and groundwater investigation for the entire refinery. He compiled available subsurface data and prepared a Work Plan to satisfy Waste Discharge Requirements established by the RWQCB for the refinery. He

oversaw hydrogeological and contaminant characterizations for the entire refinery, including the wastewater treatment area, bulk storage fields, and waste piles. Mr. Young managed a large, multi-disciplinary project team, interacted with refinery managers, conducted presentations and negotiations with regulatory agencies, and prepared assessment reports.

CDCR Prison Sites - Vacaville, Folsom and Stockton, California. Principal in Charge for the investigation/assessment of areas within and surrounding three existing prison facilities. Coordinated Phase I and II ESA's for the Stockton prison including extensive hazardous building materials surveys for demolition of the existing 19 buildings. Participated in both regulatory and design team discussions of the potential environmental issues at each facility. At the Stockton site provided subsequent consultation regarding impacted groundwater below the site resulting from releases from an up gradient landfill site.

Citation Homes Central, San Leandro, California. Construction manager for site investigation and remediation at former explosives manufacturing facility (nitrostarch) in preparation for residential development and wetlands restoration. He prepared and implemented the *Site Investigation Work Plan* and prepared the *Investigation Completion Reports, Engineering Evaluation/ Cost Analysis* (EE/CA) to select a remedial alternative for the site. Mr. Young also conducted soil remediation and air monitoring as required. He participated in public meetings as part of EE/CA and CEQA processes including numerous local, state and federal agencies. He routinely reported findings and negotiated with RWQCB and DTSC caseworkers and procured regulatory closure from DTSC.

Cottage Hospital, Santa Barbara, California. Managed the envirionmental cleanup and reporting requirements during construction of the new power plant facility at the hospital. To comply with the Office of Statewide Health Planning & Development (OSHPD), Cottage Hospital reconstructed the hospital as a completely new facility on and around the existing facility. Mr. Young prepared and implemented a Soil Management Plan to comply with certain Deed Restriction requirements for the former UST area, coordinated with the contractor, and provided field observations, mapping, soil sampling, and analytical services during excavation. He assisted the hospital with certain soil reuse and disposal activites and obtained NoFA status on behalf of the hospital.

Former Maskell Oil Facility, San Leandro, California. Project Manager responsible for the development and implementation of a Corrective Action Plan to remediate hydrocarbon-containing soil and groundwater at this bulk petroleum fuel and vehicle maintenance property. To expedite construction of a new post office, he assisted the San Leandro Development Services Agency, the U.S. Postal Service (USPS) with obtaining RWQCB and DTSC's approval of a remediation plan that focused on mass removal of

chemical contaminant, rather than one based on regulatory numerical cleanup goals. A risk-based closure based on the intended institutional land use of the site was achieved. When remediation was completed, the Agency and USPS received the qualified immunity provisions of the Polanco Act.

Summer Del Caribe Lead Remediation Project, Richmond California: Operations manager for the remedial action at this former lead recovery facility. Remedial services involved the excavation, stabilization, and offsite disposal of treated lead waste. Activities included decontamination of the existing structures, oversight of a comprehensive excavation and confirmation testing program, mechanical screening, stabilization, trucking, and site restoration involving a number of remedial subcontractors. My. Young was instrumental in arranging disposal of non-spec treated waste as well as tracking pay quantities for the subcontractors.

On Broadway Redevelopment Project, Redwood City, California. Managed the hazardous materials investigations and completed soil characterization activities to allow the offsite reuse of soil from this project at a nearby marina project. These services were provided to the developer with subsequent interaction with the City of Redwood City, which owns and operates the below-ground parking structure at the Site. A UST and impacted soil were removed during the construction activities. Investigation and soil reuse work was done in conformance with County and RWQCB requirements.

Big Break Marina, Oakley, California. Managed site assessment services for EB Parks to evaluate sediment, soil, and groundwater conditions at the site. Site assessment activities focused on conditions near former USTs and sediments previously dredged from the site, surface soil that may have been impacted by marine servicing and storage activities. Results of sediment analyses were compared to beneficial upland reuse criteria established by the RWQCB.

Shareholder Properties, Limited, **Benicia, California.** Construction manager for a $2.5 million turnkey soil remediation project involving characterization, excavation, stabilization/fixation, and placement of over 11,000 tons of lead-contaminated soil into an onsite repository. His responsibilities included oversight of all operations during soil remediation, including dust control, odor abatement, site security, compliance with all permits and Work Plan requirements, and was the primary point of contact for all regulatory oversight during the remedial action. He prepared closure documentation and negotiated regulatory closure for the site from the DTSC.

SPECIALIZED TRAINING

- 40-hour Safety Training Course (29 CFR 1910.120)
- 8-hour Hazardous Materials Supervisory Course
- Bay Area Training Trust (BATT) – dormant

PROFESSIONAL AFFILIATIONS

- California Groundwater Resources Association
- 1995 CELSOC Engineering Excellence Honor Award – Parcel 2-4A Lead Remediation

APPENDIX I:
ENVIRONMENTAL PROFESSIONAL STATEMENT

DEFINITION OF ENVIRONMENTAL PROFESSIONAL AND RELEVANT EXPERIENCE THERETO PURSUANT TO 40 CFR 312

(1) a person who possesses sufficient specific education, training, and experience necessary to exercise professional judgment to develop opinions and conclusions regarding conditions indicative of releases or threatened releases (see §312.1(c)) on, at, in, or to a property, sufficient to meet the objectives and performance factors in §312.20(e) and (f).

(2) Such a person must: (i) hold a current Professional Engineer's or Professional Geologist's license or registration from a state, tribe, or U.S. territory (or the Commonwealth of Puerto Rico) and have the equivalent of three (3) years of full-time relevant experience; or (ii) be licensed or certified by the federal government, a state, tribe, or U.S. territory (or the Commonwealth of Puerto Rico) to perform environmental inquiries as defined in §312.21 and have the equivalent of three (3) years of full-time relevant experience; or (iii) have a Baccalaureate or higher degree from an accredited institution of higher education in a discipline of engineering or science and the equivalent of five (5) years of full-time relevant experience; or (iv) have the equivalent of ten (10) years of full-time relevant experience.

(3) An environmental professional should remain current in his or her field through participation in continuing education or other activities.

(4) The definition of environmental professional provided above does not preempt state professional licensing or registration requirements such as those for a professional geologist, engineer, or site remediation professional. Before commencing work, a person should determine the applicability of state professional licensing or registration laws to the activities to be undertaken as part of the inquiry identified in §312.21(b).

(5) A person who does not qualify as an environmental professional under the foregoing definition may assist in the conduct of all appropriate inquiries in accordance with this part if such person is under the supervision or responsible charge of a person meeting the definition of an environmental professional provided above when conducting such activities.

Relevant experience, as used in the definition of environmental professional in this section, means: participation in the performance of all appropriate inquiries investigations, environmental site assessments, or other site investigations that may include environmental analyses, investigations, and remediation which involve the understanding of surface and subsurface environmental conditions and the processes used to evaluate these conditions and for which professional judgment was used to develop opinions regarding conditions indicative of releases or threatened releases (see §312.1(c)) to the Site. TRC personnel resume(s) are included in **Appendix H**.

I declare that, to the best of my professional knowledge and belief, I meet the definition of environmental professional as defined in §312.10 of 40 CFR 312.

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

Signature of Environmental Professional: _____ Date: 8.23.2019

Appendix F

Environmental Noise Assessment

Environmental Noise Assessment

Inez Subdivision

City of Brentwood, California

December 18, 2019

Project # 191103

Prepared for:

De Novo Planning Group
1020 Suncast Lane, Suite 106
El Dorado Hills, California 95762

Prepared by:

Saxelby Acoustics LLC

Luke Saxelby, INCE Bd. Cert.
Principal Consultant
Board Certified, Institute of Noise Control Engineering (INCE)

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INTRODUCTION

The Inez Subdivision project consists of the development of an 11-lot single-family subdivision on a vacant parcel. The project is located at the southwest corner of the intersection of Lone Tree Way and Gann Street.

Figure 1 shows the project site plan. **Figure 2** shows an aerial photo of the project site.

ENVIRONMENTAL SETTING

BACKGROUND INFORMATION ON NOISE

Fundamentals of Acoustics

Acoustics is the science of sound. Sound may be thought of as mechanical energy of a vibrating object transmitted by pressure waves through a medium to human (or animal) ears. If the pressure variations occur frequently enough (at least 20 times per second), then they can be heard and are called sound. The number of pressure variations per second is called the frequency of sound, and is expressed as cycles per second or Hertz (Hz).

Noise is a subjective reaction to different types of sounds. Noise is typically defined as (airborne) sound that is loud, unpleasant, unexpected or undesired, and may therefore be classified as a more specific group of sounds. Perceptions of sound and noise are highly subjective from person to person.

Measuring sound directly in terms of pressure would require a very large and awkward range of numbers. To avoid this, the decibel scale was devised. The decibel scale uses the hearing threshold (20 micropascals), as a point of reference, defined as 0 dB. Other sound pressures are then compared to this reference pressure, and the logarithm is taken to keep the numbers in a practical range. The decibel scale allows a million-fold increase in pressure to be expressed as 120 dB, and changes in levels (dB) correspond closely to human perception of relative loudness.

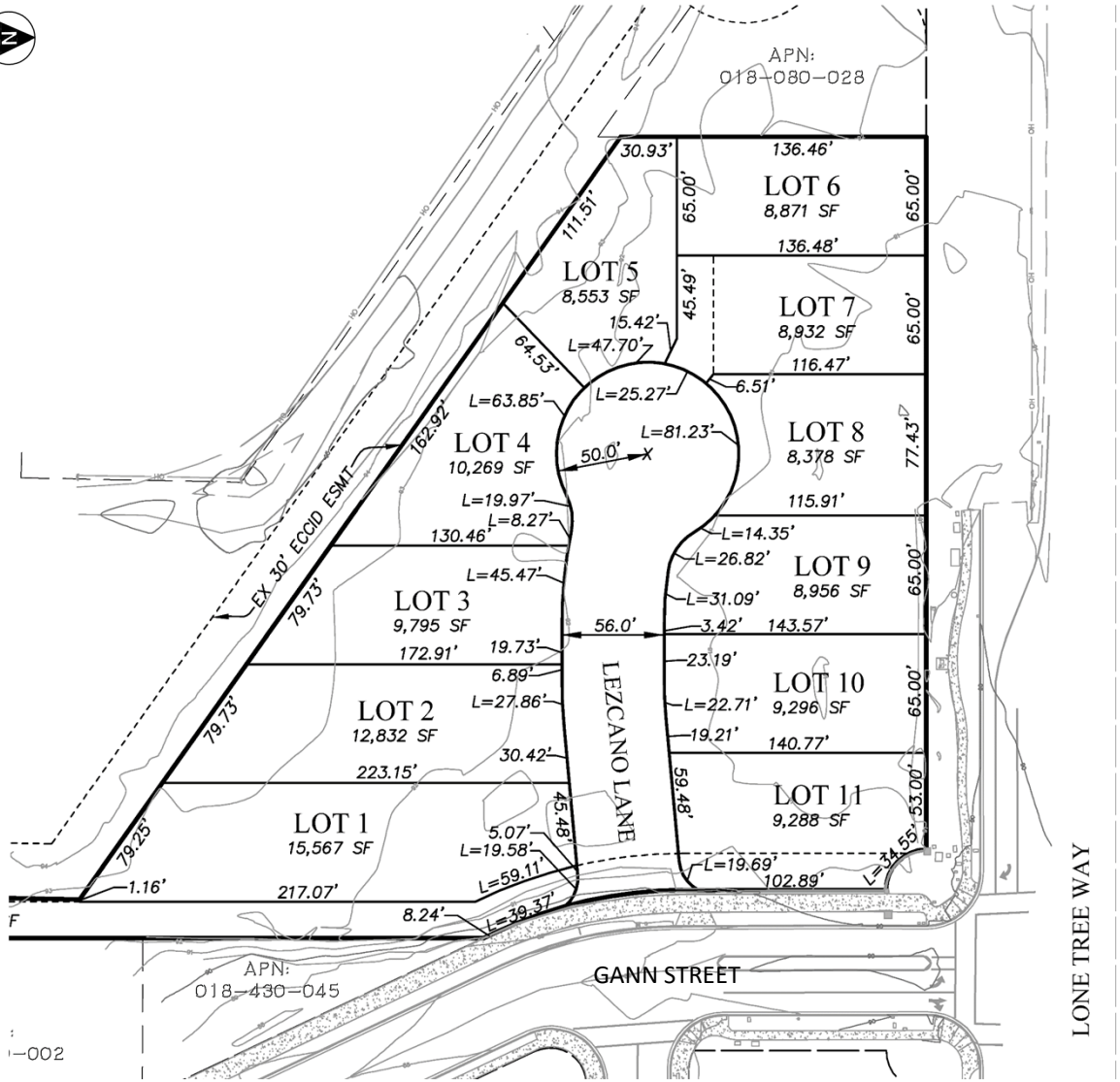
The perceived loudness of sounds is dependent upon many factors, including sound pressure level and frequency content. However, within the usual range of environmental noise levels, perception of loudness is relatively predictable, and can be approximated by A-weighted sound levels. There is a strong correlation between A-weighted sound levels (expressed as dBA) and the way the human ear perceives sound. For this reason, the A-weighted sound level has become the standard tool of environmental noise assessment.

Inez Subdivision

City of Brentwood, California

Figure 1

Project Site Plan



APEX
CIVIL ENGINEERING & LAND SURVEYING
817 Arnold Drive, Ste. 50
Martinez, CA 94553
Ph: (925) 476-8499
www.apexce.net

SAXELBY ACOUSTICS
Acoustics · Noise · Vibration

Inez Subdivision

City of Brentwood, California

Figure 2

Noise Measurement Sites

Legend

- Project Site
- Noise Measurement - Long Term
- Noise Measurement - Short Term

25 ft 75 ft 125 ft 175 ft

Projection: State Plane (California Zone 3) / NAD83 / meters
Rev. Date: 12/10/2019

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The decibel scale is logarithmic, not linear. In other words, two sound levels 10-dB apart differ in acoustic energy by a factor of 10. When the standard logarithmic decibel is A-weighted, an increase of 10-dBA is generally perceived as a doubling in loudness. For example, a 70-dBA sound is half as loud as an 80-dBA sound, and twice as loud as a 60 dBA sound.

Community noise is commonly described in terms of the ambient noise level, which is defined as the all-encompassing noise level associated with a given environment. A common statistical tool is the average, or equivalent, sound level (L_{eq}), which corresponds to a steady-state A weighted sound level containing the same total energy as a time varying signal over a given time period (usually one hour). The L_{eq} is the foundation of the composite noise descriptor, L_{dn}, and shows very good correlation with community response to noise.

The day/night average level (DNL or L_{dn}) is based upon the average noise level over a 24-hour day, with a +10-decibel weighing applied to noise occurring during nighttime (10:00 p.m. to 7:00 a.m.) hours. The nighttime penalty is based upon the assumption that people react to nighttime noise exposures as though they were twice as loud as daytime exposures. Because L_{dn} represents a 24-hour average, it tends to disguise short-term variations in the noise environment.

Table 1 lists several examples of the noise levels associated with common situations. **Appendix A** provides a summary of acoustical terms used in this report.

TABLE 1: TYPICAL NOISE LEVELS

Common Outdoor Activities	Noise Level (dBA)	Common Indoor Activities
	--110--	Rock Band
Jet Fly-over at 300 m (1,000 ft.)	--100--	
Gas Lawn Mower at 1 m (3 ft.)	--90--	
Diesel Truck at 15 m (50 ft.), at 80 km/hr. (50 mph)	--80--	Food Blender at 1 m (3 ft.) Garbage Disposal at 1 m (3 ft.)
Noisy Urban Area, Daytime Gas Lawn Mower, 30 m (100 ft.)	--70--	Vacuum Cleaner at 3 m (10 ft.)
Commercial Area Heavy Traffic at 90 m (300 ft.)	--60--	Normal Speech at 1 m (3 ft.)
Quiet Urban Daytime	--50--	Large Business Office Dishwasher in Next Room
Quiet Urban Nighttime	--40--	Theater, Large Conference Room (Background)
Quiet Suburban Nighttime	--30--	Library
Quiet Rural Nighttime	--20--	Bedroom at Night, Concert Hall (Background)
	--10--	Broadcast/Recording Studio
Lowest Threshold of Human Hearing	--0--	Lowest Threshold of Human Hearing

Source: Caltrans, Technical Noise Supplement, Traffic Noise Analysis Protocol. September, 2013.

Effects of Noise on People

The effects of noise on people can be placed in three categories:

- Subjective effects of annoyance, nuisance, and dissatisfaction
- Interference with activities such as speech, sleep, and learning
- Physiological effects such as hearing loss or sudden startling

Environmental noise typically produces effects in the first two categories. Workers in industrial plants can experience noise in the last category. There is no completely satisfactory way to measure the subjective effects of noise or the corresponding reactions of annoyance and dissatisfaction. A wide variation in individual thresholds of annoyance exists and different tolerances to noise tend to develop based on an individual's past experiences with noise.

Thus, an important way of predicting a human reaction to a new noise environment is the way it compares to the existing environment to which one has adapted: the so-called ambient noise level. In general, the more a new noise exceeds the previously existing ambient noise level, the less acceptable the new noise will be judged by those hearing it.

With regard to increases in A-weighted noise level, the following relationships occur:

- Except in carefully controlled laboratory experiments, a change of 1-dBA cannot be perceived;
- Outside of the laboratory, a 3-dBA change is considered a just-perceivable difference;
- A change in level of at least 5-dBA is required before any noticeable change in human response would be expected; and
- A 10-dBA change is subjectively heard as approximately a doubling in loudness, and can cause an adverse response.

Stationary point sources of noise – including stationary mobile sources such as idling vehicles – attenuate (lessen) at a rate of approximately 6-dB per doubling of distance from the source, depending on environmental conditions (i.e. atmospheric conditions and either vegetative or manufactured noise barriers, etc.). Widely distributed noises, such as a large industrial facility spread over many acres, or a street with moving vehicles, would typically attenuate at a lower rate.

EXISTING AND FUTURE NOISE AND VIBRATION ENVIRONMENTS

EXISTING NOISE RECEPTORS

Some land uses are considered more sensitive to noise than others. Land uses often associated with sensitive receptors generally include residences, schools, libraries, hospitals, and passive recreational areas. Sensitive noise receptors may also include threatened or endangered noise sensitive biological species, although many jurisdictions have not adopted noise standards for wildlife areas. Noise sensitive land uses are typically given special attention in order to achieve protection from excessive noise.

Sensitivity is a function of noise exposure (in terms of both exposure duration and insulation from noise) and the types of activities involved. In the vicinity of the project site, sensitive land uses include existing single-family residential uses located north, south, east, and west of the project site.

EXISTING GENERAL AMBIENT NOISE LEVELS

The existing noise environment in the project area is primarily defined traffic on Lone Tree Way directly north of the project site.

To quantify the existing ambient noise environment in the project vicinity, Saxelby Acoustics conducted continuous (24-hr.) noise level measurements at two locations on the project site.

Noise measurement locations are shown on **Figure 2**. A summary of the noise level measurement survey results is provided in **Table 2**. **Appendix B** contains the complete results of the noise monitoring.

The sound level meters were programmed to record the maximum, median, and average noise levels at each site during the survey. The maximum value, denoted L_{max}, represents the highest noise level measured. The average value, denoted L_{eq}, represents the energy average of all of the noise received by the sound level meter microphone during the monitoring period. The median value, denoted L_{50}, represents the sound level exceeded 50 percent of the time during the monitoring period.

Larson Davis Laboratories (LDL) model 812 and 820 precision integrating sound level meters were used for the ambient noise level measurement survey. The meters were calibrated before and after use with a B&K Model 4230 acoustical calibrator to ensure the accuracy of the measurements. The equipment used meets all pertinent specifications of the American National Standards Institute for Type 1 sound level meters (ANSI S1.4).

TABLE 2: SUMMARY OF EXISTING BACKGROUND NOISE MEASUREMENT DATA

Site	Date	Average Measured Hourly Noise Levels, dBA						
			Daytime (7:00 am - 10:00 pm)			Nighttime (10:00 pm – 7:00 am)		
		CNEL/L_{dn}	L_{eq}	L_{50}	L_{max}	L_{eq}	L_{50}	L_{max}
LT-1	12/09/19-12/10/19	70	67	65	84	62	52	78
LT-2	12/09/19-12/10/19	58	55	54	70	50	45	62
Source: Saxelby Acoustics – 2019								

EVALUATION OF TRANSPORTATION NOISE ON PROJECT SITE

Saxelby Acoustics used the SoundPLAN noise model to calculate traffic noise levels at the proposed single-family uses due to traffic on Lone Tree Way. Traffic noise levels were predicted for existing conditions with a +1 dBA adjustment for future conditions. The results of this analysis are shown graphically on **Figure 3**.

RAILROAD NOISE

Union Pacific Railroad Line (UPRR) – Currently Inactive

The Union Pacific Railroad (UPRR) line is bisects the City of Brentwood from the northwest corner of the City to the southeast corner of the City. This portion of the railroad line has not been in use since sometime prior to the year 2000. The line is maintained by UPRR as a standby route with no planned use for freight movement. However, there is the potential that future use of the line could be used for commuter passenger service or future freight service.

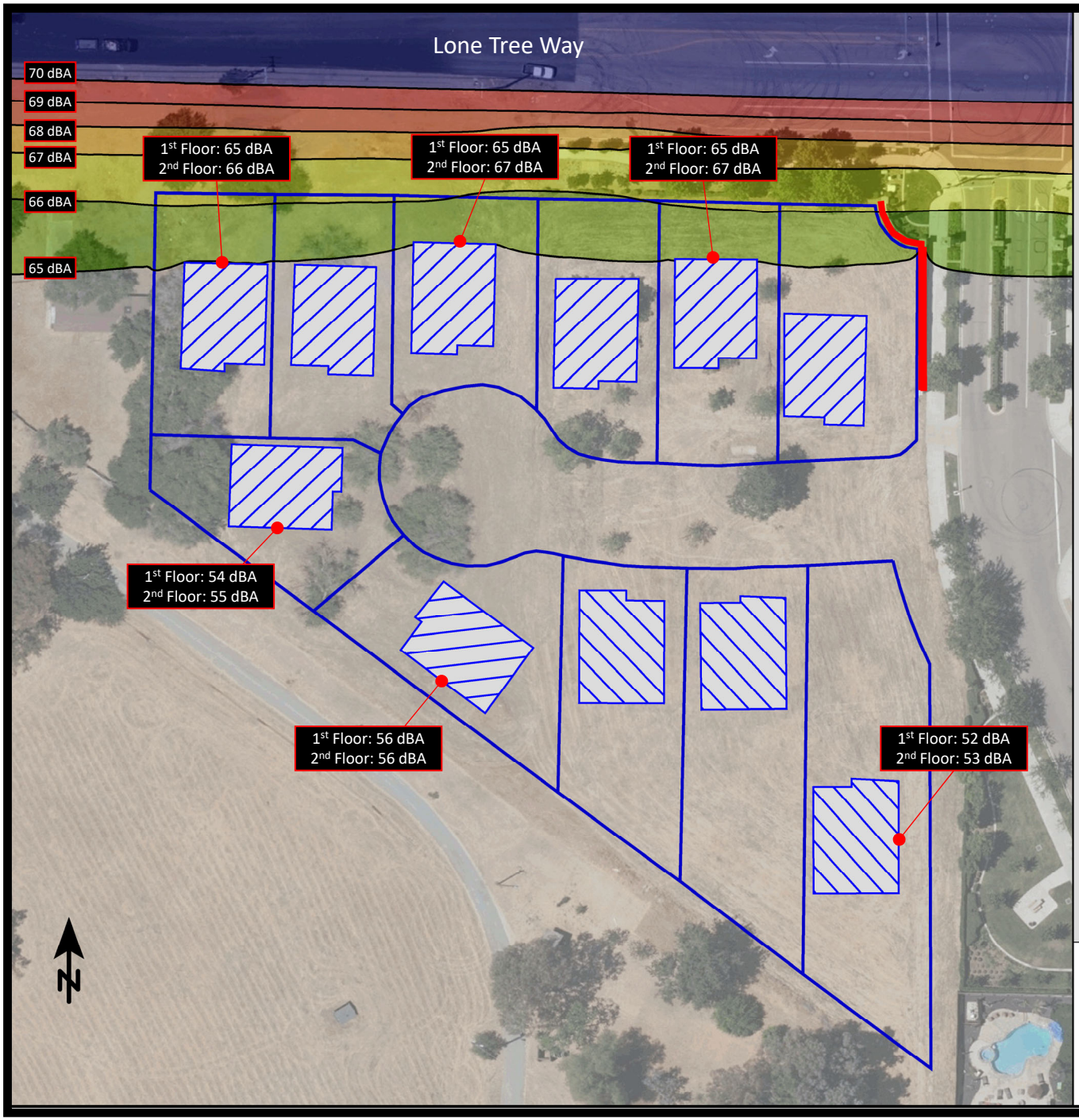
Rail operations associated with light rail passenger service is generally quiet in comparison to freight train operations. Although light rail operations may include 50 or more operations per day, the 60 dB CNEL contour will generally not extend more than 100 feet from the railroad track centerline.

To conservatively estimate potential noise impacts associated with railroad line activities, it was assumed that up to 10 freight train operations may occur during a 24-hour period. Assuming that each train generated a sound exposure level (SEL) of 100 dB at a distance of 100 feet from the railroad centerline, the Ldn noise level can be calculated using the following equation.

$$Ldn = SEL + 10 \log N_{eq} - 49.4 \text{ dB, where:}$$

SEL is the typical single event sound exposure level of an individual train event (100 dB at a distance of 100 feet), N_{eq} is the sum of the daytime (7 a.m. to 10 p.m.) train events, plus 10 times the number of nighttime (10 p.m. to 7 a.m.) train events (a total of 44), and 49.4 is ten times the logarithm of the number of seconds per day. Assuming an even distribution of trains between daytime, evening and nighttime hours, the Ldn would be 67 dB at 100 feet.

Saxelby Acoustics used the SoundPLAN noise model to calculate potential railroad noise levels across the project site. The results of this analysis are shown graphically on **Figure 3**



Inez Subdivision

City of Brentwood, California

Figure 3

Future Traffic and Railroad Noise

Levels (dBA L_{dn})

Signs and symbols

- Project Boundary
- Existing Wall
- Proposed Building

Levels in dB(A)

- <= 65
- 65 - 67
- 67 - 69
- 69 - 71
- 71 - 73
- 73 - 75
- > 75

1 : 927

0 4.5 9 18 27 36 m

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CONSTRUCTION NOISE ENVIRONMENT

During the construction of the proposed project, including roads, water and sewer lines, and related infrastructure, noise from construction activities would temporarily add to the noise environment in the project vicinity. As shown in **Table 3**, activities involved in construction would generate maximum noise levels ranging from 76 to 90 dB at a distance of 50 feet.

TABLE 3: CONSTRUCTION EQUIPMENT NOISE

Type of Equipment	Maximum Level, dBA at 50 feet
Auger Drill Rig	84
Backhoe	78
Compactor	83
Compressor (air)	78
Concrete Saw	90
Dozer	82
Dump Truck	76
Excavator	81
Generator	81
Jackhammer	89
Pneumatic Tools	85

Source: *Roadway Construction Noise Model User's Guide*. Federal Highway Administration. FHWA-HEP-05-054. January 2006.

CONSTRUCTION VIBRATION ENVIRONMENT

The primary vibration-generating activities associated with the proposed project would occur during construction when activities such as grading, utilities placement, and parking lot construction occur. **Table 4** shows the typical vibration levels produced by construction equipment.

TABLE 4: VIBRATION LEVELS FOR VARIOUS CONSTRUCTION EQUIPMENT

Type of Equipment	Peak Particle Velocity at 25 feet (inches/second)	Peak Particle Velocity at 50 feet (inches/second)	Peak Particle Velocity at 100 feet (inches/second)
Large Bulldozer	0.089	0.031	0.011
Loaded Trucks	0.076	0.027	0.010
Small Bulldozer	0.003	0.001	0.000
Auger/drill Rigs	0.089	0.031	0.011
Jackhammer	0.035	0.012	0.004
Vibratory Hammer	0.070	0.025	0.009
Vibratory Compactor/roller	0.210 (Less than 0.20 at 26 feet)	0.074	0.026

Source: *Transit Noise and Vibration Impact Assessment Guidelines.* Federal Transit Administration. May 2006.

REGULATORY CONTEXT

FEDERAL

There are no federal regulations related to noise that apply to the Proposed Project.

STATE

There are no state regulations related to noise that apply to the Proposed Project.

LOCAL

City of Brentwood General Plan

Policies

Policy N 1-1: Ensure the noise compatibility of existing and future development when making land use planning decisions.

Policy N 1-2: Require development and infrastructure projects to be consistent with the Land Use Compatibility for Community Noise Environments standards indicated in Table N-1 to ensure acceptable noise levels for existing and future development.

Policy N 1-3: Require new development to mitigate excessive noise through best practices, including building location and orientation, building design features, placement of noise-generating equipment away from sensitive receptors, shielding of noise-generating equipment, placement of noise-tolerant features between noise sources and sensitive receptors, and use of noise-minimizing materials such as rubberized asphalt.

Policy N 1-7: For projects that are required by the California Environmental Quality Act (CEQA) to analyze noise impacts, the following criteria shall be used to determine the significance of those impacts:

Stationary and Non-Transportation Noise Sources

- A significant impact will occur if the project results in an exceedance of the noise level standards contained in this element, or the project will result in an increase in ambient noise levels by more than 3 dB, whichever is greater.

Transportation Noise Sources

- Where existing traffic noise levels are less than 60 dB L_{dn} at the outdoor activity areas of noise-sensitive uses, a +5 dB L_{dn} increase in roadway noise levels will be considered significant; and

- Where existing traffic noise levels range between 60 and 65 dB L_{dn} at the outdoor activity areas of noise-sensitive uses, a +3 dB L_{dn} increase in roadway noise levels will be considered significant; and

- Where existing traffic noise levels are greater than 65 dB L_{dn} at the outdoor activity areas of noise-sensitive uses, a + 1.5 dB L_{dn} increase in roadway noise levels will be considered significant.

Policy N 1-14: Ensure that new development does not result in indoor noise levels exceeding 45 dBA Ldn for residential uses.

Policy N 1-15: Require construction activities to comply with standard best practices (see Action N 1e).

Policy N 2-1: Recognizing that existing and future traffic noise along the State Route 4 corridor, major arterials within Brentwood, and noise from the UPRR are areas of potential land use conflict for existing and future development, reasonable use of this land will be allowed with an exterior noise exposure level not exceeding 65 dB Ldn. New development that includes noise-sensitive uses (i.e., residential) along the State Route 4 corridor, major arterials, and the UPRR should incorporate appropriate noise attenuation measures in order to maintain interior noise levels of 45 dB Ldn or less. Application of this noise

standard is intended to provide for reasonable exterior noise levels while discouraging the use of excessively high and/or unattractive sound walls.

Action N 1e: *During the environmental review process, determine if proposed construction will constitute a significant impact on nearby residents and, if necessary, require mitigation measures in addition to the standard best practice controls. Suggested best practices for control of construction noise include:*

1. Construction period shall be less than 12 months.
2. Noise-generating construction activities, including truck traffic coming to and from the construction site for any purpose, shall be limited to between the hours of 7:00 am and 6:00 pm on weekdays, and between 8:00 am and 5:00 pm on Saturdays. No construction shall occur on Sundays or City holidays.
3. All equipment driven by internal combustion engines shall be equipped with mufflers, which are in good condition and appropriate for the equipment.
4. The construction contractor shall utilize "quiet" models of air compressors and other stationary noise sources where technology exists.
5. At all times during project grading and construction, stationary noise-generating equipment shall be located as far as practicable from sensitive receptors and placed so that emitted noise is directed away from residences.
6. Unnecessary idling of internal combustion engines shall be prohibited.
7. Construction staging areas shall be established at locations that will create the greatest distance between the construction-related noise sources and noise-sensitive receptors nearest the project site during all project construction activities, to the extent feasible.
8. The required construction-related noise mitigation plan shall also specify that haul truck deliveries are subject to the same hours specified for construction equipment.
9. Neighbors located adjacent to the construction site shall be notified of the construction schedule in writing.
10. The construction contractor shall designate a "noise disturbance coordinator" who will be responsible for responding to any local complaints about construction noise. The disturbance coordinator shall be responsible for determining the cause of the noise complaint (e.g., starting too early, poor muffler, etc.) and instituting reasonable measures as warranted to correct the problem. A telephone number for the disturbance coordinator shall be conspicuously posted at the construction site.

TABLE N-1 LAND USE COMPATIBILITY FOR COMMUNITY NOISE ENVIRONMENT							
Land Use Category	Exterior Noise Exposure (Ldn)						
		55	60	65	70	75	80
Single-Family Residential							
Multi-Family Residential, Hotels, and Motels							
Outdoor Sports and Recreation, Neighborhood Parks and Playgrounds							
Schools, Libraries, Museums, Hospitals, Personal Care, Meeting Halls, Churches							
Office Buildings, Business Commercial, and Professional							
Industrial							

NORMALLY ACCEPTABLE

Specified land use is satisfactory, based upon the assumption that any buildings involved are of normal conventional construction, without any special insulation requirements

CONDITIONALLY ACCEPTABLE

Specified land use may be permitted only after detailed analysis of the noise reduction requirements and needed noise insulation features included in the design

UNACCEPTABLE

New construction or development should generally not be undertaken because mitigation is usually not feasible to comply with noise element policies

Based upon Table N-1 of the City of Brentwood General Plan, residential uses are considered normally acceptable in ambient noise environments up to 60 dBA L_{dn}, and conditionally acceptable in noise environments up to 75 dBA L_{dn}. However, policy N-1 limits exterior noise levels to 65 dBA L_{dn} for new residential uses adjacent to State Route 4 corridor, major arterials within Brentwood, and noise from the UPRR. The City of Brentwood also establishes an interior noise level criterion of 45 dBA L_{dn} for residential uses.

Criteria for Acceptable Vibration

Vibration is like noise in that it involves a source, a transmission path, and a receiver. While vibration is related to noise, it differs in that in that noise is generally considered to be pressure waves transmitted through air, whereas vibration usually consists of the excitation of a structure or surface. As with noise, vibration consists of an amplitude and frequency. A person's perception to the vibration will depend on their individual sensitivity to vibration, as well as the amplitude and frequency of the source and the response of the system which is vibrating.

Vibration can be measured in terms of acceleration, velocity, or displacement. A common practice is to monitor vibration measures in terms of peak particle velocities in inches per second. Standards pertaining to perception as well as damage to structures have been developed for vibration levels defined in terms of peak particle velocities.

Human and structural response to different vibration levels is influenced by a number of factors, including ground type, distance between source and receptor, duration, and the number of perceived vibration events. **Table 5**, which was developed by Caltrans, shows the vibration levels which would normally be required to result in damage to structures. The vibration levels are presented in terms of peak particle velocity in inches per second.

Table 5 indicates that the threshold for architectural damage to structures is 0.20 in/sec p.p.v. A threshold of 0.2 in/sec p.p.v. is considered to be a reasonable threshold for short-term construction projects.

TABLE 5: EFFECTS OF VIBRATION ON PEOPLE AND BUILDINGS

Peak Particle Velocity		Human Reaction	Effect on Buildings
mm/second	in/second		
0.15-0.30	0.006-0.019	Threshold of perception; possibility of intrusion	Vibrations unlikely to cause damage of any type
2.0	0.08	Vibrations readily perceptible	Recommended upper level of the vibration to which ruins and ancient monuments should be subjected
2.5	0.10	Level at which continuous vibrations begin to annoy people	Virtually no risk of "architectural" damage to normal buildings
5.0	0.20	Vibrations annoying to people in buildings (this agrees with the levels established for people standing on bridges and subjected to relative short periods of vibrations)	Threshold at which there is a risk of "architectural" damage to normal dwelling - houses with plastered walls and ceilings. Special types of finish such as lining of walls, flexible ceiling treatment, etc., would minimize "architectural" damage
10-15	0.4-0.6	Vibrations considered unpleasant by people subjected to continuous vibrations and unacceptable to some people walking on bridges	Vibrations at a greater level than normally expected from traffic, but would cause "architectural" damage and possibly minor structural damage

Source: *Transportation Related Earthborne Vibrations.* Caltrans. TAV-02-01-R9601. February 20, 2002.

IMPACTS AND MITIGATION MEASURES

THRESHOLDS OF SIGNIFICANCE

Appendix G of the CEQA Guidelines states that a project would normally be considered to result in significant noise impacts if noise levels conflict with adopted environmental standards or plans or if noise generated by the project would substantially increase existing noise levels at sensitive receivers on a permanent or temporary basis. Significance criteria for noise impacts are drawn from CEQA Guidelines Appendix G (Items XI [a-f]).

Would the project:

a. Generate a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

b. Generate excessive groundborne vibration or groundborne noise levels?

c. For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

PROJECT-SPECIFIC IMPACTS AND MITIGATION MEASURES

IMPACT 1: WOULD THE PROJECT GENERATE A SUBSTANTIAL TEMPORARY OR PERMANENT INCREASE IN AMBIENT NOISE LEVELS IN THE VICINITY OF THE PROJECT IN EXCESS OF STANDARDS ESTABLISHED IN THE LOCAL GENERAL PLAN OR NOISE ORDINANCE, OR APPLICABLE STANDARDS OF OTHER AGENCIES?

Traffic Noise Increases

The proposed project is consistent with the City's General Plan and no traffic study was required for the project. Therefore, no substantial increases in traffic noise are predicted.

Operational Noise Increases

The proposed project would include typical residential noise which would be compatible with the adjacent existing residential uses.

Traffic and Railroad Noise at New Sensitive Receptors – Exterior Areas

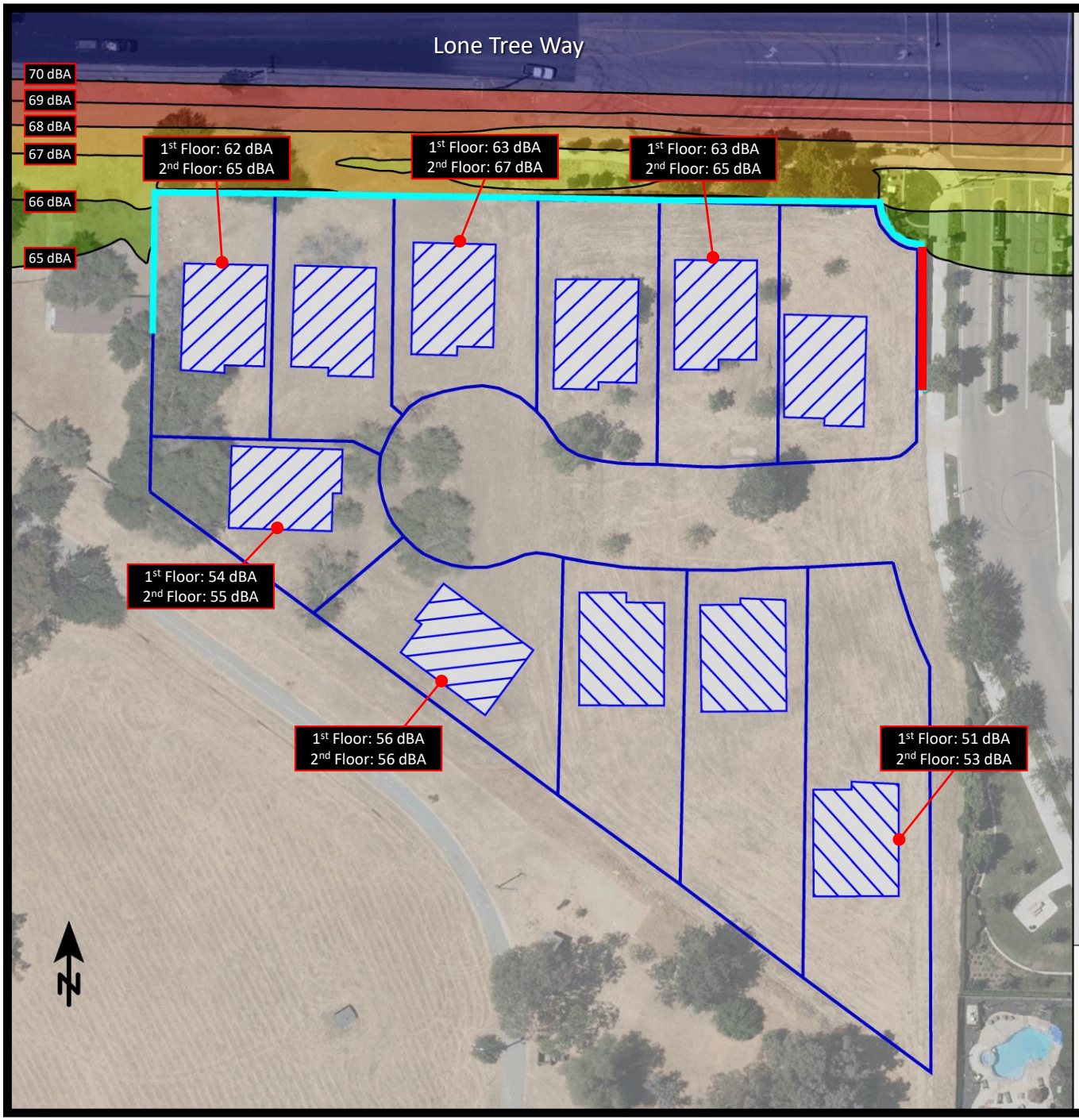
As shown on **Figure 3**, the project site is predicted to be exposed to exterior noise levels up to approximately 67 dBA L_{dn}. This would exceed the City of Brentwood 65 dB L_{dn} Community Noise Exposure standards for new developments in the vicinity of major arterial roadways. Therefore, exterior noise control measures would be required to ensure that future residents are not exposed to exterior noise levels exceeding City standards. Specifically, 8-foot tall sound walls were analyzed at the location shown on **Figure 4.** Based upon the noise predictions shown on **Figure 4**, exterior noise levels would be reduced to 65 dBA L_{dn}, or less with use of these barriers.

Traffic and Railroad Noise at New Sensitive Receptors – Interior Areas

Based upon **Figure 4**, the proposed project would be exposed to exterior noise levels of up to 62 dBA L_{dn} at the ground floor building facades closest to Lone Tree Way. Second floor locations would not receive substantial shielding from the 8-foot tall sound wall and would be expected to be exposed to exterior noise levels of up to 67 dBA L_{dn}.

Modern building construction typically yields an exterior-to-interior noise level reduction of 25 dBA. Therefore, where exterior noise levels are 70 dBA L_{dn}, or less, no additional interior noise control measures are typically required. For this project, exterior noise levels are predicted to be up to 67 dBA L_{dn}, resulting in an interior noise level of 42 dBA L_{dn} based on typical building construction. This would meet the City's 45 dBA L_{dn} interior noise level standard.

Impacts resulting from exterior noise levels exceeding the threshold of significance due to interior traffic noise would be considered ***potentially significant***.



Inez Subdivision

City of Brentwood, California

Figure 4

Future Traffic and Railroad Noise Levels (dBA L_{dn})

Signs and symbols

- Project Boundary
- Recommended 8 ft. Wall
- Proposed Building
- Existing Wall

Levels in dB(A)

- <= 65
- 65 - 67
- 67 - 69
- 69 - 71
- 71 - 73
- 73 - 75
- > 75

1 : 927

0 4.5 9 18 27 36 m

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Construction Noise

During the construction phases of the project, noise from construction activities would add to the noise environment in the immediate project vicinity. As indicated in **Table 5**, activities involved in construction would generate maximum noise levels ranging from 76 to 90 dBA L_{max} at a distance of 50 feet. Most of the building construction would occur at distances of 50 feet or greater from the nearest residences. Construction noise associated with streets would be similar to noise that would be associated with public works projects, such as a roadway widening or paving projects.

Construction activities would be temporary in nature and are anticipated to occur during normal daytime working hours.

Noise would also be generated during the construction phase by increased truck traffic on area roadways. A project-generated noise source would be truck traffic associated with transport of heavy materials and equipment to and from the construction site. This noise increase would be of short duration, and would likely occur primarily during daytime hours.

Construction activities are conditionally exempt from the Noise Ordinance during certain hours. Construction activities are exempt from the noise standard from 6 AM to 8 PM Monday through Friday, and from 7 AM to 8 PM on Saturdays and Sundays.

Although construction activities are temporary in nature and would likely occur during normal daytime working hours, construction-related noise could result in sleep interference at existing noise-sensitive land uses in the vicinity of the construction if construction activities were to occur outside the normal daytime hours. Therefore, impacts resulting from noise levels temporarily exceeding the threshold of significance due to construction would be considered ***potentially significant***.

<u>Mitigation Measure(s)</u>
Implementation of the following mitigation measures would reduce the above impact to a *less-than-significant* level.

1(a) *Prior to approval of project improvement plans, the improvement plans for the proposed project shall show that the first-row lots shall be shielded from the Lone Tree Way through the use of eight-foot tall masonry sound walls per the approval of the City Engineer. The approximate locations of these barriers are shown on* ***Figure 4****. Other types of barrier may be employed but shall be reviewed by an acoustical engineer prior to being constructed.*

1(b) *Construction activities shall be limited to the hours set forth below:*

Monday-Friday 7:00 AM to 6:00 PM
Saturday 8:00 AM to 5:00 PM

Construction shall be prohibited on Sundays and City holidays. These criteria shall be included in the grading plan submitted by the applicant/developer for review and approval of the Community Development Director prior to issuance of grading permits. Exceptions to allow expanded construction activities shall be reviewed on a case-by-case basis as determined by the Chief Building Official and/or City Engineer.

1(c) The project contractor shall ensure that the following construction noise BMPs are met on-site during all phases of construction:

- *All equipment driven by internal combustion engines shall be equipped with mufflers, air-inlet silencers where appropriate, and any other shrouds, shields, or other noise-reducing features in good operating condition that meet or exceed original factory specifications. Mobile or fixed "package" equipment (e.g., arc welders, air compressors) shall be equipped with shrouds and noise- control features that are readily available for that type of equipment.*
- *All mobile or fixed noise-producing equipment used on the project site that are regulated for noise output by a federal, state, or local agency shall comply with such regulations while in the course of project activity.*
- *The construction contractor shall utilize "quiet" models of air compressors and other stationary noise sources where technology exists.*
- *At all times during project grading and construction, stationary noise-generating equipment shall be located as far as practicable from sensitive receptors and placed so that emitted noise is directed away from residences.*
- *Unnecessary idling of internal combustion engines shall be prohibited.*
- *Construction staging areas shall be established at locations that would create the greatest distance between the construction-related noise sources and noise-sensitive receptors nearest the project site during all project construction activities, to the extent feasible.*
- *Construction site and access road speed limits shall be established and enforced during the construction period.*
- *The use of noise-producing signals, including horns, whistles, alarms, and bells, shall be for safety warning purposes only.*
- *Project-related public address or music systems shall not be audible at any adjacent receptor.*
- *Neighbors located adjacent to the construction site shall be notified of the construction schedule in writing.*
- *The construction contractor shall designate a "noise disturbance coordinator" who would be responsible for responding to any local complaints about construction noise. The disturbance coordinator shall be responsible for determining the cause of the noise complaint (e.g., starting too early, poor muffler, etc.) and instituting reasonable measures as warranted to correct the problem. A telephone number for the disturbance coordinator shall be conspicuously posted at the construction site.*

Construction noise BMPs shall be included in the grading plan submitted by the developer for review and approval by the Community Development Director prior to grading permit issuance.

IMPACT 2: WOULD THE PROJECT GENERATE EXCESSIVE GROUNDBORNE VIBRATION OR GROUNDBORNE NOISE LEVELS?

Construction vibration impacts include human annoyance and building structural damage. Human annoyance occurs when construction vibration rises significantly above the threshold of perception. Building damage can take the form of cosmetic or structural.

The **Table 4** data indicate that construction vibration levels anticipated for the project are less than the 0.2 in/sec threshold at distances of 26 feet. Sensitive receptors which could be impacted by construction related vibrations, especially vibratory compactors/rollers, are located approximately 26 feet, or further, from typical construction activities. At these distances construction vibrations are not predicted to exceed acceptable levels. Additionally, construction activities would be temporary in nature and would likely occur during normal daytime working hours.

This is a **less-than-significant** impact and no mitigation is required.

IMPACT 3: FOR A PROJECT LOCATED WITHIN THE VICINITY OF A PRIVATE AIRSTRIP OR AN AIRPORT LAND USE PLAN OR, WHERE SUCH A PLAN HAS NOT BEEN ADOPTED, WITHIN TWO MILES OF A PUBLIC AIRPORT OR PUBLIC USE AIRPORT, WOULD THE PROJECT EXPOSE PEOPLE RESIDING OR WORKING IN THE PROJECT AREA TO EXCESSIVE NOISE LEVELS?

There are no airports in the project vicinity. Therefore, this impact is not applicable to the proposed project.

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Appendix A: Acoustical Terminology

Acoustics	The science of sound.
Ambient Noise	The distinctive acoustical characteristics of a given space consisting of all noise sources audible at that location. In many cases, the term ambient is used to describe an existing or pre-project condition such as the setting in an environmental noise study.
ASTC	Apparent Sound Transmission Class. Similar to STC but includes sound from flanking paths and correct for room reverberation. A larger number means more attenuation. The scale, like the decibel scale for sound, is logarithmic.
Attenuation	The reduction of an acoustic signal.
A-Weighting	A frequency-response adjustment of a sound level meter that conditions the output signal to approximate human response.
Decibel or dB	Fundamental unit of sound, A Bell is defined as the logarithm of the ratio of the sound pressure squared over the reference pressure squared. A Decibel is one-tenth of a Bell.
CNEL	Community Noise Equivalent Level. Defined as the 24-hour average noise level with noise occurring during evening hours (7 - 10 p.m.) weighted by +5 dBA and nighttime hours weighted by +10 dBA.
DNL	See definition of Ldn.
IIC	Impact Insulation Class. An integer-number rating of how well a building floor attenuates impact sounds, such as footsteps. A larger number means more attenuation. The scale, like the decibel scale for sound, is logarithmic.
Frequency	The measure of the rapidity of alterations of a periodic signal, expressed in cycles per second or hertz (Hz).
Ldn	Day/Night Average Sound Level. Similar to CNEL but with no evening weighting.
Leq	Equivalent or energy-averaged sound level.
Lmax	The highest root-mean-square (RMS) sound level measured over a given period of time.
L(n)	The sound level exceeded a described percentile over a measurement period. For instance, an hourly L50 is the sound level exceeded 50% of the time during the one-hour period.
Loudness	A subjective term for the sensation of the magnitude of sound.
NIC	Noise Isolation Class. A rating of the noise reduction between two spaces. Similar to STC but includes sound from flanking paths and no correction for room reverberation.
NNIC	Normalized Noise Isolation Class. Similar to NIC but includes a correction for room reverberation.
Noise	Unwanted sound.
NRC	Noise Reduction Coefficient. NRC is a single-number rating of the sound-absorption of a material equal to the arithmetic mean of the sound-absorption coefficients in the 250, 500, 1000, and 2,000 Hz octave frequency bands rounded to the nearest multiple of 0.05. It is a representation of the amount of sound energy absorbed upon striking a particular surface. An NRC of 0 indicates perfect reflection; an NRC of 1 indicates perfect absorption.
RT60	The time it takes reverberant sound to decay by 60 dB once the source has been removed.
Sabin	The unit of sound absorption. One square foot of material absorbing 100% of incident sound has an absorption of 1 Sabin.
SEL	Sound Exposure Level. SEL is a rating, in decibels, of a discrete event, such as an aircraft flyover or train pass by, that compresses the total sound energy into a one-second event.
SPC	Speech Privacy Class. SPC is a method of rating speech privacy in buildings. It is designed to measure the degree of speech privacy provided by a closed room, indicating the degree to which conversations occurring within are kept private from listeners outside the room.
STC	Sound Transmission Class. STC is an integer rating of how well a building partition attenuates airborne sound. It is widely used to rate interior partitions, ceilings/floors, doors, windows and exterior wall configurations. The STC rating is typically used to rate the sound transmission of a specific building element when tested in laboratory conditions where flanking paths around the assembly don't exist. A larger number means more attenuation. The scale, like the decibel scale for sound, is logarithmic.
Threshold of Hearing	The lowest sound that can be perceived by the human auditory system, generally considered to be 0 dB for persons with perfect hearing.
Threshold of Pain	Approximately 120 dB above the threshold of hearing.
Impulsive	Sound of short duration, usually less than one second, with an abrupt onset and rapid decay.
Simple Tone	Any sound which can be judged as audible as a single pitch or set of single pitches.

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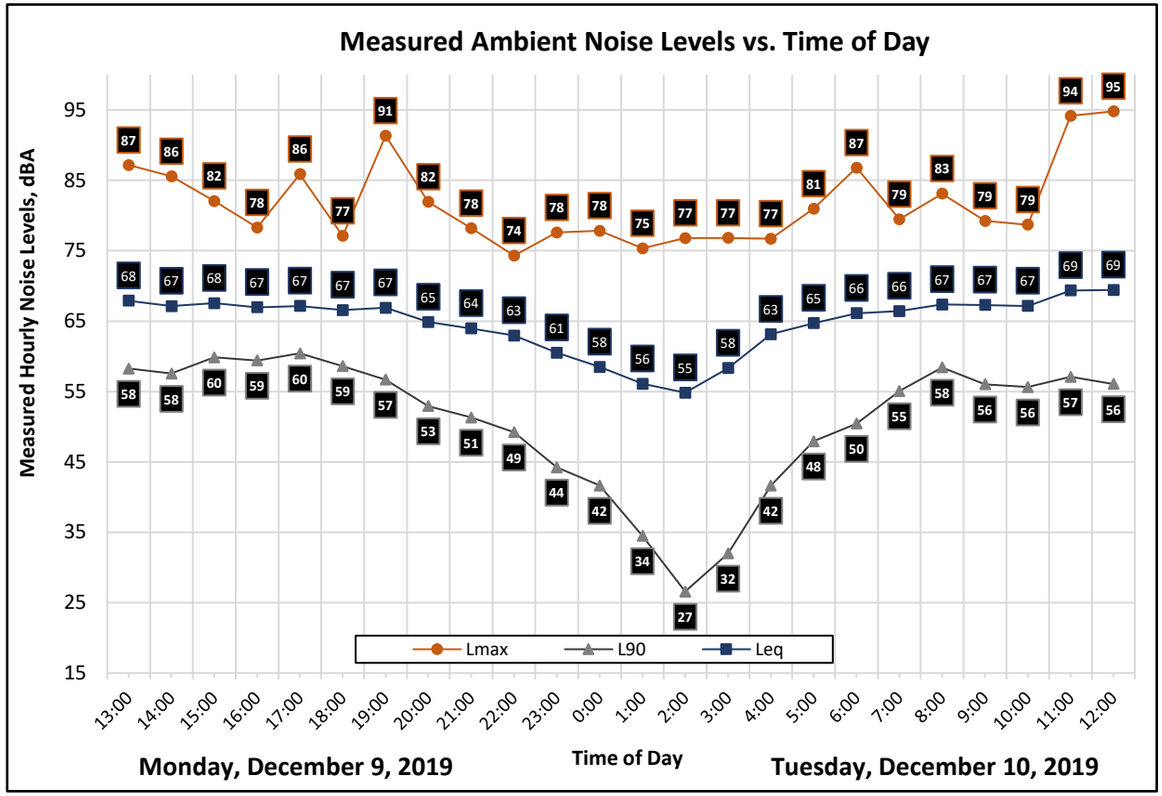
Appendix B1: Continuous Noise Monitoring Results

Site: LT-1
Project: Inez Subdivision
Meter: LDL 820-1
Location: Southwestern Project Boundary
Calibrator: CAL200
Coordinates: 37.9607390°, -121.7200016°

Date	Time	Measured Level, dBA			
		L_{eq}	L_{max}	L_{50}	L_{90}
Monday, December 9, 2019	13:00	68	87	66	58
Monday, December 9, 2019	14:00	67	86	66	58
Monday, December 9, 2019	15:00	68	82	66	60
Monday, December 9, 2019	16:00	67	78	66	59
Monday, December 9, 2019	17:00	67	86	66	60
Monday, December 9, 2019	18:00	67	77	66	59
Monday, December 9, 2019	19:00	67	91	65	57
Monday, December 9, 2019	20:00	65	82	63	53
Monday, December 9, 2019	21:00	64	78	62	51
Monday, December 9, 2019	22:00	63	74	60	49
Monday, December 9, 2019	23:00	61	78	54	44
Tuesday, December 10, 2019	0:00	58	78	49	42
Tuesday, December 10, 2019	1:00	56	75	43	34
Tuesday, December 10, 2019	2:00	55	77	34	27
Tuesday, December 10, 2019	3:00	58	77	44	32
Tuesday, December 10, 2019	4:00	63	77	58	42
Tuesday, December 10, 2019	5:00	65	81	62	48
Tuesday, December 10, 2019	6:00	66	87	63	50
Tuesday, December 10, 2019	7:00	66	79	65	55
Tuesday, December 10, 2019	8:00	67	83	66	58
Tuesday, December 10, 2019	9:00	67	79	66	56
Tuesday, December 10, 2019	10:00	67	79	66	56
Tuesday, December 10, 2019	11:00	69	94	66	57
Tuesday, December 10, 2019	12:00	69	95	66	56

Statistics	Leq	Lmax	L50	L90
Day Average	67	84	65	57
Night Average	62	78	52	41
Day Low	64	77	62	51
Day High	69	95	66	60
Night Low	55	74	34	27
Night High	66	87	63	50
Ldn	70	Day %		85
CNEL	70	Night %		15

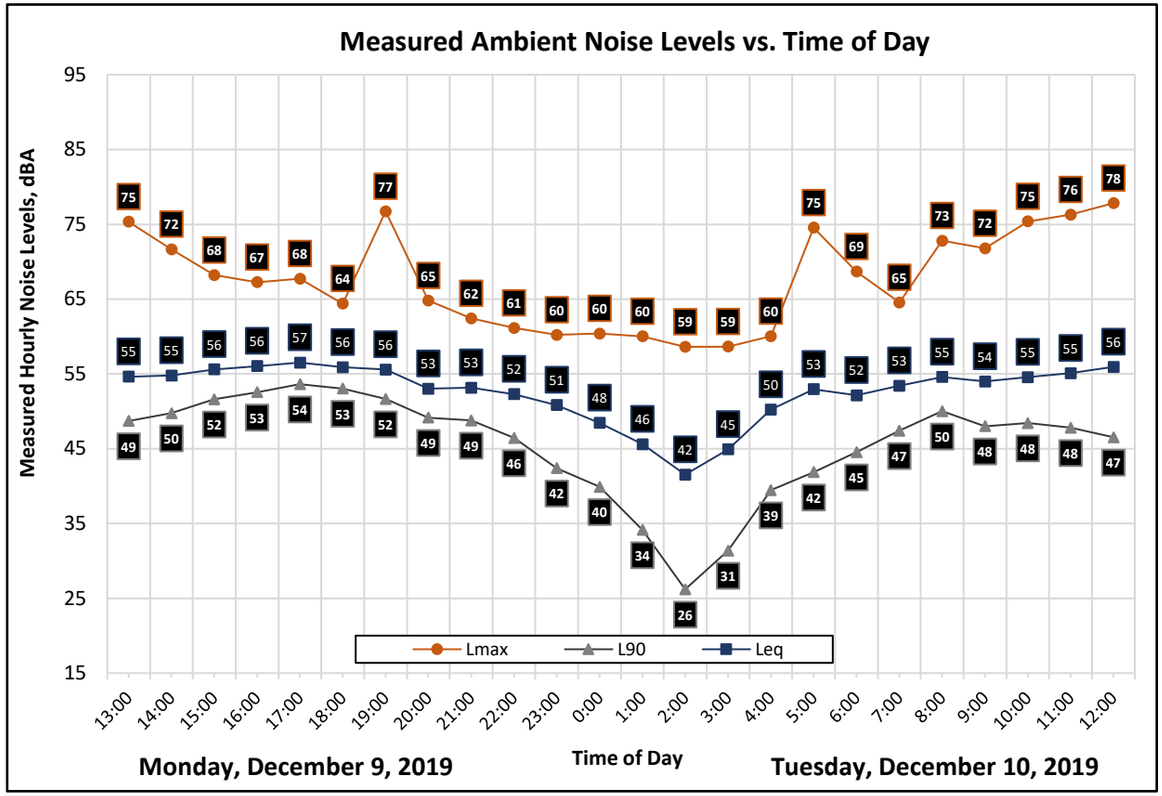


Appendix B2: Continuous Noise Monitoring Results

Site: LT-2
Project: Inez Subdivision
Location: Northern Project Boundary
Coordinates: 37.9614215°, -121.7201052 °
Meter: LDL 812-2
Calibrator: CAL200

Date	Time	Measured Level, dBA			
		L_{eq}	L_{max}	L_{50}	L_{90}
Monday, December 9, 2019	13:00	55	75	53	49
Monday, December 9, 2019	14:00	55	72	54	50
Monday, December 9, 2019	15:00	56	68	55	52
Monday, December 9, 2019	16:00	56	67	56	53
Monday, December 9, 2019	17:00	57	68	56	54
Monday, December 9, 2019	18:00	56	64	56	53
Monday, December 9, 2019	19:00	56	77	55	52
Monday, December 9, 2019	20:00	53	65	52	49
Monday, December 9, 2019	21:00	53	62	53	49
Monday, December 9, 2019	22:00	52	61	51	46
Monday, December 9, 2019	23:00	51	60	49	42
Tuesday, December 10, 2019	0:00	48	60	46	40
Tuesday, December 10, 2019	1:00	46	60	42	34
Tuesday, December 10, 2019	2:00	42	59	32	26
Tuesday, December 10, 2019	3:00	45	59	39	31
Tuesday, December 10, 2019	4:00	50	60	48	39
Tuesday, December 10, 2019	5:00	53	75	50	42
Tuesday, December 10, 2019	6:00	52	69	51	45
Tuesday, December 10, 2019	7:00	53	65	53	47
Tuesday, December 10, 2019	8:00	55	73	54	50
Tuesday, December 10, 2019	9:00	54	72	53	48
Tuesday, December 10, 2019	10:00	55	75	53	48
Tuesday, December 10, 2019	11:00	55	76	52	48
Tuesday, December 10, 2019	12:00	56	78	52	47

Statistics	Leq	Lmax	L50	L90
Day Average	55	70	54	50
Night Average	50	62	45	38
Day Low	53	62	52	47
Day High	57	78	56	54
Night Low	42	59	32	26
Night High	53	75	51	46
Ldn	58	Day %		84
CNEL	58	Night %		16



Appendix B3 : Short Term Noise Monitoring Results

Site: ST-1
Project: Inez Subdivision
Location: Eastern Project Boundary
Coordinates: 37.9609912°, -121.7188060°

Meter: LDL 831-2
Calibrator: CAL200

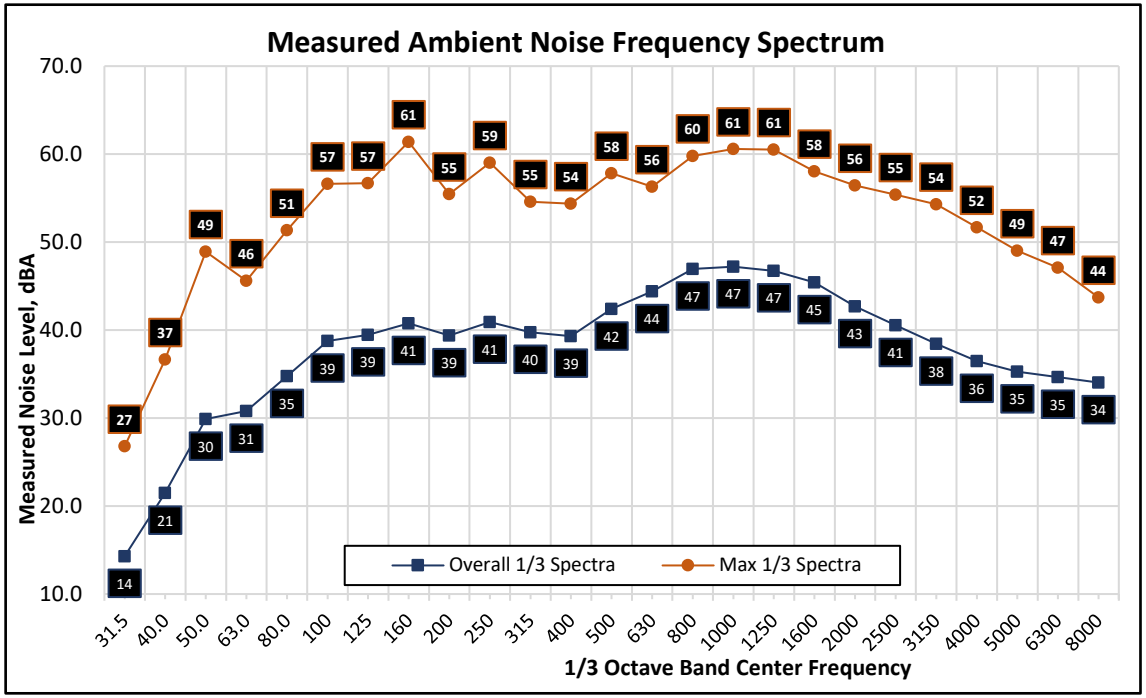
Start: 2019-12-09 12:19:40
Stop: 2019-12-09 12:29:40
SLM: Model 831
Serial: 3141

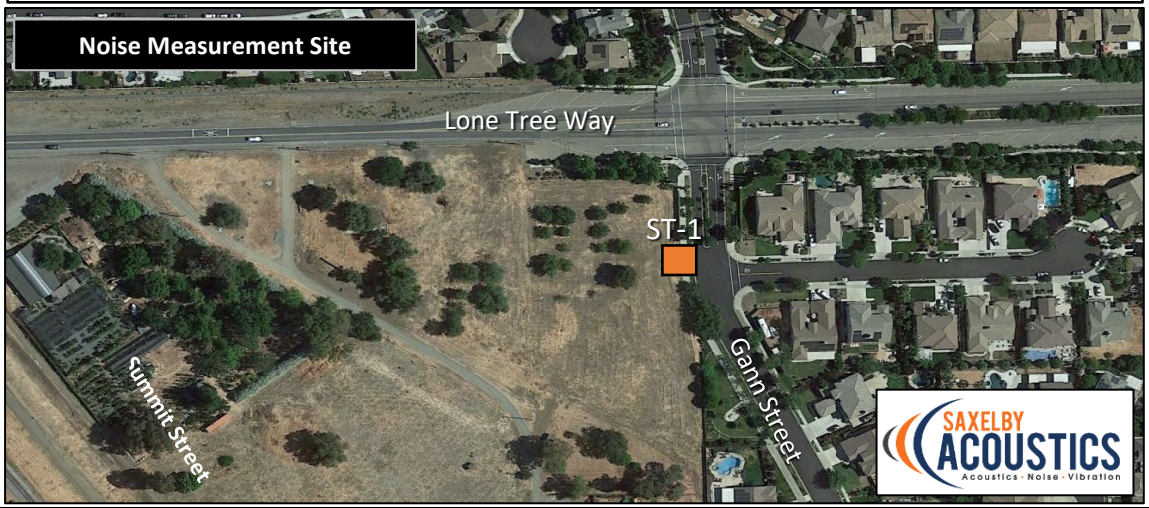
Measurement Results, dBA

Duration:	0:10
L_{eq}:	55
L_{max}:	68
L_{min}:	40
L_{50}:	53
L_{90}:	47

Notes

Primary noise source is traffic on Lone Tree Way. Lmax caused by passing delivery truck.





Appendix G

Geotechnical Investigation

Geotechnical Investigation

Lone Tree Way Residential Development

Brentwood, California

Report No. 338571 has been prepared for:

CYRUS LAND INVESTMENS, LLC

4021 Port Chicago Highway, Concord, California 94520

May 28, 2019

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Principal Geotechnical Engineer
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REGISTERED PROFESSIONAL ENGINEER
MUSTAFA BURAK DOGAN
No. GE 3002
Exp. 06/30/2020
GEOTECHNICAL
STATE OF CALIFORNIA

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GEOTECHNICAL INVESTIGATION
LONE TREE WAY RESIDENTIAL DEVELOPMENT
BRENTWOOD, CALIFORNIA

1.0 INTRODUCTION

This report presents the results of our geotechnical investigation for the proposed Lone Tree Way Residential Development to be constructed at Lone Tree Way – APN 018-080-025 in Brentwood, California. The site location is shown on the Vicinity Map, Figure 1. The purpose of our investigation was to evaluate the geologic and subsurface conditions and to provide geotechnical recommendations for design of the proposed project.

We received and reviewed the following:

- A report titled, "Geotechnical Investigation for Ipsen Restaurant / Retail Center, 7281 Lone Tree Way, Brentwood, California," prepared by Romig Engineers, Inc. dated October, 2005.
- A report titled, "Skipolini Property, Lone Tree Way, Brentwood, California, Geotechnical Report Update," prepared by Engeo dated May 19, 2014.
- An untitled and undated drawing showing the proposed lot layout.

1.1 Project Description

We understand the project will consist of developing an approximately 1-acre open land parcel with improvements that will include 5 single-family residences with associated streets, and underground utilities. Additional improvements will include pavements, underground utilities, and landscaping. The layout of the existing site is shown on the Site Plan, Figure 2.

Structural loads have not been provided to us; therefore we assumed that structural loads will be representative for this type of construction.

1.2 Scope of Services

Our scope of services was presented in our agreement with you dated April 11, 2019. To accomplish this work, we provided the following services:

- Exploration of subsurface conditions by drilling two borings in the area of the proposed development and retrieving soil samples for observation and laboratory testing.
- Evaluation of the physical and engineering properties of the subsurface soils by visually classifying the samples and performing various laboratory tests on selected samples.
- Engineering analysis to evaluate building foundations, site earthwork, slabs-on-grade, retaining walls, and pavements.
- Preparation of this report to summarize our findings and to present our conclusions and recommendations.

2.0 SITE CONDITIONS

2.1 Site Reconnaissance

Our Senior Staff Engineer performed a reconnaissance of the site on May 3, 2019. The site consisted of a vacant parcel occupied by trees and shrubs and appeared relatively flat. The site is bounded by Lone Tree Way to the north, Double K Road and a residence to the south, and a vacant lot to the west and east. Additionally, the field exploration locations were marked and notification was provided to Underground Service Alert (USA) prior to beginning fieldwork to identify public and/or private underground utilities. We also contracted a private utility locator to reduce the risk of damaging unidentified underground utilities.

2.2 Exploration Program

Subsurface exploration was performed on May 10, 2019 using conventional, truck-mounted hollow-stem auger drilling equipment to investigate, sample, and log subsurface soils. Two hollow-stem auger exploratory borings were drilled to a depth of approximately 30 feet.

Our borings were permitted and backfilled in accordance with Contra Costa County Environmental Health Services Department guidelines. The approximate locations of the borings are shown on the Site Plan, Figure 2. The logs of the borings and details regarding our field investigation are included in Appendix A; laboratory tests are discussed in Appendix B.

2.3 Subsurface Conditions

Boring EB-1 encountered very stiff to hard lean clay to depth of 30 feet, the maximum depth explored. Boring EB-2 encountered interbedded layers consisting of stiff to hard lean clay, hard lean clay with sand, and hard sandy lean clay to a depth of approximately 19 feet, underlain by dense clayey sand and dense poorly graded sand with clay to a depth of 30 feet.

Two Plasticity Index (PI) tests were performed on clayey samples from our borings EB-1 and EB-2 at a depth of approximately 2 feet. The tests resulted in PIs of 32 and 30 for borings EB-1 and EB-2, respectively, indicating high plasticity and expansion potential of the near surface soils.

2.4 Ground Water

Free ground water was not encountered in any of our borings to a drilled to a maximum depth of 30 feet below the ground surface. Based on the depth to historically high ground water map prepared by the California Geological Survey for the Brentwood Quadrangle (CGS, 2018), the depth to historically high ground water levels in the site vicinity is on the order of approximately 30 feet below the existing ground surface (bgs). Based on the above information, we judged a ground water depth of 30 feet to be appropriate for design purposes. Our borings were backfilled immediately after drilling. Fluctuations in the level of the ground water may occur due to variations in rainfall, underground drainage patterns, and other factors not evident at the time measurements were made.

3.0 GEOLOGIC HAZARDS

A brief qualitative evaluation of geologic hazards was made during this investigation. Our comments concerning these hazards are presented below.

3.1 Fault Rupture

The San Francisco Bay Area is one of the most seismically active regions in the United States. The significant earthquakes that occur in the Bay Area are generally associated with crustal movement along well-defined active fault zones of the San Andreas Fault system, which regionally trend in a northwesterly direction.

The site is not located within a currently designated Alquist-Priolo Earthquake Fault Zone (known formerly as a Special Studies Zone). The nearest known active fault is the Greenville Fault (Late Quaternary), which is located approximately 8¾ miles southwest of the project site. The potentially active Davis Fault and Midland Fault are located about 2¾ west and 5½ miles east of the site, respectively. Fault rupture through the site, therefore, is not anticipated.

3.2 Maximum Estimated Ground Shaking

Based on Equation 11.8-1 of ASCE 7-10, we judge a maximum considered earthquake geometric mean peak ground acceleration of 0.50g to be appropriate for geotechnical analyses for the project site.

3.3 Future Earthquake Probabilities

Although research on earthquake prediction has greatly increased in recent years, seismologists cannot predict when or where an earthquake will occur. The U.S. Geological Survey's Working Group on California Earthquake Probabilities (WGCEP, 2014) estimates there is a 72 percent chance of at least one magnitude 6.7 earthquake occurring in the San Francisco Bay region between 2014 and 2044. This result is an important outcome of WGCEP's work because any major earthquake can cause damage throughout the region. The 1989 Loma Prieta earthquake demonstrated this potential by causing severe damage in Oakland and San Francisco, more than 50 miles from the fault epicenter.

Although earthquakes can cause damage at a considerable distance, shaking will be very intense near the fault rupture. Therefore, earthquakes located in urbanized areas of the region have the potential to cause much more damage than the 1989 Loma Prieta earthquake.

3.4 Liquefaction

The site is not located within an area zoned by the State of California as having potential for seismically induced liquefaction hazards (CGS 2018). During cyclic ground shaking, such as earthquakes, cyclically-induced stresses may cause increased pore water pressures within the soil matrix, which results in liquefaction. Liquefied soil may lose shear strength that may lead to large shear deformations and/or flow failure (Youd et al., 2001). Liquefied soil can also settle as pore pressures dissipate following an earthquake. Limited field data is available on this subject; however, settlement on the order of 2 to 3 percent of the thickness of the liquefied zone has been measured in some cases.

Soils most susceptible to liquefaction are loose to moderately dense, saturated, non-cohesive soils with poor drainage, such as sands and silts with interbedded or capping layers of relatively low permeability soil.

Based on the exploratory borings, the site is underlain by stiff to hard clays and dense sands. Additionally, ground water was not encountered in the explorations and is estimated to be at a depth of 30 feet below the existing ground surface. Therefore, we judge the potential for liquefaction induced damage to the proposed residences to be low.

3.5 Dry Seismic Settlement

If near-surface soils vary in composition both vertically and laterally, strong earthquake shaking can cause non-uniform densification of loose to medium dense cohesionless soil strata. This results in movement of the near-surface soils.

We performed dry sand settlement calculations following Tokimatsu and Seed method (1987). Our calculations indicated that the medium dense clayey sand and silty sand layers encountered during the 2005 explorations may densify and settle on the order of less than ¼-inch.

3.6 Lateral Spreading

Lateral spreading typically occurs as a form of horizontal displacement of relatively flat-lying alluvial material toward an open or "free" face such as an open body of water, channel, or excavation. In soils this movement is generally due to failure along a weak plane, and may often be associated with liquefaction. As cracks develop within the weakened material, blocks of soil displace laterally towards the open face. Cracking and lateral movement may gradually propagate away from the face as blocks continue to break free. There are no creeks or open bodies of water within an appropriate distance from the site for lateral spreading to occur. Additionally, because of the low probability for liquefaction, the probability of lateral spreading occurring at the site during a seismic event is low.

3.7 Landsliding

The site is not located within an area zoned by the State of California as having potential for seismically induced landslide hazard (CGS 2018). For this reason, it is our opinion that the probability of landsliding occurring at the site is low.

4.0 CORROSION EVALUATION

To evaluate the corrosion potential of the subsurface soils at the site, we submitted two samples collected during our subsurface investigation to an analytical laboratory for pH, resistivity, soluble sulfate and chloride content testing. The results of these tests are summarized in Table 1 below.

Table 1. Results of Corrosivity Testing

Sample	Depth (feet)	Chloride (mg/kg)	Sulfate (mg/kg)	pH	Resistivity (ohm-cm)	Estimated Corrosivity Based on Resistivity	Estimated Corrosivity Based on Sulfates
EB-1, 2A	3.5	6	112	7.2	1,240	Severely	Negligible
EB-2, 1B	2.0	7	91	6.8	1,796	Severely	Negligible

Notes: 1. mg/kg = milligrams per kilogram.

Many factors can affect the corrosion potential of soil including soil moisture content, resistivity, permeability and pH, as well as chloride and sulfate concentration. In general, soil resistivity, which is a measure of how easily electrical current flows through soils, is the most influential factor. Based on classification developed by William J. Ellis (1978), the approximate relationship between soil corrosiveness was developed as shown in Table 2 below.

Table 2. Relationship Between Soil Resistivity and Soil Corrosivity

Soil Resistivity (ohm-cm)	Classification of Soil Corrosiveness
0 to 900	Very Severely Corrosive
900 to 2,300	Severely Corrosive
2,300 to 5,000	Moderately Corrosive
5,000 to 10,000	Mildly Corrosive
10,000 to >100,000	Very Mildly Corrosive

Chloride and sulfate ion concentrations and pH appear to play secondary roles in affecting corrosion potential. High chloride levels tend to reduce soil resistivity and break down otherwise protective surface deposits, which can result in corrosion of buried metallic improvements or reinforced concrete structures. Sulfate ions in the soil can lower the soil resistivity and can be highly aggressive to Portland cement concrete (PCC) by combining chemically with certain constituents of the concrete, principally tricalcium aluminate. This reaction is accompanied by expansion and eventual disruption of the concrete matrix. Soils containing high sulfate content could also cause corrosion of the reinforcing steel in concrete. Table 4.2.1 of the American Concrete Institute (ACI, 2008) provides requirements for concrete exposed to sulfate-containing solutions as summarized in Table 3.

Table 3. Relationship Between Sulfate Concentration and Sulfate Exposure

Water-Soluble Sulfate (SO_4) in soil, ppm	Sulfate Exposure
0 to 1,000	Negligible
1,000 to 2,000	Moderate[1]
2,000 to 20,000	Severe
over 20,000	Very Severe

[1] = seawater

Acidity is an important factor of soil corrosivity. The lower the pH (the more acidic the environment), the higher will the soil corrosivity be with respect to buried metallic structures. As soil pH increases above 7 (the neutral value), the soil is increasingly more alkaline and less corrosive to buried steel structures due to protective surface films which form on steel in high pH environments. A pH between 5 and 8.5 is generally considered relatively passive from a corrosion standpoint.

As shown in Table 1, the soil resistivity results were 1,240 and 1,796 ohm-centimeters. Based on these results and the resistivity correlations presented in Table 2, the corrosion potential to buried metallic improvements may be characterized as severely corrosive. We recommend that a corrosion protection engineer be consulted about appropriate corrosion protection methods for buried metallic materials. Steel reinforcing in a properly designed concrete structure will not be adversely affected by this corrosion potential.

Based on our previous experience and Table 4.2.1 of the ACI, it is our opinion that sulfate exposure to PCC may be considered negligible for the subsurface materials sampled.

5.0 CONCLUSIONS AND RECOMMENDATIONS

From a geotechnical engineering viewpoint, the proposed residential development may be constructed as planned, in our opinion, provided the design and construction are performed in accordance with the recommendations presented in this report.

5.1 Primary Geotechnical Concerns

The primary geotechnical and geologic concerns at the site are as follows:

- Strong seismic shaking
- Corrosion potential of the near-surface soils
- Moderately to highly expansive near-surface soils

We have prepared a brief description of the issues and present typical approaches to manage potential concerns associated with the long-term performance of the development.

5.1.1 Strong Seismic Shaking

We recommend that, at a minimum, the proposed improvements be designed in accordance with the seismic design criteria as discussed in the Maximum Estimated Ground Shaking section above, and the site seismic coefficients presented in Table 4.

5.1.2 Corrosion Potential of Near-Surface Soils

As discussed above, the corrosion potential to buried metallic improvements constructed within the soil may be characterized as severely corrosive. A qualified corrosion engineer should be contacted to provide specific recommendations regarding corrosion protection for buried metal pipe or buried metal pipe-fittings.

5.1.3 Moderately to Highly Expansive Clays

To reduce the potential for damage to the planned structures due to the presence of moderately to highly expansive surficial soils, we recommend slabs-on-grade have sufficient reinforcement and be supported on a layer of non-expansive fill and that any shallow foundations extend below the zone of seasonal moisture fluctuation. In addition, residences may be supported on PT slabs. Detailed recommendations are presented in the following sections of this report.

5.2 Plans, Specifications, and Construction Review

We recommend that our firm perform a plan review of the geotechnical aspects of the project design for general conformance with our recommendations. In addition, subsurface materials encountered in the relatively small diameter, widely spaced borings may vary significantly from other subsurface materials on the site. Therefore, we also recommend that a representative of our firm observe and confirm the geotechnical specifications of the project construction. This will allow us to form an opinion about the general conformance of the project plans and construction with our recommendations. In addition, our observations during construction will enable us to note subsurface conditions that may vary from the conditions encountered during our investigation and, if needed, provide supplemental recommendations. For the above reasons, our geotechnical recommendations are contingent upon our firm providing geotechnical observation and testing services during construction.

6.0 EARTHWORK

6.1 Clearing and Site Preparation

The proposed project area should be cleared of all surface improvements to be removed and deleterious materials including existing building foundations, slabs, irrigation lines, utilities, fills, pavements, debris, designated trees, shrubs, and associated roots. Abandonment of existing buried utilities is discussed below. Excavations extending below the planned finished site grades should be cleaned and backfilled with suitable material as necessary and compacted as recommended in the "Compaction" section of this report. We recommend that backfilling of holes or pits resulting from demolition and removal of existing building foundations, buried structures or other improvements be carried out under our observation and that the backfill be observed and tested during placement.

After clearing, any vegetated areas within the proposed improvements should be stripped to sufficient depth to remove all surface vegetation and topsoil containing greater than 3 percent organic matter by weight. The actual stripping depth required depends on site usage prior to construction and should be established in the field by us at the time of construction. The stripped materials should be removed from the site or may be stockpiled for use in landscaped areas, if desired.

6.2 Removal of Undocumented Fill

If undocumented fill is encountered, it should be removed down to the native soil. If the fill material meets the requirements in the "Material for Fill" section below, it may be reused as engineered fill. Side slopes of fill removal excavations in building and pavement areas should be sloped at inclinations no steeper than 3:1 (horizontal:vertical) to minimize abrupt variations in fill thickness. All fill should be compacted in accordance with the recommendations for fill presented in the "Compaction" section of this report.

6.3 Cut/Fill Transitions

A grading plan was not available at the time of publication of our report. We recommend that any residences to have cut/fill transitions be constructed by overexcavating the upper 1 foot below the design grade, scarifying, moisture conditioning and recompacting the upper 12 inches in place prior to fill placement (total of 2 feet reworked). We recommend that residences with no cut/fill transitions be constructed on a reworked pad at least 12 inches in thickness extending a minimum of 5 feet laterally beyond foundation perimeter extents.

6.4 Abandoned Utilities

Abandoned utilities within the proposed improvement area should be removed in their entirety where applicable. Utilities within the proposed improvement area would only be considered for in-place abandonment provided they do not conflict with new improvements, that the ends and all laterals are located and completely grouted, and the previous fills associated with the utility do not pose a risk to the structure.

Utilities outside the improvement area should be removed or abandoned in-place by grouting or plugging the ends with concrete. Fills associated with utilities abandoned in-place could pose some risk of settlement; utilities that are plugged could also pose some risk of future collapse or erosion should they leak or become damaged.

6.5 Subgrade Preparation

After the site has been properly cleared, stripped and necessary excavations have been made, exposed surface soils in those areas to receive fill or pavements should be scarified to a depth of 12 inches, moisture conditioned in place, and recompacted in place in accordance with the recommendations for fill presented in the "Compaction" section. The finished compacted subgrade should be firm and non-yielding under the weight of compaction equipment.

6.6 Material for Fill

All on-site soils below the stripped layer having an organic content of less than 3 percent by weight are suitable for use as fill at the site. In general, fill material should not contain rocks or lumps larger than 6 inches in greatest dimension, with 15 percent or less larger than 2½ inches in the greatest dimension.

Import fill material should be inorganic, have a PI of 20 or less and should have sufficient binder to reduce the potential for sidewall caving of foundation and utility trenches. Samples of the proposed import fill should be submitted to us at least 10 working days prior to delivery to the site to allow for visual review and laboratory testing. This will allow us to evaluate the general conformance of the import fill with our recommendations.

Consideration should also be given to the environmental characteristics and corrosion potential of any imported fill. Suitable documentation should be provided for import material. In addition, it may be appropriate to perform laboratory testing of the environmental characteristics and corrosion potential of imported materials. Import soils should not be more corrosive than the on-site native materials, including pH, soluble sulfates, chlorides and resistivity.

6.7 Compaction

All fill, as well as scarified surface soils in those areas to receive fill, should be uniformly compacted to at least 90 percent relative compaction as determined by ASTM Test Designation D1557, latest edition, at a moisture content near the laboratory optimum, except for the expansive clays. The expansive clays should be compacted to between 87 and 92 percent relative compaction at a moisture content at least 5 percent over optimum. Fill should be placed in lifts no greater than 8 inches in uncompacted thickness. Each successive lift should be firm and relatively non-yielding under the weight of construction equipment.

In pavement areas, the upper 6 inches of subgrade and full depth of aggregate base should be compacted to at least 95 percent relative compaction (ASTM D1557, latest edition), except for the expansive clays, which should be compacted as noted above. Aggregate base should be compacted at a moisture content near the laboratory optimum moisture content. Import soils with a PI between 15 to 20 should be compacted at a moisture content at least 3 percent over optimum.

Pad moisture content should be checked within 24 hours of foundation construction to confirm moisture content is at the specified level.

6.8 Wet Soils and Wet Weather Conditions

Earthwork such as subgrade preparation, fill placement and trench backfill may be difficult for soil containing high moisture content or during wet weather. If the soil is significantly above its optimum moisture content, it will become soft, yielding, and difficult to compact. If saturated soils are encountered, aerating or blending with drier soils to achieve a workable moisture content may be

required. We recommend that earthwork be performed during periods of suitable weather conditions, such as the "summer" construction season.

There are several alternatives to facilitate subgrade preparation, fill placement and trench backfill if the soil is wet or earthwork is performed during the wet winter season.

- Scarify and air dry until the fill materials have a suitable moisture content for compaction,
- Over-excavate the fill and replace with suitable on-site or import materials with an appropriate moisture content,
- Install a layer of geo-synthetic (geotextile or geogrid) to reduce surface yielding and bridge over soft fill,
- Chemically treat the higher moisture content soils with quicklime (CaO), kiln-dust, or cement to reduce the moisture content and increase the strength of the fill.

The implementation of these methods should be reviewed on a case-by-case basis so that a cost effective approach may be used for the specific conditions at the time of construction.

6.9 Trench Backfill

Bedding and pipe embedment materials to be used for underground utility pipes (embedment material not including onsite sewer or water tie-ins) should be well graded sand or gravel conforming to the pipe manufacturer's recommendations and should be placed and compacted in accordance with project specifications, local requirements of the governing jurisdiction. General fill to be used above pipe embedment materials should be placed and compacted in accordance with local requirements or the recommendations contained in this section, whichever is more stringent.

On-site soils may be used, at the contractor's option, as general fill above pipe embedment materials provided they meet the requirements of the "Material for Fill" section of this report. General fill should be placed in lifts not exceeding 8 inches in uncompacted thickness and should be compacted to at least 90 percent relative compaction (ASTM D1557, latest edition) by mechanical means only. If expansive soil is used for trench backfill, it should be compacted to between 87 to 92 percent at a moisture content at least 5 percent over optimum. Water jetting of trench backfill should not be allowed. The upper 6 inches of general fill in all pavement areas subject to wheel loads should be compacted to at least 95 percent relative compaction.

Utility trenches located adjacent to footings should not extend below an imaginary 1:1 (horizontal:vertical) plane projected downward from the footing bearing surface to the bottom edge of the trench. Where utility trenches will cross beneath footing bearing planes, the footing concrete should be deepened to encase the pipe or the utility trench should be backfilled with sand/cement slurry or lean concrete within the foundation-bearing plane.

Where relatively higher permeability sand or gravel backfill is used in trenches through lower permeability soils, we recommend that a cut-off plug of compacted clayey soil or a 2-sack cement/sand slurry be placed where such trenches enter the building and pavement areas. This would reduce the likelihood of water entering the trenches from the landscaped areas and seeping through the trench backfill into the building and pavement areas, and coming into contact with very highly expansive subgrade soils.

6.10 Temporary Slopes and Trench Excavations

The contractor should be responsible for all temporary slopes and trenches excavated at the site and design of any required temporary shoring. Shoring, bracing, and benching should be performed by the contractor in accordance with the strictest governing safety standards. On a preliminary basis, site soils can be classified as Type B based on soil classification by OSHA. Therefore a maximum slope 1:1 (horizontal:vertical) should be anticipated. A TRC representative should be retained to verify soil conditions in the field at the time of the excavation.

6.11 Surface Drainage

Positive surface water drainage gradients, at least 1 percent in landscaping and 0.5 percent in pavement areas, should be provided to direct surface water away from foundations and slopes towards suitable discharge facilities. Ponding of surface water should not be allowed on or adjacent to structures, slabs-on-grade, or pavements. Roof runoff should be directed away from the foundations and slabs-on-grade. Downspouts may discharge onto splash-blocks provided the area is covered with concrete slabs or asphalt concrete pavements.

6.12 Landscaping Considerations

We recommend restricting the amount of surface water infiltrating these soils near structures and slabs-on-grade. This may be accomplished by:

- Selecting landscaping that requires little or no watering, especially within 3 feet of structures, slabs-on-grade, or pavements,
- Using low flow rate sprinkler heads, or drip irrigation systems,
- Regulating the amount of water distributed to lawn or planter areas by installing timers on the sprinkler system,
- Providing surface grades to drain rainfall or landscape watering to appropriate collection systems and away from structures, slabs-on-grade, or pavements,
- Preventing water from draining toward or ponding near building foundations, slabs-on-grade, or pavements.

6.13 Construction Observation

A field technician should observe the geotechnical aspects of the grading and earthwork for general conformance with our recommendations including site preparation, selection of fill materials, and the placement and compaction of fill. To facilitate your construction schedule we request sufficient notification (48 hours) for site visits. The project plans and specifications should incorporate all recommendations contained in the text of this report.

7.0 FOUNDATIONS

Based on our investigation, the proposed structures may be supported on shallow foundations as discussed below.

7.1 2016 CBC Site Class and Site Seismic Coefficients

Chapter 16 of the 2016 California Building Code outlines the procedure for seismic design of structures. Based on our explorations, the site is generally underlain by stiff to hard clays, and dense sands, which corresponds to a soil profile type D. Based on the above information and local seismic sources, the site may be characterized for design using the information in Table 4 below.

Table 4. 2016 CBC Site Class and Site Seismic Coefficients (done)

Latitude: 37.960975 N **Longitude: - 121.719506 W**	**CBC Reference**	**Factor/ Coefficient**	**Value**
Soil Profile Type	Section 1613.3.2	Site Class	D
Mapped Spectral Response Acceleration for MCE at 0.2 second Period	Figure 1613.3.1(1)	S_s	1.50
Mapped Spectral Response Acceleration for MCE at 1 Second Period	Figure 1613.3.1(2)	S_1	0.52
Site Coefficient	Table 1613.3.3(1)	F_a	1.00
Site Coefficient	Table 1613.3.3(2)	F_v	1.50
Adjusted MCE Spectral Response Parameter	Equation 16-37	S_{MS}	1.50
Adjusted MCE Spectral Response Parameter	Equation 16-38	S_{M1}	0.77
Design Spectral Response Acceleration Parameter	Equation 16-39	S_{DS}	1.00
Design Spectral Response Acceleration Parameter	Equation 16-40	S_{D1}	0.52

7.2 Post-Tensioned Mat Slab Recommendations

The proposed residences can be supported on post-tensioned mats bearing on prepared native soil or compacted fill. Before slab construction, the subgrade surface should be proof-rolled to provide a smooth, firm surface for slab support.

Post-tension mats should be designed with the criteria presented in Table 5 below, using an average allowable bearing pressure of 1,000 pounds per square foot (psf) for dead plus live loads, with maximum localized bearing pressures of 3,000 psf at column or wall loads. Allowable bearing pressures may be increased by one-third for all loads including wind or seismic. All mats should be designed with a thickened edge at least 12 inches wide and 12 inches thick. The thickened edge should be considered from top to bottom of mat. The structural engineer should determine the slab thickness and reinforcing in accordance with the anticipated use and loading of the slab.

Table 5. Post-Tension Mat Design Criteria

Condition	**Center Lift**	**Edge Lift**
Edge Moisture Variation (ft.)	9.0	4.5
Differential Soil Movement (in.)	0.30	1.25

The above design criteria is based on the procedure presented by the Post-Tensioning Institute (2007) using a Thornthwaite Moisture Index of -30, a Plasticity Index of 30 and 32, 73 and 79 percent passing the No. 200 sieve and 37 and 40 percent smaller than 2 microns. We estimate that the total static settlement will be on the order of ½-inch for the mat slab foundation. We recommend that the mat be designed to accommodate ½-inch of differential settlement over a horizontal distance of 50 feet.

Lateral loads may be resisted by friction between the bottom of mats and the supporting subgrade. A maximum allowable frictional resistance of 0.3 may be used for design. If two layers of vapor retarder are used, we would recommend a maximum frictional resistance of 0.1 for design. In addition, lateral resistance may be provided by passive pressures acting against mat edges poured neat against competent soil. We recommend that an allowable passive pressure based on an equivalent fluid pressure of 300 pounds per cubic foot (pcf) be used in design. The upper 12 inches of soil should be neglected when determining lateral passive resistance.

According to the PTI manual, the following assumptions were made when using this design procedure:

- The site will be sloped such that the water flows away from the foundation for a distance of 5 ft from the perimeter,
- Downspouts should be tied directly into storm drains, swales or other means to direct excessive moisture away from the foundation,
- The foundation should not be constructed over a cut/fill transition in expansive or compressible soils without proper considerations for swell and/or settlement potential, and
- Stoops, patios, etc, should be cast independently of the slab foundation unless it is the foundation for a supporting member, such as a column. Include expansion material between slab and non-structural concrete.

In addition, since the post-tensioned mat is a flexible foundation system, consideration should be given to compatibility with roof trusses, load concentrations, brittle exterior siding, drainage and utility connections. The design procedures provided in the PTI manual are only valid if the above assumptions are taken into account. Proper site preparation and maintenance are vital to the success of the foundation design.

7.3 Moisture Protection Considerations for Slabs-on-Grade

Since the long-term performance of the concrete mat foundations and slabs-on-grade depends to a large degree on good design, workmanship, and materials, the following general guidelines are presented for consideration by the developer, design team, and contractor. The purpose of these guidelines is to aid in producing a concrete mat or slab of sufficient quality to allow successful installation of floor coverings and reduce the potential for floor covering failures due to moisture-related problems associated with mat and slab-on-grade foundation construction. These guidelines may be supplemented, as necessary, based on the specific project requirements.

- We recommend at least 15 mil of vapor retarder, which can be achieved with either a single layer of 15-mil retarder (such as Stego-wrap) or two 10-mil retarders. The vapor retarder should meet or exceed ASTM E 1745, Class A requirements and should be placed directly below the mat. The vapor retarder should extend to the edge of the mat. At least 2 inches of free-draining gravel, such as ½-inch or ¾-inch crushed rock with no more than 5 percent passing the ASTM No. 200 sieve, should be placed below the vapor retarder to serve as a capillary break (no sand). The crushed rock should be consolidated in place with vibratory

equipment. The vapor retarder should be sealed at all seams and penetrations. The crushed rock is not needed for slabs 10 inches or thicker.

- The concrete water/cement ratio should not exceed 0.57. Midrange plasticizers could be used to facilitate concrete placement and workability.
- Water should not be added after initial batching, unless the slump of the concrete is less than specified, and the resulting water/cement ratio will not exceed 0.57.
- Polishing the concrete surface with metal trowels should not be permitted.
- Water vapor emission levels and pH should be determined before floor installation as required by the manufacturer of the floor covering materials. Measurements and calculations should be made according to ASTM F1869-98 and F710-98 protocol.

The guidelines presented above are based on information obtained from various technical sources, including the American Concrete Institute (ACI), and are intended to present information that can be used to reduce potential long-term impacts from slab moisture infiltration. It should be noted that the application of these guidelines does not affect the geotechnical aspects of the foundation performance.

Please have your structural engineer forward a copy of the mat slab design to us for our review when it is complete.

7.4 Footings

Any lightly loaded structures may be supported on conventional continuous and/or isolated spread footings bearing on prepared native soil or compacted fill. All footings should have a minimum width of 18 inches, and the bottom of footings should extend at least 24 inches below lowest adjacent finished grade. Lowest adjacent finished grade may be taken as the bottom of interior slab-on-grade or the finished exterior grade, excluding landscape topsoil, whichever is lower.

Footings constructed in accordance with the above recommendations would be capable of supporting maximum allowable bearing pressures of 2,000 pounds per square foot (psf) for dead loads, 3,000 psf for combined dead and live loads, and 4,000 psf for all loads including wind or seismic. These allowable bearing pressures are based upon factors of safety of 3.0, 2.0 and 1.5 for dead, dead plus live, and seismic loads, respectively.

These maximum allowable bearing pressures are net values; the weight of the footings may be neglected for design purposes. All footings located adjacent to utility trenches should have their bearing surfaces below an imaginary 1:1 (horizontal:vertical) plane projected upward from the bottom edge of the trench to the footing.

All continuous footings should be reinforced with top and bottom steel to provide structural continuity and to help span local irregularities. It is essential that we observe all footing excavations before reinforcing steel is placed.

7.5 Footing Settlement

Structural loads were not available for our review at the time of our investigation. Therefore, we assumed typical interior maximum column dead plus live loads on the order of 50 kips. Based on these assumed loads and the maximum allowable bearing pressures recommended above, we estimate that total footing settlement should be approximately 1-inch with post-construction differential movement between of approximately ½-inch over a horizontal distance of 50 feet. We should be

retained to review the final foundation plans and structural loads to verify the above settlement estimates.

7.6 Lateral Loads

Lateral loads may be resisted by friction between the bottom of footings and the supporting subgrade. A maximum allowable frictional resistance of 0.30 may be used for design. In addition, lateral resistance may be provided by passive pressures acting against footings poured neat against competent soil. We recommend that an allowable passive pressure based on an equivalent fluid pressure of 300 pounds per cubic foot (pcf) be used in design. The upper 12 inches of soil should be neglected when calculating lateral passive resistance unless covered by concrete slabs or pavements.

7.7 Slabs-On-Grade

We recommend concrete slabs used in conjunction with shallow footings be supported on at least 12 inches of non-expansive fill (NEF). NEF may include aggregate base, crushed rock, quarry fines or import soil having a PI of 15 or less. We also recommend that the contractor take special measures to protect the subgrade from any inflow of water during construction, especially after the floor slab has been cast.

If desired to limit moisture rise through slab-on-grade floors, the guidelines presented in the “Moisture Protection Considerations” section of this report should be considered.

Post-construction cracking of concrete slabs-on-grade is inherent in any project. In our opinion, consideration should be given toward a maximum control joint spacing of 10 to 15 feet in both directions for the interior slab-on-grade construction. Adequate slab reinforcement should be provided to satisfy the anticipated use and loading requirements. The floor slabs for the structure should be designed to structurally span an area 10 feet in diameter. If slabs cannot be designed to accommodate this movement, they should be designed as structural slabs.

We recommend that the contractor take special measures to protect the subgrade from any inflow of water during construction, especially after the floor slab has been cast. Areas to receive special attention include slab joints and areas where building columns pass through the floor slab.

8.0 SOUNDWALLS AND RETAINING WALLS

8.1 Lateral Earth Pressures

Any proposed soundwalls and retaining walls should be designed to resist lateral earth pressures from adjoining natural materials, backfill, and surcharge loads. Provided that adequate drainage is provided as recommended below, we recommend that unrestrained walls be designed to resist an equivalent fluid pressure of 45 pcf and restrained wall be designed resist an equivalent fluid pressure of 45 pcf plus a uniform pressure of 8H pounds per square foot, where H is the distance in feet between the bottom of the footing and the top of the retained soil. Unrestrained walls should also be designed to resist an additional uniform pressure equivalent to one-third of any surcharge loads applied at the surface and restrained walls should be designed to resist an additional uniform pressure equivalent to one-half of any surcharge loads applied at the surface.

The above lateral earth pressures assume level backfill conditions and sufficient drainage behind the walls to prevent build-up of hydrostatic pressure from surface water infiltration and/or a rise in the ground water level. If adequate drainage is not provided, we recommend an equivalent fluid pressure of 40 pcf be added to the values recommended above for both restrained and unrestrained walls.

Damp proofing of the walls should be included in areas where wall moisture and efflorescence would be undesirable.

8.2 Seismic Lateral Earth Pressures

Any soundwalls or retaining walls greater than 6 feet in height need to be designed for seismic lateral loading. For our analysis, we have assumed that the walls will have flat, non-sloping backfill. We used the Mononobe-Okabe approach to approximate the increased earth pressures induced by earthquakes. As discussed in Section 3.2 of our report, a peak ground acceleration of 0.50g is expected at the site. We performed calculations using this ground acceleration and estimated an additional seismic increment of 13 pcf to be applied to in addition to the static lateral earth pressures given in Section 8.1 for flexible walls. For fixed walls, under seismic conditions the total pressure to be used in analysis (seismic plus static) should be the greater of at-rest pressure or the sum of the active pressure and the seismic increment acting in a triangular distribution.

8.3 Drainage

All proposed walls over 2 feet in exposed height should be designed with adequate drainage. Adequate drainage may be provided by a subdrain system behind the walls. This system should consist of a 4-inch minimum diameter perforated pipe placed near the base of the wall (perforations placed downward). The pipe should be bedded and backfilled with Class 2 Permeable Material per Caltrans Standard Specifications, latest edition. The permeable backfill should extend at least 12 inches out from the wall and to within 2 feet of outside finished grade. Alternatively, ½- to ¾-inch crushed rock may be used in place of the Class 2 Permeable Material provided the crushed rock and pipe are enclosed in filter fabric, such as Mirafi 140N or equivalent. The upper 2 feet of wall backfill should consist of relatively low permeable compacted on-site clayey soil. The subdrain outlet should be connected to a free-draining outlet or sump.

Miradrain, Geotech Drainage Panels, or Enkadrain drainage matting may be used for wall drainage as an alternative to the Class 2 Permeable Material or drain rock backfill. The drainage panel should be connected to the perforated pipe at the base of the wall, or to some other closed or through-wall system. Miradrain panels should terminate 24 inches from final exterior grade. The Miradrain panel filter fabric should be extended over the top of and behind the panel to protect it from intrusion of the adjacent soil.

8.4 Backfill

Where surface improvements will be located over the retaining wall backfill, backfill placed behind the walls should be compacted to at least 95 percent relative compaction using light compaction equipment. Where no surface improvements are planned, backfill should be compacted to at least 90 percent. If heavy compaction equipment is used, the walls should be temporarily braced.

8.5 Foundation

Reinforced concrete soundwalls and retaining walls not located on or adjacent to slopes may be supported on a continuous spread footing designed in accordance with the recommendations presented in the “Footings” section of this report. Lateral load resistance for the walls may be developed in accordance with the recommendations presented in the “Lateral Loads” section. Mechanically stabilized earth block walls may be supported on foundations constructed in accordance with manufacturer’s recommendations.

9.0 PAVEMENTS

9.1 Asphalt Concrete

Based on the near-surface soils encountered during our exploration, which consisted of moderately to highly expansive clay, we judged an R-value of 5 to be applicable for design based on a subgrade consisting of untreated native soils. Using estimated traffic indices for various pavement-loading requirements, we developed the following recommended pavement sections based on Procedure 608 of the Caltrans Highway Design Manual, presented in Table 6. The pavement section should be designed based on the stringiest requirements between Table 6 and the city standard.

Table 6. Recommended Asphalt Concrete Pavement Design Alternatives
Pavement Components
Design R–Value = 5

General Traffic Condition	Design Traffic Index	Asphalt Concrete (Inches)	Aggregate Baserock* (Inches)	Total Thickness (Inches)
Automobile	5.0	3.0	10.0	13.0
Parking Channel	5.5	3.0	12.0	15.0
Truck Access &	6.0	3.5	13.0	16.5
Parking Areas	6.5	4.0	14.0	18.0

*Caltrans Class 2 aggregate base; minimum R-value equal to 78.

The traffic indices used in our pavement design are considered reasonable values for the proposed development and should provide a pavement life of approximately 20 years with a normal amount of flexible pavement maintenance. If the pavement subgrade soils are expansive, increased maintenance and reduction in pavement life can be expected. The traffic parameters used for design were selected based on engineering judgment and not on information furnished to us such as an equivalent wheel load analysis or a traffic study. We recommend that R-value testing be performed on the actual subgrade soils once the grades have been raised. If testing indicates a significantly higher R-value, it may be feasible to reduce the design pavement sections.
Because the full thickness of asphalt concrete is frequently not placed prior to construction traffic being allowed to use the street, rutting and pavement failures can occur prior to project completion. To reduce this occurrence, we recommend that either the full design pavement section be placed prior to use by construction traffic, or a higher Traffic Index (TI) be specified where construction traffic will use the pavement.

In addition, it has been our experience that asphalt concrete pavements constructed over expansive soils and adjacent to non-irrigated open space areas may experience cracking parallel to the edge of the pavement. This is typically caused by seasonal shrinkage and swelling adjacent to non-irrigated edges of the pavement. The cracks typically occur within the first few years of construction, and are typically located within a few to several feet of the edge of the pavement. The cracks, if they occur, can be filled with a bituminous sealant. Otherwise, a moisture barrier would need to be installed to a depth of at least 24 inches to reduce the potential for shrinkage of the pavement subgrade soils.

9.2 Asphalt Concrete, Aggregate Base and Subgrade

Asphalt concrete and aggregate base should conform to and be placed in accordance with the requirements of Caltrans Standard Specifications, latest edition, except that ASTM Test Designation D1557 should be used to determine the relative compaction of the aggregate base. Pavement subgrade should be prepared and compacted as described in the “Earthwork” section of this report.

9.3 Flatwork and Sidewalks

We recommend that exterior slabs-on-grade, such as flatwork and sidewalks be at least 6 inches thick and be underlain by at least 6 inches of Class 2 aggregate base compacted to a minimum of 90 percent relative compaction in accordance with ASTM Test Method D1557, latest edition.

We recommend that exterior slabs be isolated from adjacent foundations and that adequate construction and control joints be used in design of the concrete slabs to control cracking inherent in concrete construction.

10.0 LIMITATIONS

This report has been prepared for the sole use of Cyrus Land Investments, LLC, specifically for design of the proposed Lone Tree Way Residential Development project in Brentwood, California. The opinions, conclusions, and recommendations presented in this report have been formulated in accordance with accepted geotechnical engineering practices that exist in the San Francisco Bay Area at the time this report was written. No other warranty, expressed or implied, is made or should be inferred.

The opinions, conclusions and recommendations contained in this report are based upon the information obtained from our investigation, which includes data from widely separated discrete locations, visual observations from our site reconnaissance, and review of other geotechnical data provided to us, along with local experience and engineering judgment. The recommendations presented in this report are based on the assumption that soil and geologic conditions at or between the borings do not deviate substantially from those encountered or extrapolated from the information collected during our investigation. We are not responsible for the data presented by others.

We should be retained to review the geotechnical aspects of the final plans and specifications for conformance with our recommendations. The recommendations provided in this report are based on the assumption that we will be retained to provide observation and testing services during construction to confirm that conditions are similar to that assumed for design and to form an opinion as to whether the work has been performed in accordance with the project plans and specifications. If we are not retained for these services, TRC cannot assume any responsibility for any potential claims that may arise during or after construction as a result of misuse or misinterpretation of TRC's report by others. Furthermore, TRC will cease to be the Geotechnical-Engineer-of-Record if we are not retained for these services and/or at the time another consultant is retained for follow up service to this report.

The opinions presented in this report are valid as of the present date for the property evaluated. Changes in the condition of the property will likely occur with the passage of time due to natural processes and/or the works of man. In addition, changes in applicable standards of practice can occur because of legislation and/or the broadening of knowledge. Furthermore, geotechnical issues may arise that were not apparent at the time of our investigation. Accordingly, the opinions presented in this report may be invalidated, wholly or partially, by changes outside of our control. Therefore, this report is subject to review and should not be relied upon after a period of three years, nor should it be used, or is it applicable, for any other properties.

11.0 REFERENCES

American Concrete Institute, 2008, *Building Code Requirements for Structural Concrete (ACI 318-08) and Commentary*, An ACI Standard, first printing, January.

ASCE (American Society of Civil Engineers), 2010, *Minimum Design Loads for Buildings and Other Structures*, ASCE/SEI Standard 7-10.

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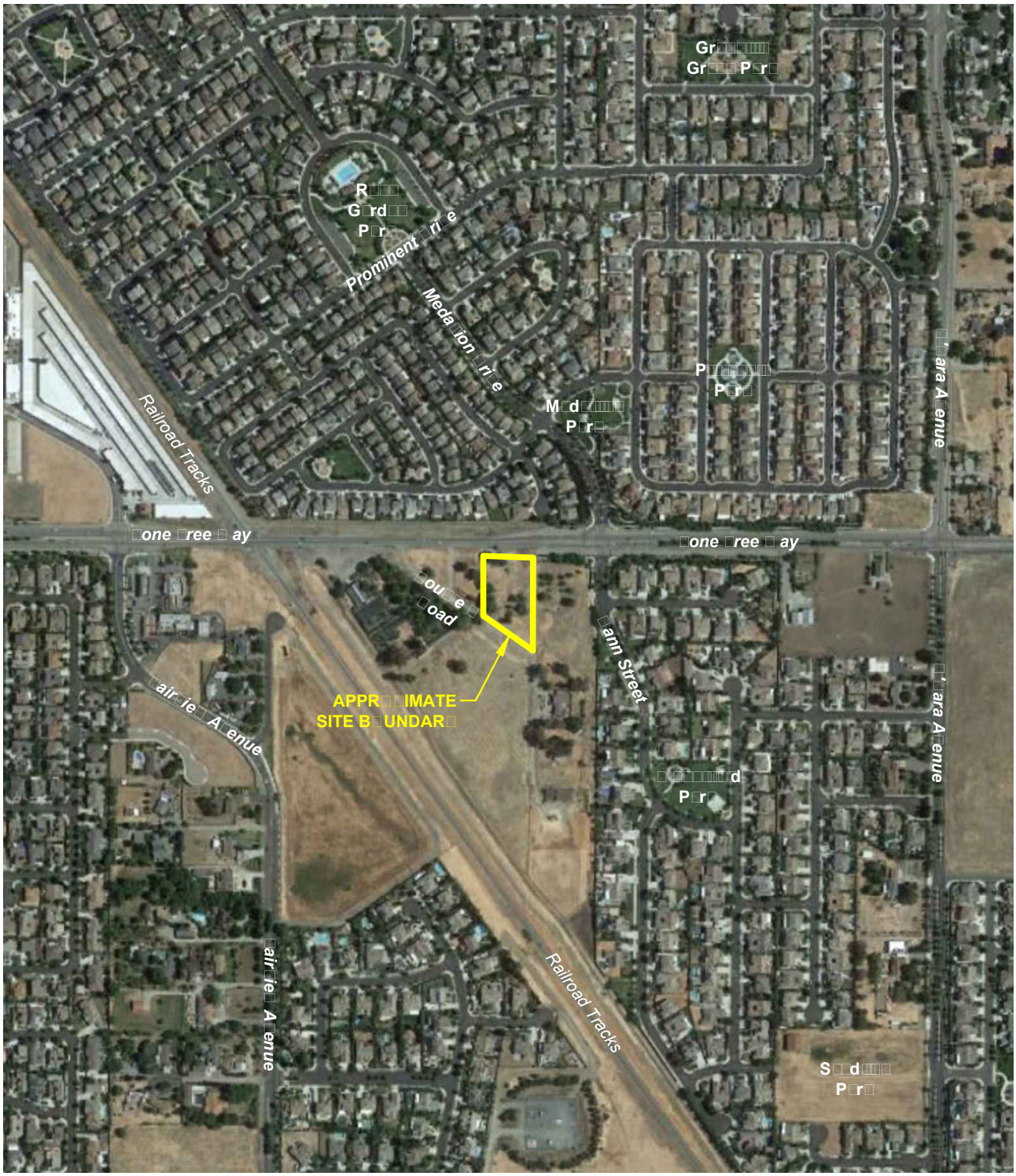

SOURCE AERIAL PHOTO: Google Earth, June 2018.

N

APPR IMATE SCALE (FEET)

0 00 1,200

I INIT MAP

Lone Tree Way Residential Development
Brentwood, California

TRC | 338571 | FIGURE 1

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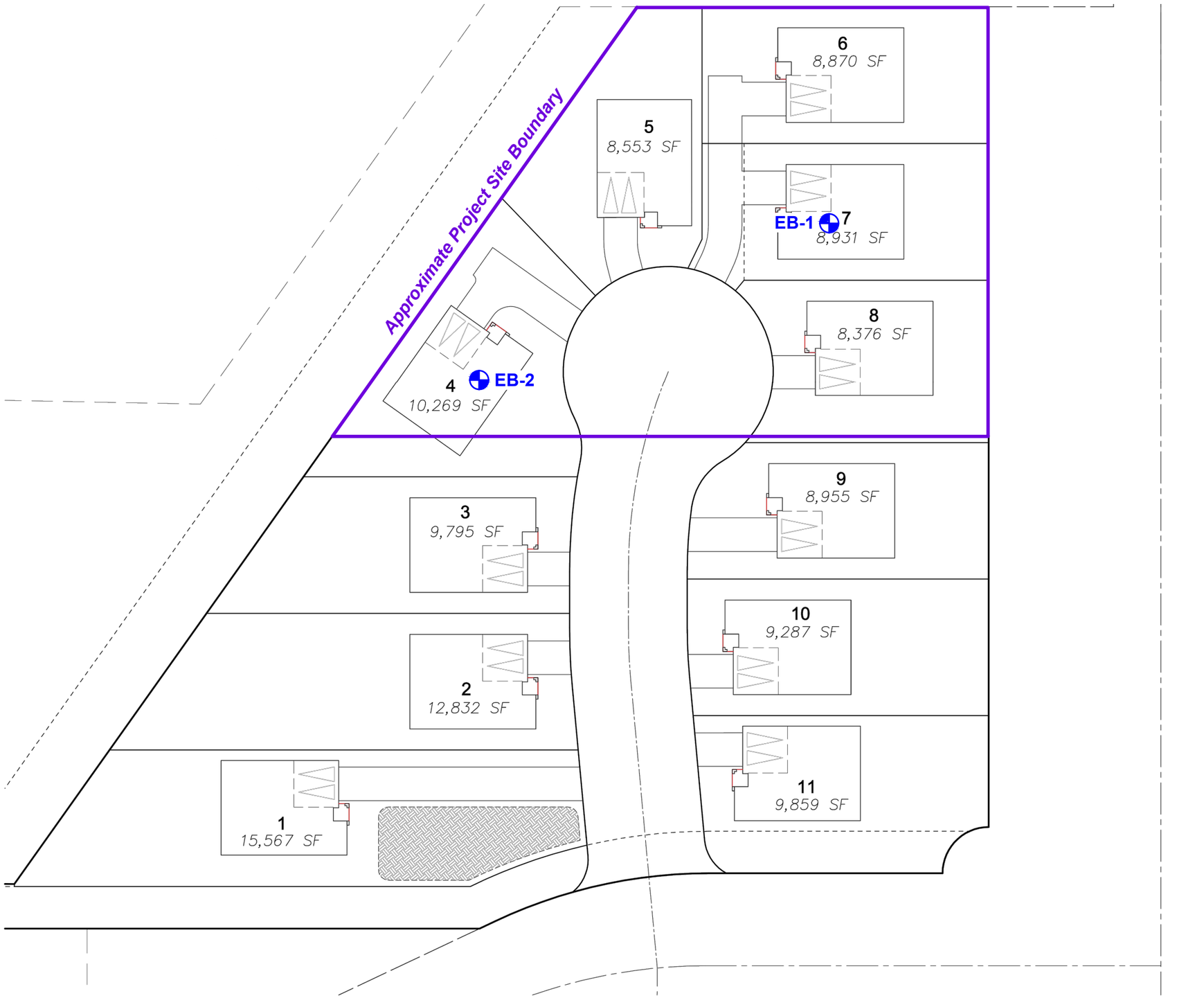

LEGEND

Approximate location of boring by TRC, 2019

N

SCALE (FEET)

0 50 100

SITE PLAN

Lone Tree Way Residential Development
Brentwood, California

TRC | 338571 | **FIGURE 2**

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APPENDIX A

FIELD INVESTIGATION

The field investigation consisted of a surface reconnaissance and a subsurface exploration program using conventional, truck-mounted, hollow-stem auger drilling equipment. Two 8-inch diameter exploratory borings were drilled on May 10, 2019 to a maximum depth of 30 feet. The approximate locations of the exploratory borings are shown on Figure 2. The soils encountered in the borings were continuously logged in the field by our representative and described in accordance with the Unified Soil Classification System (ASTM D2488). The logs of the borings, as well as a key to the classification of the soil, are included as part of this appendix.

The locations of borings were approximately determined by pacing from existing site boundaries. Elevations of the boring were not determined. The locations of the borings should be considered accurate only to the degree implied by the method used.

Representative soil samples were obtained from the borings at selected depths. All samples were returned to our laboratory for evaluation and appropriate testing. Penetration resistance blow counts were obtained by dropping a 140-pound hammer 30 inches. Modified California 3.0-inch outside diameter (O.D.) samples and Standard Penetration Test (SPT) 2-inch O.D. samples were obtained by driving the samplers 18 inches and recording the number of hammer blows for each 6 inches of penetration. Unless otherwise indicated, the blows per foot recorded on the boring logs represent the accumulated number of blows required to drive the samplers the last two 6-inch increments. When using the SPT sampler, the sum of the last two 6-inch increments is the uncorrected SPT measured blow count. The various samplers are denoted at the appropriate depth on the boring logs and symbolized as shown on Figure A-1.

The attached boring logs and related information depict subsurface conditions at the locations indicated and, on the date, designated on the logs. Subsurface conditions at other locations may differ from conditions occurring at these boring locations. The passage of time may result in altered subsurface conditions due to environmental changes. In addition, any stratification lines on the logs represent the approximate boundary between soil types and the transition may be gradual.

* * * * * * * * * * * *

PRIMARY DIVISIONS			SOIL TYPE	SECONDARY DIVISIONS
COARSE GRAINED SOILS (MORE THAN HALF OF MATERIAL IS LARGER THAN NO. 200 SIEVE SIZE)	GRAVELS (MORE THAN HALF OF COARSE FRACTION IS LARGER THAN NO. 4 SIEVE)	CLEAN GRAVELS (Less than 5% Fines)	GW	Well graded gravels, gravel–sand mixtures, little or no fines
			GP	Poorly graded gravels or gravel–sand mixtures, little or no fines
		GRAVEL WITH FINES	GM	Silty gravels, gravel–sand–silt mixtures, plastic fines
			GC	Clayey gravels, gravel–sand–clay mixtures, plastic fines
	SANDS (MORE THAN HALF OF COARSE FRACTION IS SMALLER THAN NO. 4 SIEVE)	CLEAN SANDS (Less than 5% Fines)	SW	Well graded sands, gravelly sands, little or no fines
			SP	Poorly graded sands or gravelly sands, little or no fines
		SANDS WITH FINES	SM	Silty sands, sand–silt–mixtures, non–plastic fines
			SC	Clayey sands, sand–clay mixtures, plastic fines
FINE GRAINED SOILS (MORE THAN HALF OF MATERIAL IS SMALLER THAN NO. 200 SIEVE SIZE)	SILTS AND CLAYS (LIQUID LIMIT IS LESS THAN 50 %)		ML	Inorganic silts and very fine sands, rock flour, silty or clayey fine sands or clayey silts with slight plasticity
			CL	Inorganic clays of low to medium plasticity, gravelly clays, sandy clays, silty clays, lean clays
			OL	Organic silts and organic silty clays of low plasticity
	SILTS AND CLAYS (LIQUID LIMIT IS GREATER THAN 50 %)		MH	Inorganic silts, micaceous or diatomaceous fine sandy or silty soils, elastic silts
			CH	Inorganic clays of high plasticity, fat clays
			OH	Organic clays of medium to high plasticity, organic silts
HIGHLY ORGANIC SOILS			PT	Peat and other highly organic soils

DEFINITION OF TERMS

U.S. STANDARD SIEVE SIZE: 200, 40, 10, 4

CLEAR SQUARE SIEVE OPENINGS: 3/4", 3", 12"

SILTS AND CLAY	SAND			GRAVEL		COBBLES	BOULDERS
	FINE	MEDIUM	COARSE	FINE	COARSE		

0.08, 0.4, 2, 5, 19, 76mm

GRAIN SIZES

TERZAGHI SPLIT SPOON STANDARD PENETRATION

MODIFIED CALIFORNIA

ROCK CORE

PITCHER TUBE

NO RECOVERY

SAMPLERS

SAND AND GRAVEL	BLOWS/FOOT*
VERY LOOSE	0–4
LOOSE	4–10
MEDIUM DENSE	10–30
DENSE	30–50
VERY DENSE	OVER 50

RELATIVE DENSITY

SILTS AND CLAYS	STRENGTH+	BLOWS/FOOT*
VERY SOFT	0–1/4	0–2
SOFT	1/4–1/2	2–4
MEDIUM STIFF	1/2–1	4–8
STIFF	1–2	8–16
VERY STIFF	2–4	16–32
HARD	OVER 4	OVER 32

CONSISTENCY

*Number of blows of 140 pound hammer falling 30 inches to drive a 2–inch O.D. (1–3/8 inch I.D.) split spoon (ASTM D–1586).
+Unconfined compressive strength in tons/sq.ft. as determined by laboratory testing or approximated by the standard penetration test (ASTM D–1586), pocket penetrometer, torvane, or visual observation.

KEY TO EXPLORATORY BORING LOGS

Unified Soil Classification System (ASTM D–2487)

TRC

FIGURE A–1

EXPLORATORY BORING: EB-1

DRILL RIG: TRUCK MOBILE B-61
BORING TYPE: 8-INCH HOLLOW-STEM AUGER
LOGGED BY: JA
START DATE: 5-10-19 FINISH DATE: 5-10-19

PROJECT NO: 338571
PROJECT: LONE TREE WAY
LOCATION: BRENTWOOD, CA
COMPLETION DEPTH: 30.0 FT.

This log is a part of a report by TRC, and should not be used as a stand-alone document. This description applies only to the location of the exploration at the time of drilling. Subsurface conditions may differ at other locations and may change at this location with time. The description presented is a simplification of actual conditions encountered. Transitions between soil types may be gradual.

SURFACE ELEVATION:

ELEVATION (FT)	DEPTH (FT)	MATERIAL DESCRIPTION AND REMARKS	SOIL TYPE	PENETRATION RESISTANCE (BLOWS/FT.)	SAMPLER	MOISTURE CONTENT (%)	DRY DENSITY (PCF)	PERCENT PASSING NO. 200 SIEVE
	0	**LEAN CLAY WITH SAND (CL)** very stiff, moist, yellowish brown, medium to high plasticity Liquid Limit = 49, Plasticity Index = 32	CL	21		20	104	
				45		19	105	
	5	**LEAN CLAY (CL)** very stiff, moist, yellowish brown, medium plasticity, trace find sand		30		24	101	
				18		25	92	
	10							
				54		19	107	
	15		CL					
				75				
	20	hard						
				35				
	25							
				44				
	30	Bottom of boring at 30 feet						

Undrained Shear Strength (ksf)
○ Pocket Penetrometer
△ Torvane
● Unconfined Compression
▲ U-U Triaxial Compression
1.0 2.0 3.0 4.0

GROUND WATER OBSERVATIONS:
NO FREE GROUND WATER ENCOUNTERED

LA_CORP.GDT 5/28/19 MV, CA*

EXPLORATORY BORING: EB-2

DRILL RIG: TRUCK
BORING TYPE: 8-INCH
LOGGED BY: JA
START DATE: 5-10-19 FINISH DATE: 5-10-19

PROJECT NO: 338571
PROJECT: LONE TREE WAY
LOCATION: BRENTWOOD, CA
COMPLETION DEPTH: 30.0 FT.

This log is a part of a report by TRC, and should not be used as a stand-alone document. This description applies only to the location of the exploration at the time of drilling. Subsurface conditions may differ at other locations and may change at this location with time. The description presented is a simplification of actual conditions encountered. Transitions between soil types may be gradual.

SURFACE ELEVATION:

ELEVATION (FT)	DEPTH (FT)	MATERIAL DESCRIPTION AND REMARKS	SOIL TYPE	PENETRATION RESISTANCE (BLOWS/FT.)	SAMPLER	MOISTURE CONTENT (%)	DRY DENSITY (PCF)	PERCENT PASSING NO. 200 SIEVE
	0	**LEAN CLAY WITH SAND (CL)** stiff, moist, yellowish brown, medium to high plasticity, trace fine sand Liquid Limit = 46, Plasticity Index = 30	CL	25		20	100	
				38		12	103	
	5	**SANDY LEAN CLAY (CL)** hard, moist, light brown, moderate plasticity, trace fine sand, trace fine gravel	CL	40		11	93	
	10	**LEAN CLAY WITH SAND (CL)** hard, moist, light brown, moderate plasticity, fine sand	CL	29		14	84	
	15	**LEAN CLAY (CL)** hard, moist, brown, medium plasticity	CL	28		19	103	
	20	**CLAYEY SAND (SC)** dense, moist, light brown, medium plasticity, fine sand	SC	61				
	25	**POORLY GRADED SAND WITH CLAY (SP-SC)** dense, moist, light brown, medium plasticity, fine sand	SP-SC	30				
				79				
	30	Bottom of boring at 30 feet						

Undrained Shear Strength (ksf)
○ Pocket Penetrometer
△ Torvane
● Unconfined Compression
▲ U-U Triaxial Compression
1.0 2.0 3.0 4.0

GROUND WATER OBSERVATIONS:
NO FREE GROUND WATER ENCOUNTERED

LA_CORP.GDT 5/28/19 MV, CA*

APPENDIX B

LABORATORY PROGRAM

The laboratory testing program was directed toward a quantitative and qualitative evaluation of the physical and mechanical properties of the soils underlying the site and to aid in verifying soil classification.

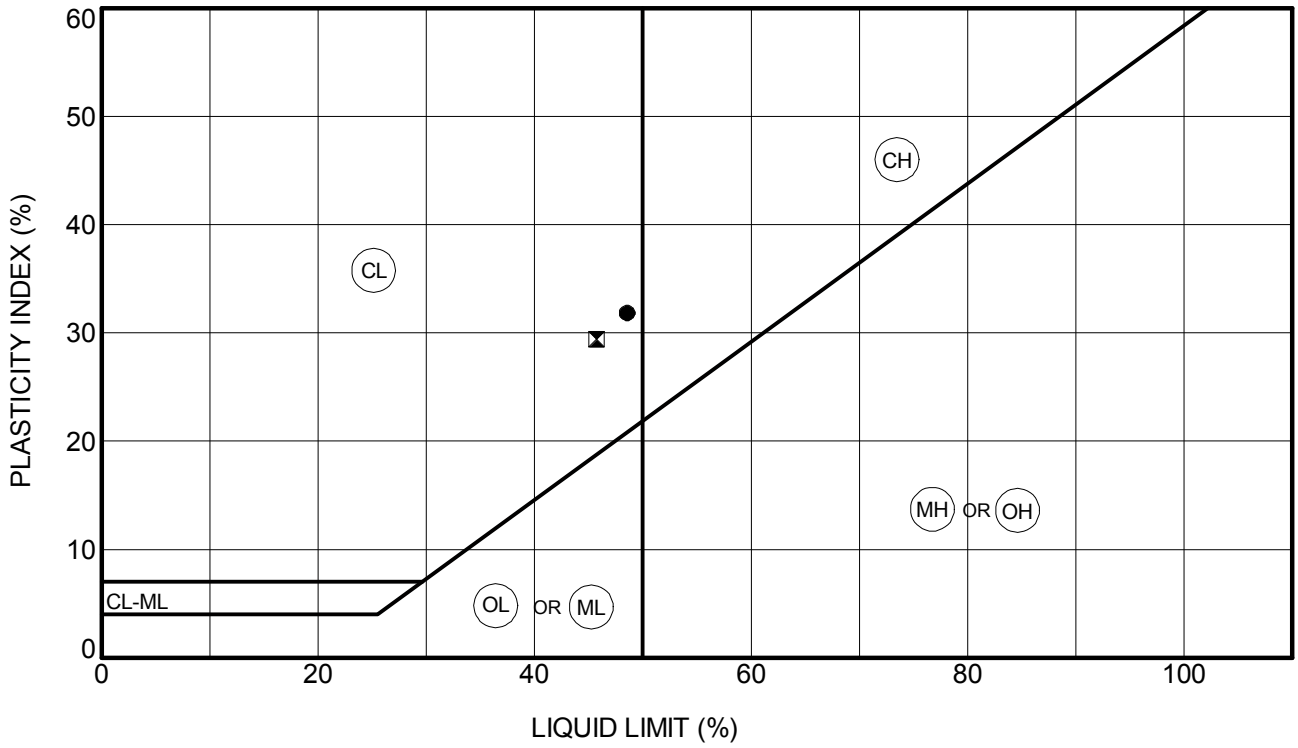
Moisture Content: The natural water content was measured (ASTM D2216) on samples of the materials recovered from the boring. These water contents are recorded on the boring log at the appropriate sample depths.

Dry Densities: In place dry density tests (ASTM D2937) were performed on samples to measure the unit weight of the subsurface soils. Results of these tests are shown on the boring log at the appropriate sample depths.

Plasticity Index: Two Plasticity Index (PI) test determinations (ASTM D4318) were performed on samples of the subsurface soils to measure the range of water contents over which these material exhibits plasticity. The Plasticity Index was used to classify the soil in accordance with the Unified Soil Classification System and to evaluate the soil expansion potential. Results of these tests are presented on the Plasticity Chart of this appendix and on the logs of the boring at the appropriate sample depths.

Sieve and Hydrometer Analyses: Gradation and washed sieve analysis (ASTM D422 and D2217) were performed on two samples of the subsurface soils to aid in the soil classification. Results of these tests are included in this appendix.

* * * * * * * * * * * *



Symbol	Boring No.	Depth (ft.)	Natural Water Content (%)	Liquid Limit (%)	Plastic Limit (%)	Plasticity Index (%)	Passing No. 200 Sieve	Unified Soil Classification Description
●	**EB-1**	**2.0**		**49**	**17**	**32**		
⊠	**EB-2**	**2.0**		**46**	**16**	**30**		

TRC

PLASTICITY CHART AND DATA

Project: LONE TREE WAY

Location: BRENTWOOD, CA

Project No.: 338571

FIGURE B-1

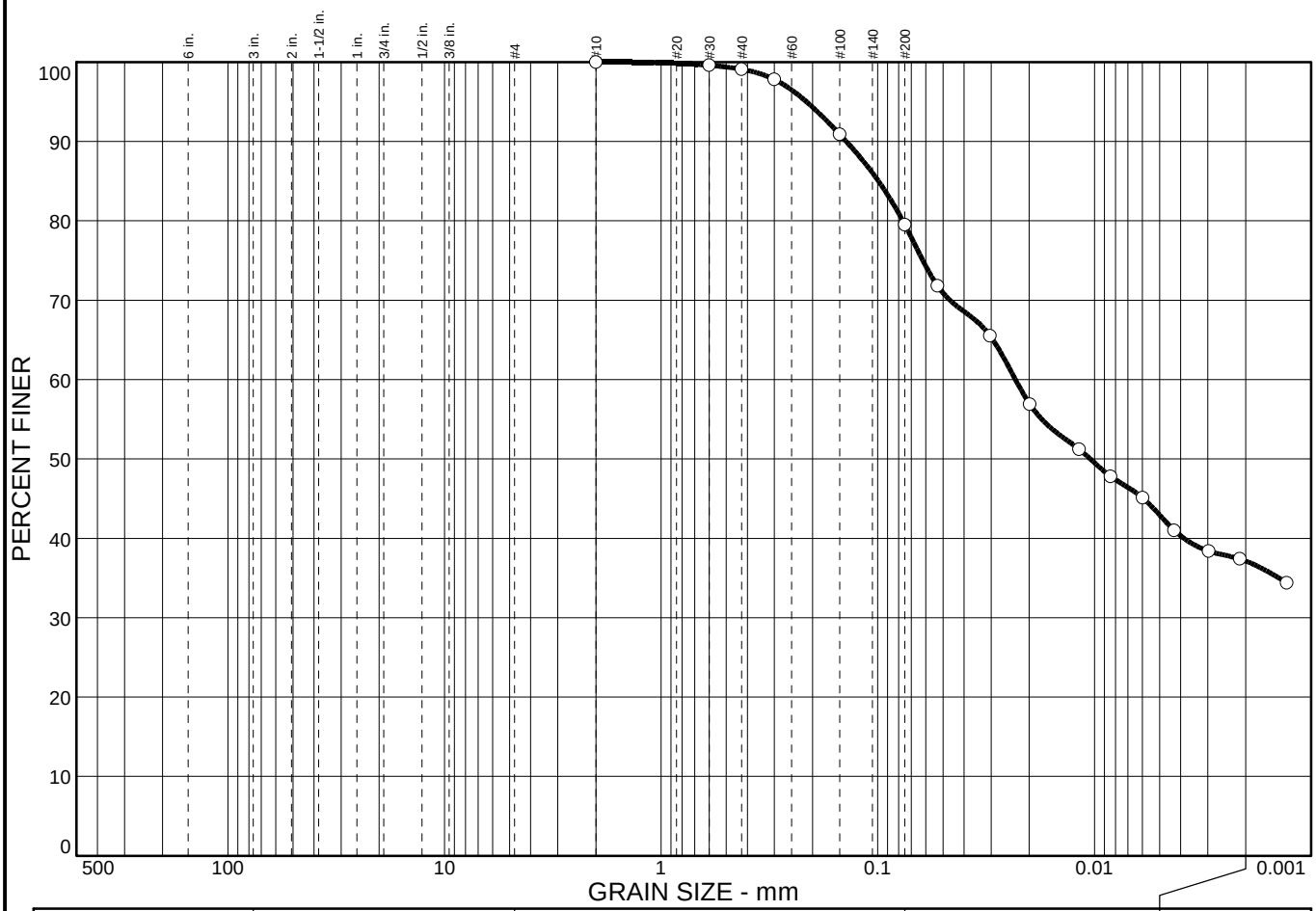
LA_CORP.GDT 5/27/19 MV, CA*

Corrosivity Tests Summary

CTL # 028-2812 **Date:** 5/22/2019 **Tested By:** PJ **Checked:** PJ
Client: TRC **Project:** Lone Tree Way **Proj. No:** 338571
Remarks:

Sample Location or ID			Resistivity @ 15.5 °C (Ohm-cm)			Chloride	Sulfate		pH	ORP (Redox)		Sulfide	Moisture	Soil Visual Description
			As Rec.	Min	Sat.	mg/kg	mg/kg	%				Qualitative	At Test	
						Dry Wt.	Dry Wt.	Dry Wt.		E_H (mv)	At Test	by Lead	%	
Boring	Sample, No.	Depth, ft.	ASTM G57	Cal 643	ASTM G57	ASTM D4327	ASTM D4327	ASTM D4327	ASTM G51	ASTM G200	Temp °C	Acetate Paper	ASTM D2216	
EB-1	2A	3.5	-	-	1,240	6	112	0.0112	7.2	-	-	-	18.2	Yellowish Brown CLAY w/ Sand
EB-2	1B	2.0	-	-	1,796	7	91	0.0091	6.8	-	-	-	18.1	Yellowish Brown CLAY w/ Sand

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
0.0	0.0	20.5	42.4	37.1

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#10	100.0		
#30	99.6		
#40	99.1		
#50	97.8		
#100	90.9		
#200	79.5		
#270	71.8		
0.0303 mm.	65.5		
0.0199 mm.	56.9		
0.0118 mm.	51.2		
0.0084 mm.	47.8		
0.0060 mm.	45.1		
0.0043 mm.	41.0		
0.0030 mm.	38.4		
0.0021 mm.	37.4		
0.0013 mm.	34.4		

* (no specification provided)

Soil Description

Yellowish Brown CLAY w/ Sand

Atterberg Limits

PL= LL= PI=

Coefficients

D_{85}= 0.0994 D_{60}= 0.0232 D_{50}= 0.0105
D_{30}= D_{15}= D_{10}=
C_u= C_c=

Classification

USCS= ML AASHTO=

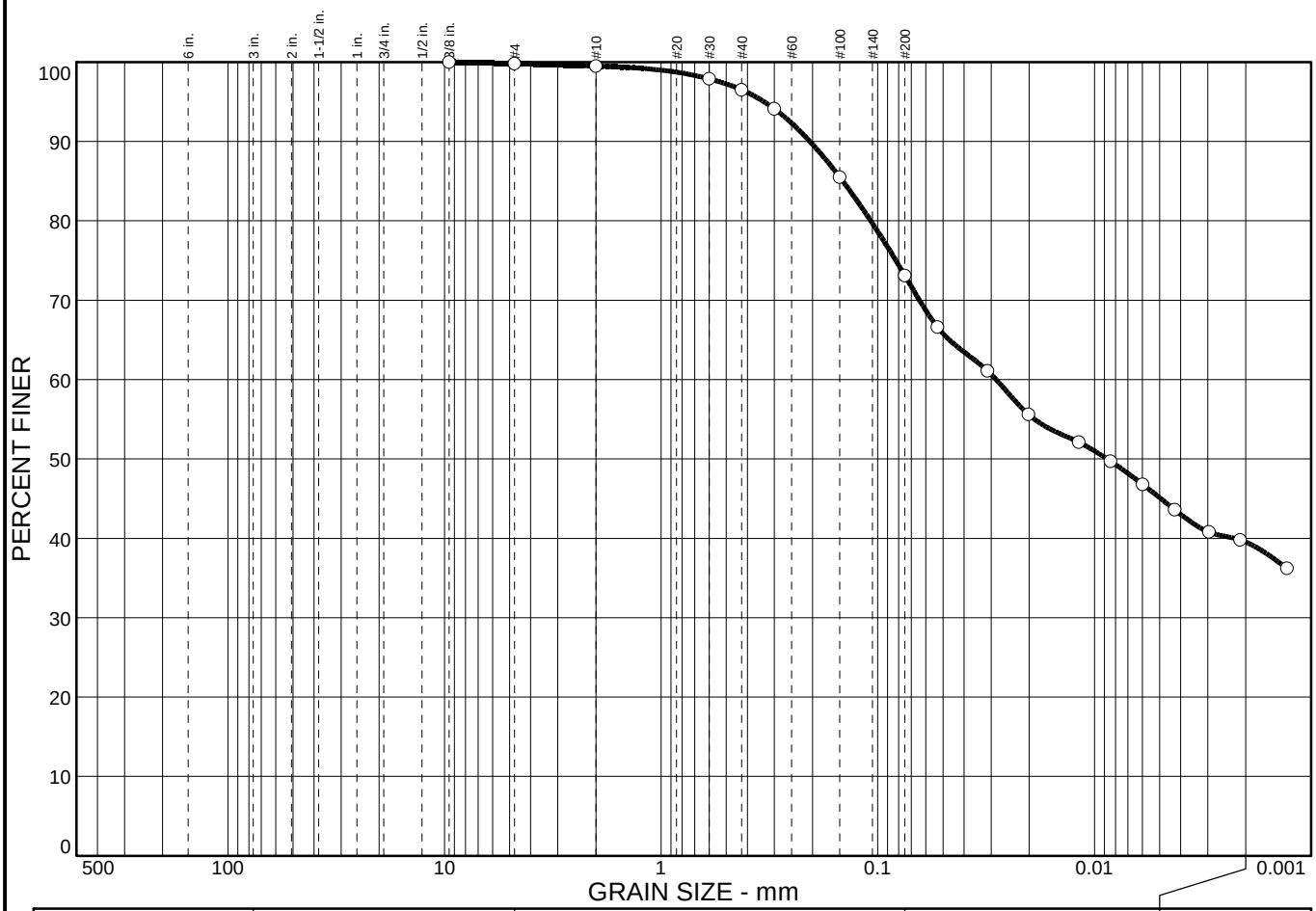
Remarks

Sample No.: 2A **Source of Sample:** EB-1 **Date:** 5/24/19
Location: **Elev./Depth:** 3.5'

COOPER TESTING LABORATORY

Client: TRC
Project: Lone Tree Way - 338571
Project No: 028-2812 **Figure**

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
0.0	0.2	26.7	33.6	39.5

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3/8 in.	100.0		
#4	99.8		
#10	99.5		
#30	97.9		
#40	96.5		
#50	94.1		
#100	85.5		
#200	73.1		
#270	66.6		
0.0312 mm.	61.1		
0.0201 mm.	55.6		
0.0118 mm.	52.1		
0.0084 mm.	49.7		
0.0060 mm.	46.8		
0.0043 mm.	43.6		
0.0030 mm.	40.8		
0.0021 mm.	39.8		
0.0013 mm.	36.2		

* (no specification provided)

Soil Description

Yellowish Brown CLAY w/ Sand

Atterberg Limits

PL= LL= PI=

Coefficients

D_{85}= 0.145 D_{60}= 0.0285 D_{50}= 0.0087
D_{30}= D_{15}= D_{10}=
C_u= C_c=

Classification

USCS= ML AASHTO=

Remarks

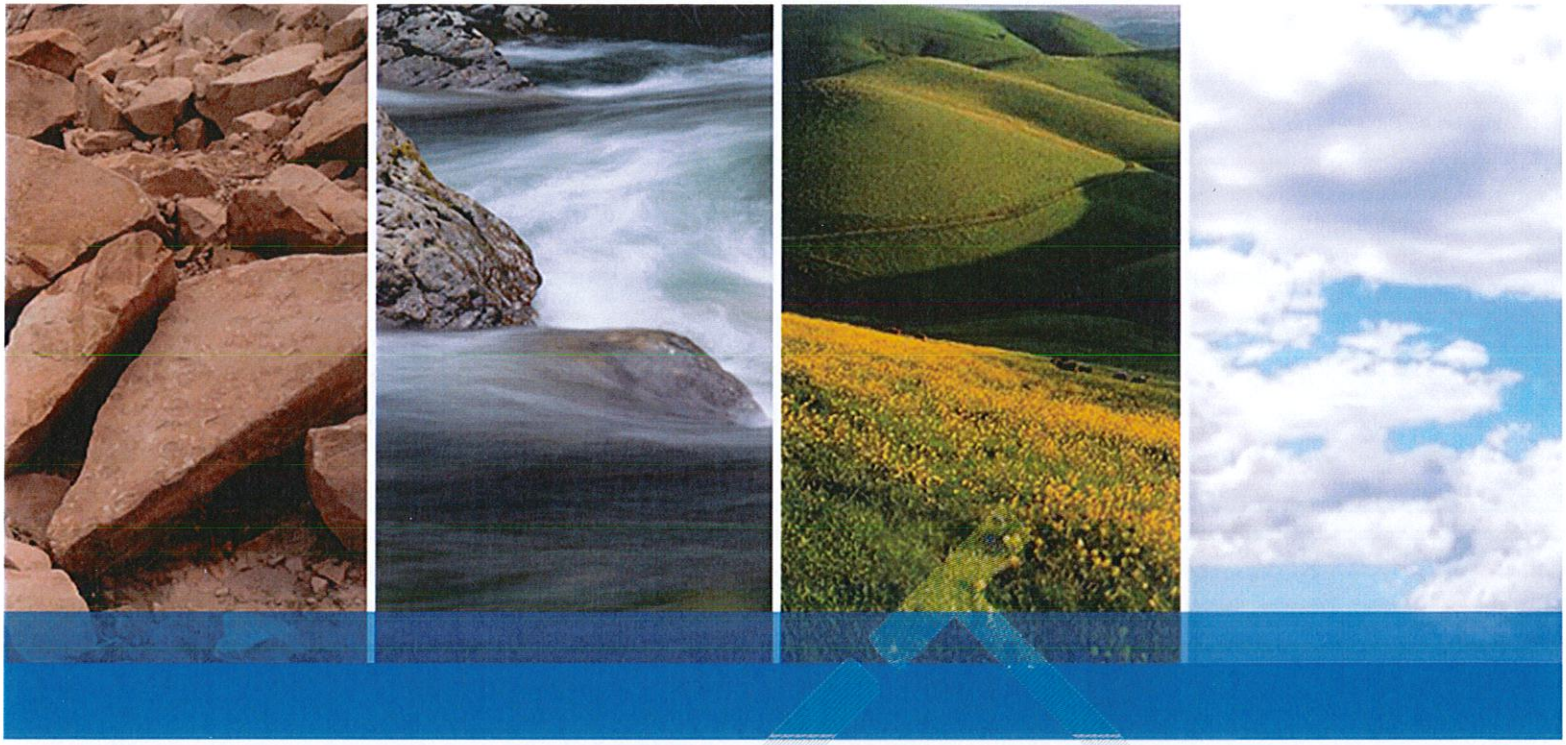
Sample No.: 1B **Source of Sample:** EB-2 **Date:** 5/24/19
Location: **Elev./Depth:** 2.0'

COOPER TESTING LABORATORY

Client: TRC
Project: Lone Tree Way - 338571
Project No: 028-2812 **Figure**

Appendix H

Draft Skipolini Removal Action Plan



SKIPOLINI PROPERTY

7281 LONE TREE WAY
BRENTWOOD, CALIFORNIA

REMOVAL ACTION WORK PLAN

SUBMITTED TO
Cyrus Land Investments, LLC
4021 Port Chicago Highway
Concord, California 94520

PREPARED BY
ENGEO Incorporated

August 5, 2019

PROJECT NO.
11133.002.000

ENGEO
Expect Excellence

REMOVAL ACTION WORK PLAN
SKIPOLINI PROPERTY
7281 LONE TREE WAY
BRENTWOOD, CALIFORNIA

PREPARED FOR:

CYRUS LAND INVESTMENTS, LLC
4021 PORT CHICAGO HIGHWAY
CONCORD, CALIFORNIA 94520

PREPARED BY:

ENGEO INCORPORATED
2010 CROW CANYON PLACE, SUITE 250
SAN RAMON, CALIFORNIA

August 5, 2019

TABLE OF CONTENTS

EXECUTIVE SUMMARY

This Removal Action Work plan (RAW) was prepared for the property located at 7281 Lone Tree Way in Brentwood, California (the "Site"). The purpose of the RAW is to describe the proposed procedures and protocols for remediation of lead-impacted soil at the Site. The primary purpose of the RAW is to present the remedial measures to mitigate lead-impacted soil to allow for possible future development.

A RAW is one of two remedy selection documents that may be prepared for a hazardous substance release site pursuant to California Health and Safety Code (HSC) Section 25356.1 A RAW is appropriate for removal actions that are projected to cost less than $2,000,000.

The Site is located at 7281 Lone Tree Way in Brentwood, California. The Site is approximately 2.96 acres in area and is identified by Assessor's Parcel Number (APN) 018-080-022. The Site currently consists of undeveloped fallow land. Review of historical records indicates that the Site had been occupied by residential structures between 1949 and 2003. Review of historical records indicates that structures were demolished in 2003 and the Site has been undeveloped since. Historical aerial photographs indicate a portion of the parcel consisted of orchards.

In 2014, ENGEO conducted a Phase I Environmental Site Assessment and a subsequent Agrichemical Impact Assessment for the Site. No significant pesticide or arsenic impacts were identified; however, elevated lead concentrations exceeding residential screening levels were identified in one area of the parcel. Lead is the only identified chemical of potential concern (COPC). Based on the findings of the soil sampling and laboratory testing, the soil impacts appear to be limited to an approximately 21,000-square-foot area in the west-central portion of the parcel. The depth of the impacted soil is likely limited to the upper 12 inches of soil measured from the ground surface, equating to an approximate volume of 800 to 1,000 cubic yards.

The removal action objective (RAO) is to reduce the human health risks associated with the COPC in Site soil to a level that is acceptable for possible future development. Based on the RAO, cleanup levels have been established that are protective of human health and the environment and reduce the potential for exposure to the COPC in soil encountered at the Site. The established cleanup level for lead is 80 milligrams per kilogram (mg/kg) (CAL-EPA residential screening level).

The selected remedial approach for the Site is excavation and offsite disposal. This approach includes the following:

- Excavation of an estimated 800 to 1,000 cubic yards of lead-impacted soil.
- Stockpiling of the excavated soil for landfill profiling.
- Transport of the soil to an appropriate permitted disposal facility, an offsite property where reuse may be potentially considered, or potential reuse on-Site, depending on lead concentrations.
- Collection of confirmation soil samples across the excavation area to verify the removal of lead-impacted soil.

This document details past investigations, health risk assessments and details regarding the proposed removal action. The RAW also includes details regarding implementation of the removal action, including sampling protocols, quality control/quality assurance, dust control measures, a transportation plan, and a site-specific health and safety plan.

Implementation of this RAW will mitigate health-based risks associated with the noted lead in near-surface soil and allow for possible future development.

1.0 INTRODUCTION

A Removal Action Work Plan (RAW) is one of two remedy selection documents that may be prepared for a hazardous substance release site pursuant to California Health and Safety Code (HSC) Section 25356.1. It is appropriate for removal actions that are projected to cost less than $2,000,000. This RAW has been prepared in compliance with the California Environmental Protection Agency (Cal/EPA), Department of Toxic Substances Control (DTSC) September 23, 1998 guidance memorandum entitled *Removal Action Workplans – Senate Bill 1706.*

1.1 REMOVAL ACTION PROCESS

The RAW process, including the regulatory background and the RAW objectives, is described in the following sections.

1.1.1 Regulatory Basis for the RAW

In California HSC 25323.1, a RAW is defined as, "A work plan prepared or approved by the Department (DTSC) or a California Regional Water Quality Control Board (RWQCB) which is developed to carry out a removal action, in an effective manner, that is protective of the public health and safety and the environment." As mentioned previously, a RAW is appropriate when the estimated cost of the removal action is less than $2,000,000. If the estimated capital cost of implementing the chosen action will exceed $2,000,000, a Remedial Action Plan should be prepared.

The estimated cost of the selected removal alternative recommended in this RAW is less than $2,000,000.

1.1.2 Objectives of the RAW

The objectives of this RAW are to:

- Present and evaluate existing Site conditions;
- Establish soil cleanup levels for protection of human health and the environment; and
- Evaluate alternatives and identify a final recommendation for a removal action at the Site that is protective of human health and the environment.

1.1.3 Elements of the RAW

To accomplish the objectives stated in the preceding section, and satisfy regulatory requirements, this RAW includes the following elements:

- A description of the nature and extent of the COPCs at the Site.
- The goals and soil cleanup levels to be achieved by the removal action.
- A description of the remedial approach and preparation of an implementation plan.

1.2 SITE DESCRIPTION

The Site is located at 7281 Lone Tree Way in Brentwood, California (Figure 1). The 2.96-acre Site is identified as APN 018-080-022 (Figure 2). The Site currently consists of undeveloped fallow land. The parcels to the south and west consist of ranch houses and grazing land, while parcels to the north and west consist of residential developments.

According to published topographic maps, the Site is relatively level at an elevation approximately 90 feet above mean sea level (msl). Review of the Dibblee (2006) Geologic Map found that the Site is underlain by Quaternary-aged alluvial deposits (Ql).

Six Federal United States Geological Survey (USGS) wells and five State wells are located within 1 mile of the Site. Groundwater measurements for these wells range between 28 feet and 62 feet below the ground surface.

1.2.1 Current and Historic Land Use

The 2.96-acre Site currently consists of undeveloped fallow land. The parcels to the south and west consist of ranch houses and grazing land, while parcels to the north and west consist of residential developments.

Review of historical records indicates that the Site had been occupied by residential structures between 1949 and 2003. Review of historical records indicates that structures were demolished in 2003, and the Site has been undeveloped since. Historical aerial photographs indicate a portion of the parcel consisted of orchards.

There is no current development plans; however, the Site may be developed for residential use in the future.

1.3 SITE OWNER

The Property title is vested in Cyrus Land Investments, LLC.

2.0 SITE CHARACTERIZATION

2.1 INITIAL SAMPLING AND TESTING

Field work was conducted by ENGEO on May 15, 2014. Four surface soil samples were collected at the Property using hand-sampling equipment from approximately 0 to 6 inches below the ground surface. The sample locations are depicted in Figure 3.

Laboratory analysis of the soil samples included the following target analytes:

- *Organochlorine pesticides (OCPs – EPA 8081A) - one 4-point composite sample.*
- *Arsenic, cadmium, chromium, lead, nickel, zinc (EPA 6020) – one discrete sample.*

The following tables summarize the laboratory results:

TABLE 2.1-1: Organochlorine Pesticides (OCPs) – May 2014 - Composite Soil Sample Results (micrograms per kilogram - □g/kg)

SAMPLE	4,4-DDT	4,4-DDE	4,4-DDD
CS1-A,B,C,D	27	110	ND
DTSC-SL[1]	N/A	N/A	N/A
RSL[2]	2,000	2,000	2,900

TABLE 2.1-2: Metal Analysis – May 2014 - Discrete Soil Sample Results (milligrams per kilogram - mg/kg)

SAMPLE	AS	CD	CR(III)	PB	NI	ZN
CS1-A	**9.8**	0.47	29	**200**	27	160
DTSC-SL	0.11	910	N/A	80	N/A	N/A
RSL	0.77	2,100	120,000	400	15,000	23,000

The reported OCPs were below levels of concern for residential land use; however, given the results of the initial metal analyses, the laboratory was instructed to homogenize and re-analyze the four discrete samples for arsenic and lead:

TABLE 2.1-3: May 2014 - Discrete Soil Sample Results (mg/kg)

SAMPLE	ARSENIC	LEAD
CS1-A	**5.8**	47
CS1-B	**7.7**	37
CS1-C	**9.4**	48
CS1-D	**9.8**	**410**
DTSC-SL	0.11	80
RSL	0.77	400

Although the reported arsenic concentrations exceed the referenced DTSC-SL, the reported arsenic levels are indicative of background concentrations for Brentwood. Sample CS1-D exceeds the residential DTSC-SL of 80 mg/kg; therefore, additional site-wide soil sampling was recommended to determine the extent of lead-impacted soil exceeding residential criteria.

2.2 SUPPLEMENTAL SAMPLING AND ANALYSES

On June 2, 2014, ENGEO collected additional soil samples from two depths at 34 locations across the Property, as shown in Figure 4. Soil samples were retrieved within continuous Geoprobe® acetate core liners measuring 2½ feet in length. Upon completion of the soil sampling, the Geoprobe holes were backfilled with the soil cuttings. Soil samples were collected for laboratory analysis by cutting portions of the Geoprobe soil core liners corresponding to the respective desired sampling depths in each location; 0 to 12 inches and 18 to 30 inches.

[1] HERO HHRA Note Number: 3, DTSC Modified Screening Levels For Residential Soil (DTSC-SLs), April 2019.
[2] USEPA Regional Screening Levels For Resident Soil (RSLs); November 2018.

As described above, two samples were recovered from each Geoprobe location at depths of approximately 0 to 12 inches and 18 to 30 inches below the ground surface. The laboratory was instructed to homogenize the soil within each sample before analyzing. Initially, only the shallow sample from each boring was analyzed while the deeper sample from each location was held by the laboratory pending the initial analysis.

As presented in Table 2.2-1 below, 10 of the 34 samples collected at depths of 0 to 12 inches exhibited concentrations above the applicable DTSC-SL for residential land use (>80 mg/kg). Four samples from 18 to 30 inches were selected for testing. The deeper samples selected for further analysis were below the samples, which reported the four highest lead concentrations. The four deeper samples exhibited lead concentrations below residential screening levels, with the highest concentration at 45 mg/kg.

The previous soil sampling and laboratory analyses indicate that pesticides and arsenic are not COPCs for Site soils; however, lead was detected above residential thresholds. Lead was detected above the residential DTSC-SL in 10 of the 34 soil samples collected from a depth of 0 to 12 inches at the Property. Sample S29, which exhibited a concentration of 81 mg/kg, is only slightly above the screening level and is considered an isolated de minimus condition. Laboratory testing of the samples collected from the 18- to 30-inch depth did not detect lead at concentrations above residential screening levels.

TABLE 2.2-1: Soil Analytical Data

SAMPLE ID	LEAD (mg/kg)	SAMPLE ID	LEAD (mg/kg)
S-1 A	24	S-19 A	160
S-2 A	11	S-20 A*	310
S-3 A	9.9	S-20 B	17
S-4 A	12	S-21 A	210
S-5 A	47	S-22 A*	220
S-6 A	17	S-22 B	10
S-7 A	73	S-23 A	130
S-8 A	11	S-24 A	43
S-9 A	31	S-25 A	13
S-10 A	37	S-26 A	13
S-11 A*	650	S-27 A	22
S-11 B	45	S-28 A	39
S-12 A	110	S-29 A	81
S-13 A	17	S-30 A	78
S-14 A	33	S-31 A	27
S-15 A	16	S-32 A	13
S-16 A	59	S-33 A	19
S-17 A	120	S-34 A	21
S-18 A*	390		
S-18 B	17		

*Deeper samples tested to determine lead concentration at depth

Lead concentration above residential limit

2.3 BACKGROUND ARSENIC EVALUATION

In January 2014, ENGEO prepared an *Arsenic Risk Evaluation* for the Miles-Fennel property (Shady Willow Lane, Brentwood, CA) under DTSC oversight (ENVIROSTOR - 60001996).[3] This property is located approximately 4,000 feet east of the subject Site.

An initial risk evaluation was conducted for the Miles – Fennel property by Mark Stelljes, Ph.D., Toxicologist (SLR International). The evaluation was prepared in accordance with the following California Environmental Protection Agency (CAL-EPA DTSC) guidance documents:

Department of Toxic Substances Control (DTSC), Selecting Inorganic Constituents as Chemicals of Potential Concern at Risk Assessments at Hazardous Waste Sites and Permitted Facilities; February 1997.

Department of Toxic Substances Control (DTSC), Arsenic Strategies Determination of Arsenic Remediation Development of Arsenic Cleanup Goals for Proposed and Existing School Sites. California Environmental Protection Agency, Sacramento, California; March 2007.

The data set consists of 42 soil samples collected from a depth of 1 foot and 14 samples collected from a depth of 2 feet. Arsenic was detected at concentrations between 7.2 mg/kg and 18 mg/kg, with a mean of 12 mg/kg, a standard deviation of 2.8 mg/kg, and a coefficient of variation of 0.23.

The arsenic concentrations were sorted and plotted against cumulative probability. Data from a single population would be expected to appear linear in a cumulative probability plot, while linear discontinuities can indicate the presence of multiple distinct populations. Based on a normal population, there is the presence of an inflection point in the cumulative probability at a concentration of 15 mg/kg. The same data was plotted with cumulative probability displayed on a log scale to expand the upper range of the distribution. In this representation, three distinct linear sections are visible with a linear discontinuity located at a concentration of 14 mg/kg.

At the request of DTSC, an additional background arsenic evaluation was conducted in order to further define the range of local arsenic concentrations in native soils. This information was reported in a revised August 6, 2014 *Arsenic Risk Evaluation*. Soil data was compiled from 13 previous ENGEO projects located within two miles of the Miles – Fennel property. A total of 212 soil samples were evaluated using USEPA methodologies. The background arsenic concentrations ranged from 1.0 to 15 mg/kg, with a mean concentration of 7.7 mg/kg.

Based on the findings of the 2014 Risk Evaluation, the reported arsenic concentrations at the subject Site suggest background levels, with no anthropogenic source.

2.4 NATURE AND EXTENT OF CONTAMINATION

Review of the soil data indicates lead is the only COPC for the Site. Based on the findings of the soil sampling and laboratory testing, the soil impacts appear to be limited to about a 21,000-square-foot area in the west-central portion of the parcel (Figure 5). The depth of the impacted soil is likely limited to 12 to 18 inches below the ground surface, equating to an approximate volume of 800 to 1,200 cubic yards.

[3] https://www.envirostor.dtsc.ca.gov/public/profile_report?global_id=60001996

3.0 REMOVAL ACTION OBJECTIVE AND SOIL CLEANUP LEVELS

Site characterization has revealed the presence of COPCs, specifically lead, above acceptable levels in soil at the Site. The removal action objective (RAO) is to reduce the human health risks associated with the COPCs in Site soil to a level that is acceptable for possible future development.

Based on the RAO, a soil cleanup level was developed that establishes the specific lead concentration that is protective of both human health and the environment. The soil cleanup level has been developed for the Site from: (1) information obtained during characterizations conducted at the Site; and (2) risk management decisions based upon the current and possible future development of the Site. The following is the soil cleanup level that was developed for the Site:

- Lead – 80 mg/kg (DTSC-SL for a residential land use scenario).

4.0 ALTERNATIVE REMEDIAL EVALUATION

The purpose of this Section of the RAW is to identify and screen possible removal action alternatives that may best achieve the RAOs discussed in Section 3.0. The removal action alternatives were screened and evaluated on the basis of their effectiveness, implementability, and cost.

4.1 IDENTIFICATION AND ANALYSIS OF REMOVAL ACTION ALTERNATIVES

The response actions to address the identified COPCs in Site soil include Alternative 1: no further action, Alternative 2: on-site encapsulation with institutional controls, and Alternative 3: excavation and off-site disposal. These response actions are considered the appropriate removal action alternatives for the Site.

4.1.1 Alternative 1 – No Further Action

As required by the DTSC, the No Further Action alternative has been included to provide a baseline for comparisons among other removal alternatives. The No Further Action alternative would not require implementing any measures at the Site, and no costs would be incurred. This action includes no institutional controls, no treatment of soil, and no monitoring.

4.1.2 Alternative 2 – On-Site Encapsulation

This alternative would consist of removing approximately 800 to 1,000 cubic yards of the impacted soil and placing the affected soil within the street sections of a future residential development, below the depth of future utilities. Excavation/encapsulation includes using loaders, backhoes, and/or other appropriate equipment. It should be noted that a development plan has not been prepared for the Site; therefore, the specific location and extent of street sections is not known at this time. This alternative would include the following:

- The area of future street sections would be over-excavated to a sufficient extent to allow for placement of the impacted soils below the depth of any future utilities. A clean soil cap would be placed over the impacted material, below future utilities.

- Following soil excavation, a confirmation sampling would be performed to verify removal of soils exceeding the RAOs.

- A land use covenant would be executed between DTSC and the property owner and recorded to ensure that the cap integrity is maintained and that future uses of the property are consistent with the operation and maintenance of the cap. An operation and maintenance plan would be submitted and approved by DTSC.

- An operation and maintenance agreement signed with DTSC specifying the operation and maintenance requirements and providing financial assurance for future operation and maintenance of the cap.

4.1.3 Alternative 3 – Excavation/Off-Site Disposal

The excavation/off-site disposal alternative would consist of removing and transporting impacted soil to an appropriate, permitted off-site facility for disposal. Excavation includes using loaders, backhoes, and/or other appropriate equipment. This alternative would include the following:

- Excavation of the estimated 800 to 1,000 cubic yards of lead-impacted soil.

- Stockpiling of the excavated soil for landfill profiling.

- Transport of the soil to an appropriate permitted disposal facility, an offsite property where reuse may be potentially considered, or potential reuse on-Site, depending on lead concentrations.

- Collection of confirmation soil samples across the excavation area to verify the removal of lead-impacted soil.

- Since no soils exceeding RAOs would remain on-Site, a land use covenant would not be required.

4.2 EVALUATION CRITERIA

Each removal action alternative was independently analyzed without consideration to the other alternatives. Each of the removal action alternatives is screened based on effectiveness, implementability, and cost.

4.2.1 Effectiveness

In the effectiveness evaluation, the following factors are considered:

- *Overall Protection of Human Health and the Environment* - This criterion evaluates whether the removal alternative provides adequate protection to human health and the environment and is able to meet the Site's RAOs.

- *Compliance with ARARs/TBCs* - This criterion evaluates the ability of the removal alternative to comply with ARARs and TBCs.

- *Short-Term Effectiveness* - This criterion evaluates the effects of the removal alternative during the construction and implementation phase until removal objectives are met. It

accounts for the protection of workers and the community during removal activities and environmental impacts from implementing the removal action.

- *Long-Term Effectiveness and Permanence* - This criterion addresses issues related to the management of residual risk remaining on site after a removal action has been performed and has met it objectives. The primary focus is on the controls that may be required to manage risk posed by treatment residuals and/or untreated wastes.

- *Reduction of Toxicity, Mobility, or Volume* - This criterion evaluates whether the removal technology employed results in significant reduction in toxicity, mobility, or volume of the hazardous substances.

4.2.2 Implementability

This criterion evaluates the technical and administrative feasibility of implementing the alternative, as well as the availability of the necessary equipment and services. This includes the ability to design and perform a removal alternative, ability to obtain services and equipment, ability to monitor the performance and effectiveness of technologies, and the ability to obtain necessary permits and approvals from agencies, and acceptance by the State and the community.

4.2.3 Cost

This criterion assesses the relative cost of each technology based on estimated fixed capital for construction or initial implementation and ongoing operational and maintenance costs. The actual costs will depend on true labor and material cost, competitive market conditions, final project scope, and the implementation schedule.

4.3 ANALYSIS OF REMOVAL ACTION ALTERNATIVES

Each alternative is discussed in the following sections.

4.3.1 Alternative 1 – No Further Action

The No Further Action alternative would not require implementing any measures at the Site, and no costs would be incurred. Consequently, there would be no activities that would disturb Site soil, and, therefore, no short-term risks to Site workers or the community, as a result of implementing this alternative.

However, under the No Further Action alternative, the impacts due to the presence of elevated lead concentrations in soil would not be addressed and there would be no reduction in the potential risks. This alternative, therefore, does not meet the effectiveness criterion. As a result, acceptance by the State and the community would be unobtainable.

4.3.2 Alternative 2 – On-Site Encapsulation

<u>Effectiveness</u>

Potential short-term risks to on-site workers, public health, and the environment could result from dust or particulates that may be generated during excavation, soil handling, and encapsulation activities. These risks could be mitigated using personal protective equipment for

on-site workers and engineering controls, such as dust suppression and monitoring, and additional traffic and equipment operating safety procedures, for protection of the surrounding community.

With regard to long-term effectiveness, on-site encapsulation would not lessen toxicity or volume of the COPCs, but would limit or eliminate direct contact for future residents and workers. Under the operation and maintenance agreement, required as part of this alternative, periodic inspections would be required for settlement, cracking, ponding of liquids, erosion, and naturally occurring invasion by deep-rooted vegetation. On-site encapsulation would also require long-term inspection and maintenance and a land use covenant to provide long-term effectiveness, and to ensure that the integrity of the cap is not compromised by land use activities.

Implementability

Encapsulation is a relatively simple technology that are readily implemented. As COPCs would remain on site, obtaining permits and regulatory approval is more difficult. In addition, community acceptance for this alternative may be more difficult since the COPCs would remain on site. Encapsulation may require "triple" handling of soil and a longer period of time (one to two weeks) to complete the encapsulation. This alternative would result in the potential for a greater degree of dust generation and noise from operations.

Cost

Containment technologies typically involve low to moderate costs. Based on previous estimates, costs for this alternative are in the range of $80 per cubic yard. Total project cost for Alternative 2, based on 1,000 cubic yards, would be approximately $238,000, including additional in future O&M costs (See Section 4.4.3 Table).

4.3.3 Alternative 3 – Soil Excavation/Off-Site Disposal

Effectiveness

Potential short-term risks to on-site workers, public health, and the environment could result from dust or particulates that may be generated during excavation and soil handling activities. These risks could be reduced using personal protective equipment for on-site workers and engineering controls, such as dust suppression and monitoring, and additional traffic and equipment operating safety procedures, for protection of the surrounding community. Excavation and disposal would remove the COPCs from the Site, and therefore, eliminates the long-term risks and accomplishes the RAO.

Implementability

Excavation/off-site disposal is a well-proven, readily implementable technology that is a common method for cleaning up contaminated sites. It is a relatively simple process, with proven results. Equipment and labor required to implement this alternative are uncomplicated and readily available. The shallow depths of the identified contamination make excavation readily implementable. It is anticipated that regulatory approval would be granted since it is a proven and permanent technology. Acceptance by the State and the community for this alternative is considered high. Alternative three will result in greater transport truck traffic to and from the Site as soil loads will be transported from the Site to landfills.

Cost

The estimated cost for excavation, transportation, and disposal of the impacted soils is approximately $102 per cubic yard. This estimate includes permitting, excavation/removal, confirmation sampling/reporting, transportation, disposal at an approved off-site disposal facility, and import fill. The total cost for implementation of Alternative 3, based on 1,000 cubic yards, is $151,000.

4.4 COMPARATIVE ANALYSIS OF REMOVAL ACTION ALTERNATIVES

A comparative analysis was conducted to identify the advantages and disadvantages of each removal alternative. The comparative analysis of the removal alternatives was conducted to address the criteria listed in Section 4.2.

4.4.1 Effectiveness

Under the no further action alternative, the impacts associated with the site-specific COPCs would not be addressed. Consequently, there would be no reduction in the potential risks and the RAO would not be achieved. The no further action and containment/capping-in-place alternatives do not involve activities that would disturb the impacted soil. Therefore, there would be no short-term risks to on-site workers or the community as a result of implementing these alternatives. Alternatives 2 and 3 would require removing, handling, and transporting the impacted soil, resulting in higher short-term exposure risks. However, it is expected that these risks can be sufficiently mitigated through site control measures.

Alternatives 2 and 3 reduce or eliminate, respectively, potential exposure to COPCs, and therefore, accomplish the RAO. Once implemented, the encapsulation alternative presented in Alternative 2 would require long-term monitoring to ensure its effectiveness. In addition, future changes in land use could disturb the soil. The excavation/off-site disposal alternative present in Alternative 3 would remove the COPCs from the Site, and would not require any further management or site controls.

Based upon this evaluation, Alternative 3 is favored is favored under this criterion.

4.4.2 Implementability

No measures would be implemented for the no further action alternative. Alternatives 2 and 3 are both well-proven, readily implementable technologies. However, Alternative 2 requires additional handling of soil, and therefore a potential increase in dust and noise generation, and also requires a long-term Operations and Maintenance program. Alternative 3 will result in greater impacts to transportation/traffic; however, the impacts are of short duration and can be effectively managed to minimize disturbances. Accordingly, Alternative 3 is favored by this criterion.

4.4.3 Cost Effectiveness

A summary of estimated costs to implement the proposed alternatives is presented in the following table. Costs are based on encapsulation or excavation/off-site disposal of 1,000 yards (1,500 tons) of soil.

ESTIMATED COSTS FOR REMOVAL ALTERNATIVES

SUMMARY OF ESTIMATED COSTS			
Costs	Removal Action Alternative		
	Alternative 1 No Further Action	Alternative 2 Encapsulation	Alternative 3 Excavation and Disposal
Direct Capital Costs			
Equipment Costs	0	$75,000	$36,000
Disposal &Transport Costs	0	0	$80,000
Backfill & Compaction Costs	0	$30,000	0
Indirect Capital Costs			
Engineering and Design Expenses	0	$40,000	$30,000
Oversight and Permit Costs	0	$8,000	$5,000
Annual Post Removal Action Site Control Costs[4]			
Operational Costs	0	$60,000	0
Maintenance Costs	0	$25,000	0
Total	**0**	**$238,000**	**$151,000**

4.5 RECOMMENDED REMOVAL ACTION ALTERNATIVE

Based on the comparative analysis described in Section 4.4, Alternative 3, Excavation and Off-site Disposal is the preferred and recommended removal action alternative for addressing the Site.

5.0 REMOVAL ACTION IMPLEMENTATION

5.1 PERMITTING AND SITE PREPARATION

The removal action will be conducted in accordance with all applicable California Code of Regulations, including Cal/OSHA regulations. Prior to implementation of the RAW, a grading permit will be obtained with the City of Brentwood. A hauling plan/permit will also be submitted to the City of Brentwood for approval.

5.2 EXCAVATION METHODOLOGY

Excavation work will be conducted by a licensed grading contractor with current hazardous material certifications. Work activities will be conducted Monday – Friday between 7:00 AM and 6:00 PM. Excavations will be performed using a combination of backhoes, track-mounted excavators and loaders. The approximate extent of the proposed excavation areas is shown on

[4] Based on 30 year O&M

Figure 5. Since the excavations will be less than 18 inches in depth, shoring and/or sloping is not anticipated.

The excavated soil will be stockpiled in approximate 100-cubic-yard volumes outside of the planned excavation area. As necessary, soil stockpiles will be covered with 10-mil plastic sheeting and secured to prevent dust or runoff during storm events. Stockpiles will be managed in accordance with the Dust Control Plan (Appendix A).

Details regarding transportation and disposal, including landfill locations and trucking routes are provided in the Transportation Plan (Appendix B).

6.0 SAMPLING AND ANALYSIS PLAN

The proposed removal action will require the collection and analysis of samples to confirm the removal of impacted soil and to determine the proper waste classification of excavated soils for disposal purposes. All sampling will be conducted in general accordance with the Sampling and Analysis Plan (Appendix C). In the following sections, confirmation sampling and waste disposal classification sampling are discussed.

6.1 CONFIRMATION SAMPLING OF EXCAVATED AREAS

The affected area of the Site that exhibits lead concentrations in excess of the soil cleanup levels will be divided into approximately 35 grids, 25 feet by 25 feet (625 square feet). Figure 5 depicts the area proposed for initial excavation.

The grids with affected soils will initially be excavated to a depth of 12 inches. Following excavation, each of the excavated grids will be sampled by the collection of one discrete soil sample from the center-base of the grid. The grid samples will all be analyzed for total lead. Grids with confirmation sampling concentrations exceeding the soil cleanup levels will be re-excavated an additional 6 inches and re-sampled. Excavation will proceed until the soil cleanup levels are achieved. All excavated soil will be managed as discussed in the Excavation Methodology section presented above. Grids with confirmation samples below the soil cleanup levels will be considered complete with no further excavation conducted.

6.2 SOIL STOCKPILE CLASSIFICATION

The excavated soil will be stockpiled in approximate 100 cubic yard volumes on Site. The soil stockpiles will be profiled for landfill disposal on a one 4-point composite sample per 100 cubic yard basis. The specific laboratory profile will be determined prior to excavation activities; however, it is anticipated the stockpile samples will be analyzed for organochlorine pesticides (EPA 8081) and CAM-17 metals. If any constituents exceed 10 times the Soluble Threshold Limit Concentration (STLC), a waste extraction test (WET) will be conducted. The following table details the disposal/reuse criteria for the stockpiled soil:

TABLE 5.2-1: Disposal/Reuse Criteria

CATEGORY	TOTAL LEAD (TTLC)	SOLUBLE LEAD (STLC)	DISPOSAL/REUSE CRITERIA
A	<50 mg/kg	N/A	On site reuse
B	50 mg/kg< **sample** < 80 mg/kg	<5.0 mg/l	On site reuse

C	50 mg/kg< **sample** < 80 mg/kg	>5.0 mg/l	Class I Landfill
D	>80 mg/kg	>5.0 mg/l	Class I Landfill
E	>80 mg/kg	<5.0 mg/l	Class II Landfill

As noted in the Transportation Plan (Appendix B), it is anticipated that soil categorized as Class II non-hazardous waste will be disposed of at the Vasco Road Landfill in Livermore, California. Class I hazardous waste and/or RCRA waste will be disposed of at the Clean Harbors waste disposal facility in Buttonwillow, California.

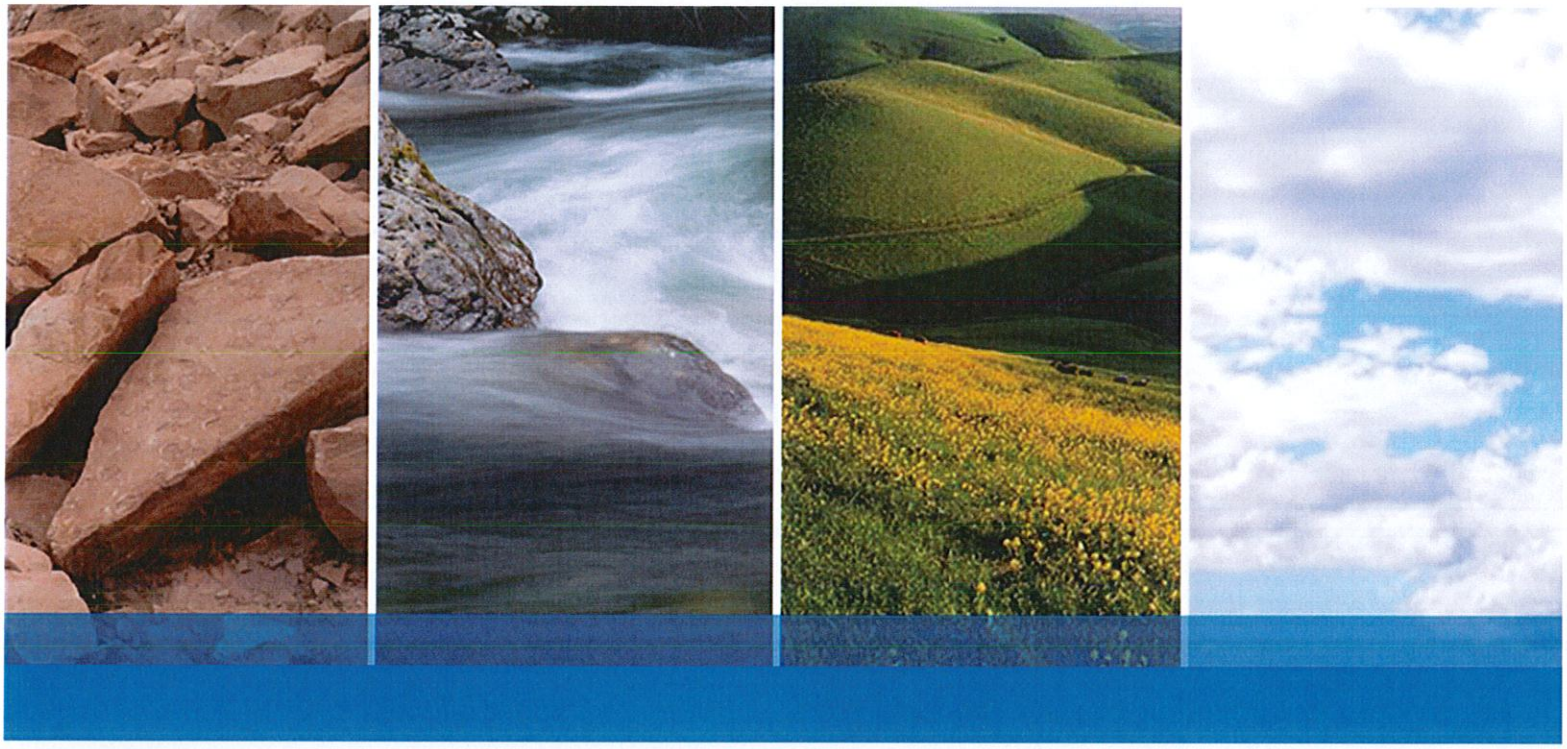
7.0 HEALTH AND SAFETY PLAN

All contractors will be responsible for operating in accordance with the most current requirements of State and Federal Standards for Hazardous Waste Operations and Emergency Response (Cal. Code Regs., Title 8, Section 5192; 29 CFR 1910.120). Onsite personnel are responsible for operating in accordance with all applicable regulations of the Occupational Safety and Health Administration (OSHA) outlined in the State General Industry and Construction Safety Orders (Cal. Code Regs., tit. 8) and Federal Construction Industry Standards (29 CFR 1910 and 29 CFR 1926), as well as other applicable federal, state, and local laws and regulations. All personnel shall operate in compliance with all California OSHA requirements.
In addition, California OSHA's Construction Safety Orders (especially Cal. Code Regs., Title 8, Sections 1539 and 1541) will be followed as appropriate. A site-specific Health and Safety Plan (HASP) has been prepared for the Site in accordance with current health and safety standards as specified by the federal and California OSHAs and submitted to DTSC prior to initiation of field work. The HASP is presented in Appendix D.

The provisions of the HASP are mandatory for all personnel who are at the Site. The contractor and its subcontractors performing fieldwork in association with this RAW will either adopt and abide by the HASP or shall develop their own safety plans which, at a minimum, meet the requirements of the HASP. All onsite personnel shall read the HASP and sign the "Plan Acceptance Form" (Attachment A of the HASP) before starting Site activities.

8.0 REPORTING

Upon completion of soil excavation, disposal and confirmation sampling, we will prepare a final Removal Action Completion Report documenting all Site activities. The report will provide all compiled laboratory data and disposal manifests for the project. The report will be signed by a California Professional Engineer and/or Professional Geologist.



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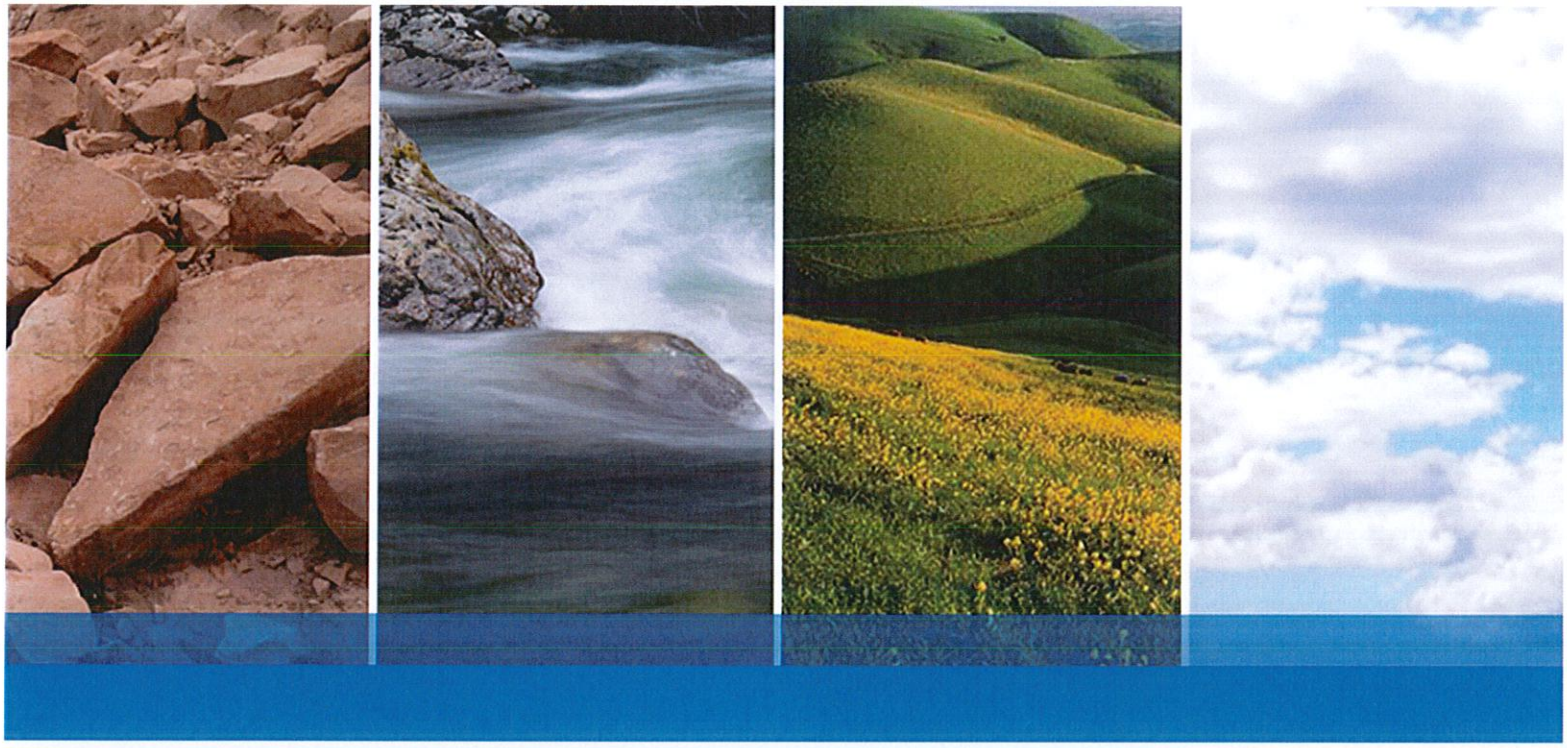


APPENDIX A

DUST CONTROL PLAN

DUST CONTROL PLAN

This plan details potential dust control measures that the Contractor will implement to minimize dust emissions during construction activities at the Site. Dust emissions may result from activities during removal action and from wind erosion. These sources are most effectively controlled using wet suppression. A high wind threshold will also be established to minimize wind erosion during extreme meteorological conditions. Stockpiles will be covered unless being loaded, and water will be sprayed on areas that have already been excavated and are subject to wind erosion. Dust control measures will be performed in accordance with applicable Bay Area Air Quality Management District (BAAQMD) standards.

Sources of Emissions

Construction Traffic – Movement of construction equipment around the construction area is capable of creating construction emissions in excavated or cleared areas. There is also the potential for vehicular traffic on paved or unpaved roads and parking lots to produce construction emissions.

Excavation – Excavation activities and backfilling operations can produce both fugitive dust and vehicle emissions.

Off haul – Removal of stockpiled soil from the Site for disposal offsite can produce both fugitive dust and vehicle emissions.

Material Stockpiles and Inactive Areas – Stockpiles of soil generated from excavation activities and exposed areas where soil has been disturbed may contribute to windborne dust emissions.

Dust Mitigation

This section presents methods to control sources of fugitive dust generated by soil disturbance or excavation, such as:

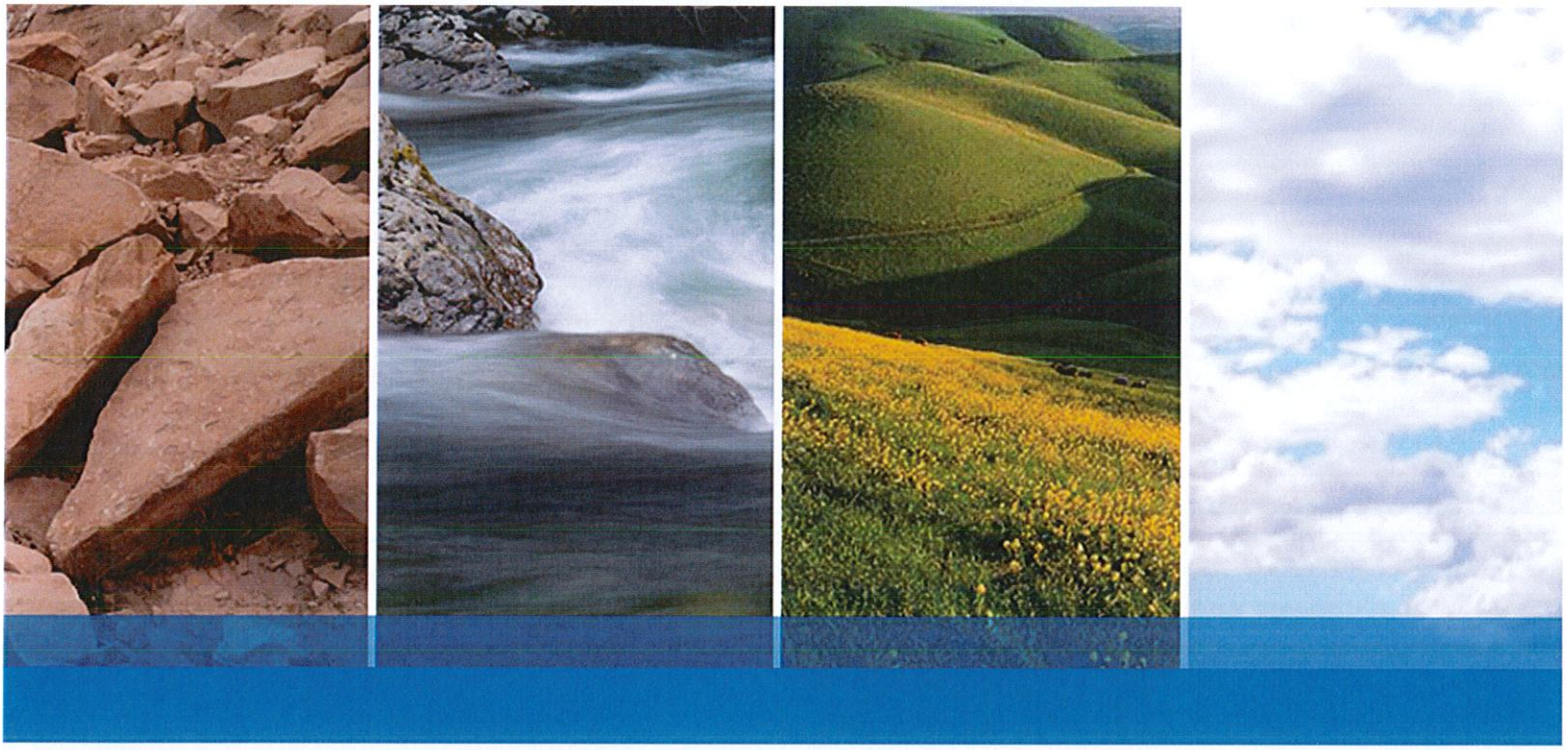
- Dust entrained during onsite travel on paved and unpaved surfaces.
- Dust entrained during excavation, materials handling, processing, and backfilling at the construction Site.
- Dust entrained during aggregate and soil stockpiling, loading, and unloading operations.
- Wind erosion of areas disturbed during construction activities.

The main mechanism for the control of fugitive dust emissions from construction activities and wind erosion is by watering, which leads to the formation of a surface crust to reduce the available reservoir of dust. The effectiveness of wet suppression is dependent on the type of activities occurring, the frequency of watering, and the meteorological conditions.

Stockpile and Vehicle Management

As necessary, based on meteorological and Site conditions, stockpiles will be covered with 10-mil plastic sheeting. All stockpiles will be placed on 10-mil plastic sheeting. All vehicles onsite will be

limited to a maximum speed of 5 mph. Prior to departure from the Site to the surface streets, all vehicles will be checked for material residue and cleaned if necessary. The public paved roadways surrounding the Site will be checked for any material possibly tracked out, despite mitigation efforts. The Contractor will take all reasonable measures to clean the roadways of this material within an hour of observation.



APPENDIX B

TRANSPORTATION PLAN

CHARACTERISTIC AND DESTINATION OF SOIL TO BE TRANSPORTED

Elevated levels of lead have been detected in Site soils. Based on the available data, the majority of the excavated soil is anticipated to be categorized as Class II non-hazardous waste or designated waste.

If California or RCRA, hazardous waste is identified from stockpile analyses as a hazardous waste generator. Cyrus Land Investments, LLC, will secure an EPA Identification Number from DTSC for proper management of the hazardous waste. Compliance with the DTSC requirements of hazardous waste generation, temporary onsite storage, transportation and disposal, is required. Any shipment of hazardous wastes in California will be transported by a registered hazardous waste hauler under a uniform hazardous waste manifest. Land ban requirements will also be followed, as necessary. Any shipment of non-hazardous waste in California will be transported under a non-hazardous waste manifest or bill-of-lading.

Soils classified as Class II waste will likely be transported to the Vasco Road Landfill or Altamont Landfill for disposal. These disposal facilities are licensed Class II landfills and are located at the following addresses:

Vasco Road Sanitary Landfill
Republic Services of California I, LLC
4001 Vasco Road
Livermore, CA 94550
EPA ID#: FRS 110009544671
Phone: (925) 447-0491

Altamont Landfill & Resource Recovery
10840 Altamont Pass Road
Livermore CA, 94550
EPA ID #: FRS 110000831404
Telephone: (925) 449-6349

If needed, soils classified as Class I Title 22 hazardous waste or RCRA hazardous waste will likely be transported to the following facility:

Clean Harbors Buttonwillow, LLC
2500 W Lokern Rd
Buttonwillow, California 93206
EPA ID # FRC 110000500912
Phone: 661-762-6200

Truck Transportation

It is anticipated that work will require approximately 2 weeks for completion. Up to approximately 1,000 cubic yards (1,500 tons) of soil will be removed from the Site. Assuming each truck carries 18 tons, up to 84 trucks will be needed to transport the impacted soil. All permitted disposal facilities operate a certified weight station at their facility. As such, each truck will be weighed before offloading its payload. Weight tickets or bills of lading will be provided to the removal action subcontractor after all the soil has been shipped offsite. A hauling plan/permit will be submitted to the City of Brentwood prior to work activities. Truck routes will be approved

by the City of Brentwood prior to work activities. Below is a summary of the truck route from the Site to the disposal facilities listed above:

Vasco Road Landfill (22 miles)

This truck route is illustrated in Figure 1.

1. Head east on Lone Tree Way toward Gann St .....0.02 mi
2. Make a U-turn at Gann St onto Lone Tree Way .....1.4 mi
3. Merge onto CA-4E via the ramp on the left toward Stockton .....5.1 mi
4. Stay straight to go onto Vasco Rd .....15.1 mi
5. Make a U-turn onto N. Vasco Rd.....0.01 mi
6. 4001 N. Vasco Rd is on the right

Altamont Landfill (32 miles)

This truck route is illustrated in Figure 2.

1. Head east on Lone Tree Way toward Gann St .....0.02 mi
2. Make a U-turn at Gann St onto Lone Tree Way .....1.4 mi
3. Merge onto CA-4E via the ramp on the left toward Stockton .....5.1 mi
4. Stay straight to go onto Vasco Rd .....17.8 mi
5. Merge onto I-580 E via the ramp on the left.....3.7 mi
6. Take exit 59 toward Flynn Rd N .....0.2 mi
7. Keep right to take the ramp toward Flynn Rd N .....0.05 mi
8. Keep right at the fork in the ramp .....0.03 mi
9. Turn right onto Carroll St .....1.2 mi
8. Turn right onto Altamont Pass Rd..... 2.2 mi
9. 10840 Altamont Pass Rd is on the left

Clean Harbors, Buttonwillow (228 miles)

This truck route is illustrated in Figure 3.

1. Head east on Lone Tree Way toward Gann St.....1.3 mi
2. Turn right onto Brentwood Blvd.....5.9 mi
3. Brentwood Blvd becomes Byron Hwy .....9.6 mi
4. Byron Hwy becomes W Byron Rd/County Hwy-J4 .....5.0 mi
5. Turn slight left onto W Grant Line Rd/County Hwy-J4. Continue W.....7.3 mi
6. Enter roundabout and take 2nd exit onto County Hwy-J4/Kasson Rd.....0.5 mi
7. Merge onto I-5 S .....193.4 mi
8. Take exit 263 toward Buttonwillow/McKittrick .....0.4 mi
9. Merge onto Buttonwillow Dr .....3.7 mi
10. Turn right onto Front St/CA-58W .....0.4 mi
11. Destination is 0.1 miles past N Main St

Loading and transportation will be conducted between 7:00 am and 6:00 pm, Monday through Friday, unless directed otherwise by the City of Brentwood. In the event traffic conditions or road repairs prevent the primary designated routes, alternate routes will developed prior to transportation activities. These alternate routes will be approved by the City of Brentwood prior to work activities.

Before leaving the Site, each truck driver will be instructed to notify the site manager. Each truck driver will be provided with a Uniform Hazardous Waste Manifest, Non-Hazardous Waste Manifest, or bill-of-lading and the cellular phone number for the site manager. It will be the responsibility of the site manager to notify DTSC and Cyrus of any unforeseen incidences. Each truck driver will be instructed to use the freeway Call Box System (if available), a cellular telephone, and/or their radio dispatch system to call for roadside assistance and report roadside emergencies.

Site Traffic Control

Truck ingress and egress shall be approved by the City. A flag person will be onsite to assist the truck drivers to safely drive on and off the Site. Transportation will be coordinated in such a manner that at any given time, onsite trucks will be in communication with the Site trucking coordinator. In addition, all vehicles will be required to maintain slow speeds (i.e., less than 5 mph) for safety and for dust control purposes.

Prior to exiting the Site, the vehicle will be swept to remove any extra soil from areas not covered or protected. This cleanup/decontamination area will be set up as close to the loading area as possible to minimize spreading the impacted soil. Prior to the offsite transport, the Site manager will be responsible for inspecting each truck to ensure that the payloads are adequately covered, the trucks are cleaned of excess soil and properly placarded, and that the truck's manifest or bill-of-lading has been completed and signed by the generator (or its agent) and the transporter. As the trucks leave the Site, the flag person will assist the truck drivers so that they can safely merge with traffic onto Lone Tree Way.

Record Keeping

The removal action contractor will be responsible for maintaining a field logbook, which will serve to document observations, personnel onsite, equipment arrival and departure times, and other important project information. Logbook entries will be complete and accurate enough to permit reconstruction of field activities. Logbooks will be bound, with consecutively numbered pages and each page will indicate the date and time of the entry. All entries will be legible, written in black or blue ink, and signed by the author. Language will be factual and objective. If an error is made, corrections will be made by crossing a line through the error and entering the correct information. Corrections will be dated and initialed.

In the event off-haul soil material is classified as hazardous waste under California or EPA regulations, the Uniform Hazardous Waste Manifest (hazardous waste manifest) form will be used to track the movement of soil from the point of generation to the point of ultimate disposal. The hazardous waste manifests will include the following information:

- Name and address of the generator, transporter, and the destination facility.
- United States Department of Transportation description of the waste being transported and any associated hazards.
- Waste quantity.
- Name and phone number of a contact in case of an emergency.
- EPA Hazardous Waste Generator Number.
- Other information required either by the EPA and/or the DTSC.

Any soil that is profiled as non-hazardous and sent offsite for disposal will be documented using a Non-Hazardous Waste Manifest or Bill-of-Lading form. At a minimum, this form will include the following information:

- Generator name and address
- Transportation company
- Accepting facility name and address
- Waste shipping name and description
- Quantity shipped

Prior to transporting the excavated soil offsite, an authorized representative of Cyrus will sign each hazardous and/or non-hazardous waste manifest. The removal action Site manager will maintain one copy of all hazardous and/or non-hazardous waste manifests on Site.

APPENDIX C

SAMPLING AND ANALYSIS PLAN

INTRODUCTION

The purpose of this Sampling and Analysis Plan (SAP) is to provide field sampling procedures and data gathering methods that will be used to support the Removal Action Work Plan (RAW) prepared for the property located at 7281 Lone Tree Way in Brentwood, California (Site). This SAP will be used by field personnel as a reference for sampling and analysis during the remedial activities.

SAMPLING OBJECTIVES

The proposed removal action will require the collection and analysis of samples to confirm the removal of lead-impacted soil from the northern portion of the Site. Sampling activities will include the following, which are discussed in detail in subsequent sections of this SAP.

Post-Excavation Confirmation Sampling

The objective of this task is to determine whether all soil above the cleanup level has been removed after the excavation of the top 12 inches of soil. The proposed cleanup level is discussed in Section 3.0 of the Remedial Action Work Plan (RAW).

Soil Stockpile Characterization and Offsite Disposal

The objective of stockpile sampling is to characterize the excavated materials and assist in making a determination of how these materials should be managed and disposed. It is anticipated that the excavated soils will placed into stockpiles. The soil stockpiles will be managed, sampled, and characterized in accordance with this SAP, along with the main document and Appendix B of the RAW. Additional analytical testing may be required to satisfy the profiling and waste acceptance criteria of the receiving facility. Transportation activities will be conducted in accordance with Appendix B of the RAW.

SAMPLE LOCATIONS AND FREQUENCY

This section discusses the locations and frequency of soil samples that will be collected for analytical testing.

Post Excavation Confirmation Sampling

The affected area of the Site that exhibits lead concentrations in excess of the cleanup level will be divided into approximately 35 grids, 25 feet by 25 feet (625 square feet). Figure 5 depicts the area proposed for excavation.

The grids with affected soils will initially be excavated to a depth of 12 inches. Following excavation, each of the excavated grids will be sampled by the collection of one discrete soil sample from the center-base of the grid. The grid samples will all be analyzed for total lead (EPA 6010B). Grids with confirmation sampling concentrations exceeding the soil cleanup levels will be re-excavated an additional 6 inches and re-sampled. Excavation will proceed until the soil cleanup levels are achieved. All excavated soil will be managed in accordance with the main document and Appendix B of the RAW. Grids with confirmation samples below the soil cleanup levels will be considered complete with no further excavation conducted.

Soil Stockpile Sampling

Impacted soils will be excavated and placed in approximate 100-cubic-yard stockpiles onsite. The stockpiles will be placed on 10-mil plastic sheeting. As necessary, the soil stockpiles will be covered with 10-mil plastic sheeting and secured to prevent dust or runoff during storm events. Appropriate dust control and stormwater best management practices (BMPs) will be implemented during the soil mitigation activities.

The specific laboratory profile will be determined prior to excavation activities; however, it is anticipated as a minimum, the stockpile samples will be analyzed for pesticides (OCPs) (EPA Method 8081A) and CAM 17 metals (EPA Method 6010/6020). Samples will be collected at an approximate density of one 4-point composite sample per 100 cubic yards. The soil would either be disposed or reused onsite if concentrations are below the Site cleanup level as discussed in the RAW document.

SAMPLING EQUIPMENT AND PROCEDURES

This section describes sampling equipment and procedures associated with post-excavation confirmation sampling and stockpile soil sampling. This section also includes a discussion of equipment blank sampling and decontamination procedures for sampling equipment.

General Procedures

A licensed contractor will be retained to excavate approximately 800 to 1,000 cubic yards of soil from the top 12 inches of the study area. Onsite workers will possess OSHA HAZWOPER training (24/40 hour).

Post-Excavation Confirmation and Stockpile Sampling

Confirmation and stockpile soil samples associated with the excavation will be sampled by following the sampling procedures:

- Obtain one 4-ounce laboratory-supplied sampling jar.
- Put on a new, clean, and chemical-resistant pair of disposable gloves.
- Completely fill the jar with soil.
- Place the samples in a cooler maintained at 4 degrees Celsius (C°) with ice.
- Samples will be transported to the laboratory under a chain-of-custody documentation as discussed in below.

Analytical Test Method

The confirmation and stockpile samples will be tested for the following:

SOIL-EXCAVATION CONFIRMATION				
Parameter	**Preservative**	**Holding Time**	**EPA Method #**	**Container**
Lead	4°C	6 months	6010B	4-ounce jar

SOIL STOCKPILE				
Parameter	**Preservative**	**Holding Time**	**EPA Method #**	**Container**
CAM-17 Metals	4°C	6 months	6010/6020	4-ounce jar
Organochlorine Pesticides	4°C	14 days	8081A	4-ounce jar

SAMPLE LABELING, DELIVERY, AND CHAIN-OF-CUSTODY

This section describes how samples will be labeled, picked up, delivered, and tracked.

Sample Labeling

Sample labels will be completed using indelible, black ink, and affixed to each sample container. Sample containers will be placed into resealable plastic bags to protect the sample from moisture during transportation to the laboratory. Each sample container will be labeled at a minimum with the following:

- Unique sample identification number
- Sample collection date (month/day/year)
- Time of collection (24-hour clock)
- Project number
- Sampler initials
- Analyses to be performed; and preservation, if any

Sample Delivery

This section applies to samples that will be picked up by the analytical testing laboratory or samples delivered to the offsite analytical laboratory. Samples may be picked up in the field or at the Field Geologist/Engineer's office by the analytical testing laboratory. The soil samples will be maintained at 4° Celsius. The chain-of-custody documentation will be completed and signed by the laboratory- assigned courier. The samples may then be relinquished to the courier for transportation to the laboratory. Each cooler will contain a temperature blank. A temperature blank is a sample container filled with tap water and stored in the cooler during sample collection and transportation. The laboratory will record the temperature of the temperature blank immediately upon receipt of the samples.

Chain-of-Custody

A chain-of-custody is a vital tool for tracking samples and is a written record of sample possession from the time the sample is collected until it is analyzed. The following will be recorded on the chain-of-custody forms:

- Project name
- Project location
- Project number

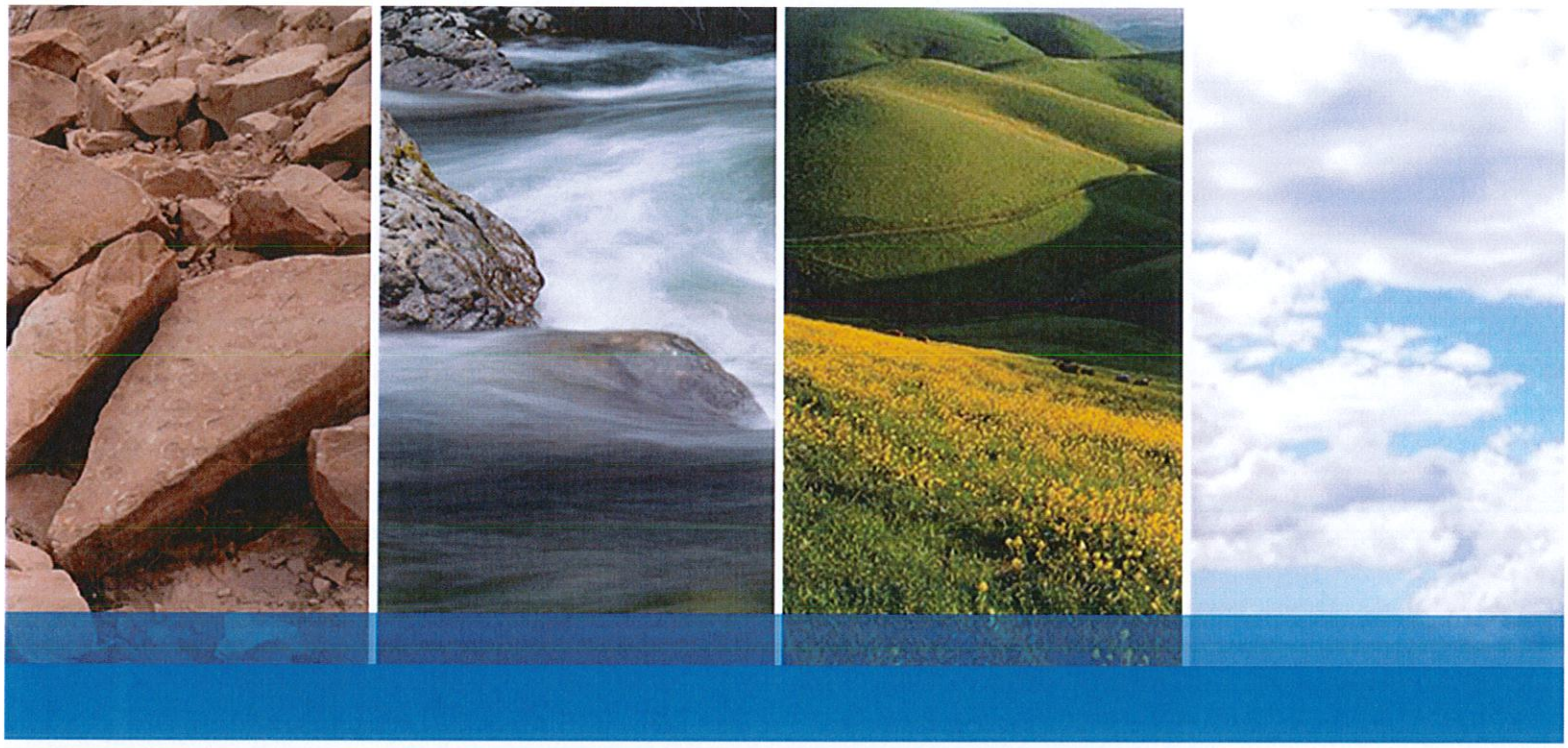
- Project contact
- Client
- Project Manager
- Sample identification
- Date and time sample was collected
- Sample type (soil, wastewater etc.)
- Number of sample containers
- Required analytical test methods
- Remarks/observations specific to the sample
- Number of samples to be relinquished to the analytical laboratory
- Transfer signatures associated with relinquishing samples (the sampler will initiate the chain-of-custody procedure)
- Courier/laboratory representative signature (for commercial carrier, record air bill number) Date/time of custody transfers
- Comments regarding the condition of the samples, (e.g., cooled with ice, etc.)
- Additional comments
- Written request for electronic file for all samples analyzed
- Information regarding sample storage/disposal
- Turn-around-time requirement; Sampler signature
- Courier signature

SITE MANAGEMENT AND RECORD KEEPING

Sampling information will be recorded on chain-of-custody forms, in a dedicated field logbook, and on the appropriate excavation or stockpile map/plan. These documents will be completed in the field at the time of sample collection. Entries will be legible and recorded in indelible black ink. A dedicated bound field logbook with consecutively numbered pages will be assigned to this project. If it is necessary to transfer the logbook to another person, the person relinquishing the logbook will sign and date the last page used and the person receiving the logbook will sign and date the next page to be used. At a minimum, the logbook will contain the following information:

- Project name and location.
- Date and time of entries.
- Personnel in attendance, including any visitors to the Site; General weather conditions.
- Work performed on a daily basis.
- Field observations.
- Sampling information (including sample identification, sample location, sample description/type, and analytical testing).

- Field measurements data (including air monitoring results, instrument calibration records, and problems, if encountered).
- Descriptions of deviations from the SAP, if applicable; Problems encountered and corrective action taken; QC-related activities and identification of field QC samples.
- Detailed record of oral and/or written requests by the regulatory agencies, client, subcontractor.
- Any other events that may affect the sampling and analyses.



APPENDIX D

QUALITY ASSURANCE PROJECT PLAN

INTRODUCTION

ENGEO prepared this Quality Assurance Project Plan (QAPP) to provide Quality Assurance (QA) and Quality Control (QC) procedures for the data collected during implementation of the Removal Action Work Plan (RAW) at the property located at 7281 Lone Tree Way in Brentwood, California (Site). The QAPP outlines the project organization and responsibilities with respect to the site work and provides procedures and methodologies to ensure that the proposed field and laboratory activities generate reliable data.

PROJECT DESCRIPTION

The Site is located at 7281 Lone Tree Way in Brentwood, California. The Site is approximately 2.96 acres in area and is identified by Assessor's Parcel Number (APN) 018-080-022. The Site currently consists of undeveloped fallow land. Review of historical records indicates that the Site had been occupied by residential structures between 1949 and 2003. Review of historical records indicates that structures were demolished in 2003 and the Site has been undeveloped since. Historical aerial photographs indicate a portion of the parcel consisted of orchards.

PROJECT TEAM AND RESPONSIBILITIES

The following section provides a description of the organizational structure and responsibilities of the individual positions for this project.

ENGEO

ENGEO is the consulting firm for Cyrus Land Investments, LLC, and is responsible for implementing the investigation and reporting described in the RAW. The project management team is comprised of the Project Manager (PM), Project Field Manager, QA Manager and Site Safety Manager. Roles and responsibilities of the ENGEO management team are presented as follows.

Project Manager— Shawn Munger, CHG

The Project Manger will hold overall responsibility for technical and quality-related project matters. The Project Manager will be responsible for committing the necessary resources of ENGEO for the timely completion of the project tasks. Final decisions on recommendations, personnel assignments, and the submittal of final reports to DTSC will be made by the Project Manager. All of the documents prepared by ENGEO will be reviewed and signed by the Project Manager.

Project Field Manager — Robert Peck

The Project Field Manager will be responsible for managing the field personnel and ensuring that field activities are completed pursuant to the work plan. The Project Field Manager will be responsible for day-to-day coordination of field activities, including the coordination of subcontractors. The Project Field Manager will schedule pick up or delivery of samples to the appropriate analytical laboratory.

Quality Assurance Manager — Jeff Adams, PE

The Quality Assurance Manager will work with the Project Field Manager to ensure that field activities are carried out in compliance with the QAPP. The Quality Assurance Manager shall approve QA and technical procedures and deliverables from the field and the laboratory.

Site Health and Safety Manager — Robert Peck

The Site Health and Safety Manager will ensure that requirements specified in the Health and Safety Plan are being met.

Laboratory Subcontractors

An offsite laboratory will be utilized for chemical analysis of media and waste materials. The laboratory will be responsible for providing data subject to their own QAPP as well as this QAPP and will designate a Laboratory Quality Assurance Manager. The Laboratory Quality Assurance Manager will review laboratory QA/QC reports, identify problems, and ensure the proper use maintenance, and storage of analytical equipment. Pursuant to California Health and Safety Code Section 25198, all subcontractor laboratories will be certified by the State of California Department of Health Services under the Environmental Laboratory Accreditation Program (NELAP) for the requested analyses. The Laboratory Quality Assurance Manager will report to the Project Field Manager.

Training

All personnel will be trained and qualified to perform the assigned tasks and will have completed the necessary safety training.

DATA GENERATION AND ACQUISITION

A description of the sampling scope, including types and numbers of samples required, locations of samples, rationale for design, and sampling methods, is detailed in the Work plan. This section presents the activities associated with data generation and acquisition to ensure that appropriate methods for sampling, measurement and analysis, and QC activities are employed throughout the project.

Sample Handling and Documentation

Sample Containers

All containers used to hold collected samples will be new containers supplied by the laboratory or an environmental equipment supply company. Appropriate measures shall be made to ensure that the samples are stored at the appropriate temperature while they are held at the site, during transport to the laboratory, and during storage at the laboratory.

Sample Labeling

Each sample taken will be labeled appropriately prior to submittal to the laboratory. All samples subject to analysis will require a sample ID that indicates where the sample was retrieved and

the matrix associated with the sample (i.e., groundwater). The sample label will include the following information:

- Sample identification
- Sampling date and time
- Name of the person who collected the sample
- The type of analysis to be performed on the sample
- Site name
- Type of preservative

Chain of Custody Record

All samples will be collected, transported, and received under chain-of-custody (COC) protocols. The COC will contain the following information:

- Project name
- Sample identifications
- Date and time of sample collection
- Analyses to be performed
- Signatures of personnel relinquishing and receiving the samples

The COC forms shall accompany the samples at all times. When transferring possession of the samples, the transferor shall sign the form and enter the date/time the samples were relinquished. The receiver shall also sign and date the form upon receiving the samples.

Hold Time Compliance

For each sample collected, the time a sample is held prior to analysis will be verified with the laboratory prior to submittal. It is the responsibility of the laboratory to analyze the submitted samples within the time indicated on the chain-of-custody form as the hold time, or turnaround time.

Equipment Decontamination

As necessary, equipment used in the field will be decontaminated prior to collection of each sample. The equipment will be rinsed with a biodegradable cleanser, along with a subsequent rinse with potable water, and a final rinse with de-ionized water.

Analytical Methods

Analytical methods for the collected samples are discussed in the RAW. The analytical methodologies, required equipment, and laboratory procedures shall meet the standards for the associated EPA methodology.

Quality Control

QC procedures will be implemented during field sampling and laboratory analysis activities. QC procedures in the field will consist of strict protocols for field sampling and decontamination procedures. Laboratory QC procedures will include the analysis of matrix spike and matrix spike duplicates. A description of the QC procedures is presented in the following sections.

Laboratory QC Samples

Laboratory QC samples will consist of method blanks, laboratory control samples, matrix spikes, matrix spike duplicates, and surrogate spikes.

- Method blanks will be analyzed at a minimum frequency of one per batch, and the concentration of target compounds in the blank must be less than the practical quantitation limit (PQL).

- Laboratory control samples (LCSs) will be analyzed at a minimum frequency of one per batch. Laboratory control samples consist of blank spikes, which are used to determine the accuracy of the analytical procedure by measuring a known concentration of an analyte of interest.

- Surrogate spikes will be performed for all organic standards, samples, and blanks. Each organic standard sample matrix spike, matrix spike duplicate, LCS, and blank is spiked with surrogate compounds prior to purging or extraction. Surrogate spike recoveries must fall within the limits established by the analytical method and if a surrogate spike recovery is outside of acceptable ranges, then a corrective action will be taken.

- Matrix spike/matrix spike duplicates (MS/MSD) are conducted to evaluate the matrix effect of the sample on the analytical method. The MS/MSD analyses will be performed at a minimum frequency of one per each group of 20 samples of the sample matrix. As a result, it is necessary to collect triplicate sample volumes in the field for one sample out of every 20. The RPD goal will be 20 percent.

Precision, Accuracy, and Completeness

The procedures used to assess data are precision, accuracy, and completeness. In the absence of laboratory-specific precision and accuracy limits, the QC limits presented in this section must be met.

Precision

Precision refers to the reproducibility of data under a specified set of conditions. Precision will be evaluated in conjunction with accuracy for the LCS samples. Precision will be determined using the MS/MSD samples and will be expressed as **RPD. RPD** is defined as:

$$\% RPD = ((|X_1 - X_2|) / ((X_1 + X_2)/2)) \times 100\%$$

Here, X_1, and X_2 refer to the larger and smaller of the two observed values, respectively.

Acceptable levels of precision vary with the sample matrix, analytical method, and sample concentration. EPA precision data will be used as a basis for developing acceptance criteria for assessing precision.

Accuracy

Accuracy refers to the degree of agreement between a measurement or set of measurements to an accepted reference value. Accuracy is assessed by means of reference samples and

percent recoveries. The calculation of percent recovery (AR) or accuracy is given by the equation:

$$\%R\ 100x_x$$
$$IL_s — LI$$

Here, L_s refers to the measured value of the spiked sample, L refers to the measured value of the unspiked sample, and X refers to the known value of the spike solution. Acceptable levels of accuracy vary with the sample matrix, analytical method, and sample concentration. EPA accuracy data will be used as a basis for developing acceptance criteria for assessing precision.

Field accuracy will be assessed through the analysis of field equipment blanks. The goal for field equipment blanks is that all values are less than the reporting limit for each target constituent.

Completeness

Completeness is the amount of valid data collected as compared to the amount of data that was expected to be collected under normal operating conditions. Two completeness values will be calculated: total number of samples collected, and total number of samples reaching the laboratory intact. The objective for completeness is to recover at least 90 percent of the planned data. The formula for completeness is:

% completeness =100% x number of valid results/ number of expected results

INSTRUMENT CALIBRATION AND MAINTENANCE PROCEDURES

Laboratory analytical instruments will be calibrated in accordance with the procedures specified in the applicable method. All analytes that are reported shall be present in the initial and continuing calibrations, and these calibrations must meet the acceptance criteria specified in the reference method. Records of standard preparation and instrument calibration will be maintained. Records shall unambiguously trace the preparation of standards and their use in calibration and quantitation of sample results. Calibration records will be traceable to standard materials.

At the onset of analysis, instrument calibrations will be checked using all of the analytes of interest. At a minimum, calibration criteria will satisfy method requirements. Analyte concentrations can be determined with either calibration curves or response factors, as defined in the method. Guidance provided in USEPA SW-846, or applicable method, should be considered to determine appropriate evaluation procedures.

All equipment and instruments used in the field will be maintained and calibrated to operate within the manufacturer's specifications to ensure the required sensitivity and QA/QC parameters.

As applicable, use of all field instruments will be documented by maintaining a log for each individual instrument. Calibration and maintenance requirements of the field instruments follow the manufacturer's specifications. Any required modifications, adjustments, repairs, or replacement of parts for any piece of equipment are recorded in the instrument's logbook. The effects of the modifications will be tested with appropriate standards and the related procedures recalibrated, if required, prior to continued use of the equipment.

DATA MANAGEMENT

Data measured by field instruments will be recorded in field notebooks or logsheets. The field data will be reviewed by the Project Field Manager to evaluate completeness of the records, problems encountered in the field, and compliance with work plan-specified field methods. All field records will be retained in the project files.

Laboratory reports will be consistent with Level II documentation and include the following data:

- Narrative, chain-of-custody, and method references
- Analytical results
- Laboratory QC results including surrogate recoveries and LCS recoveries
- Sample spike recoveries
- Acceptance criteria for applicable QC samples

The laboratory QA/QC manager will determine if the data quality objectives (DQOs) for the analytical data have been met. Results will be documented and summarized in a data validation memorandum, which is reported along with the associated data.

Data Validation

Data validation is the process of screening and accepting or rejecting data to use for project evaluation and decision-making. Whether or not data is acceptable is based on compliance with specified criteria, including meeting holding times, verifying calibration results, and meeting goals for laboratory QC sample results (i.e., blank and duplicate sample results).

Data validation activities include the following:

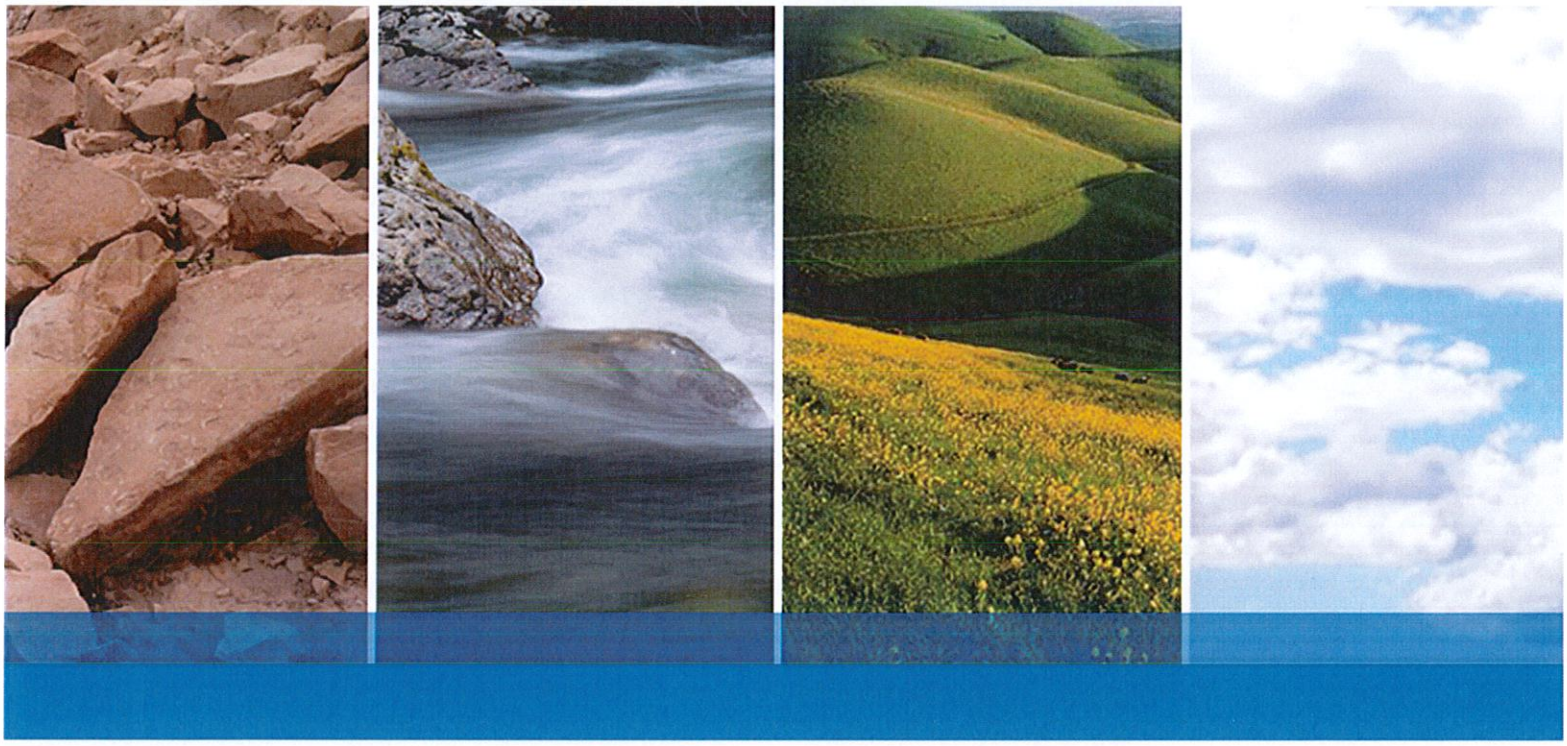
- Confirmation that the calibration standards are within the expected values.
- Review of all associated blank, duplicate, spike, standard, and QC data to ensure that results meet analytical objectives.
- Flagging laboratory results that may be suspect. Suspect data will be assessed to determine whether the information is usable or not.

Corrective Action

Corrective action will be initiated when deficiencies are encountered during the project or when QAPP guidelines/objectives are not met. Corrective action will be performed prior to analysis of the next batch of data to help prevent recurrent erroneous data. Corrective actions may consist of one or more of the following:

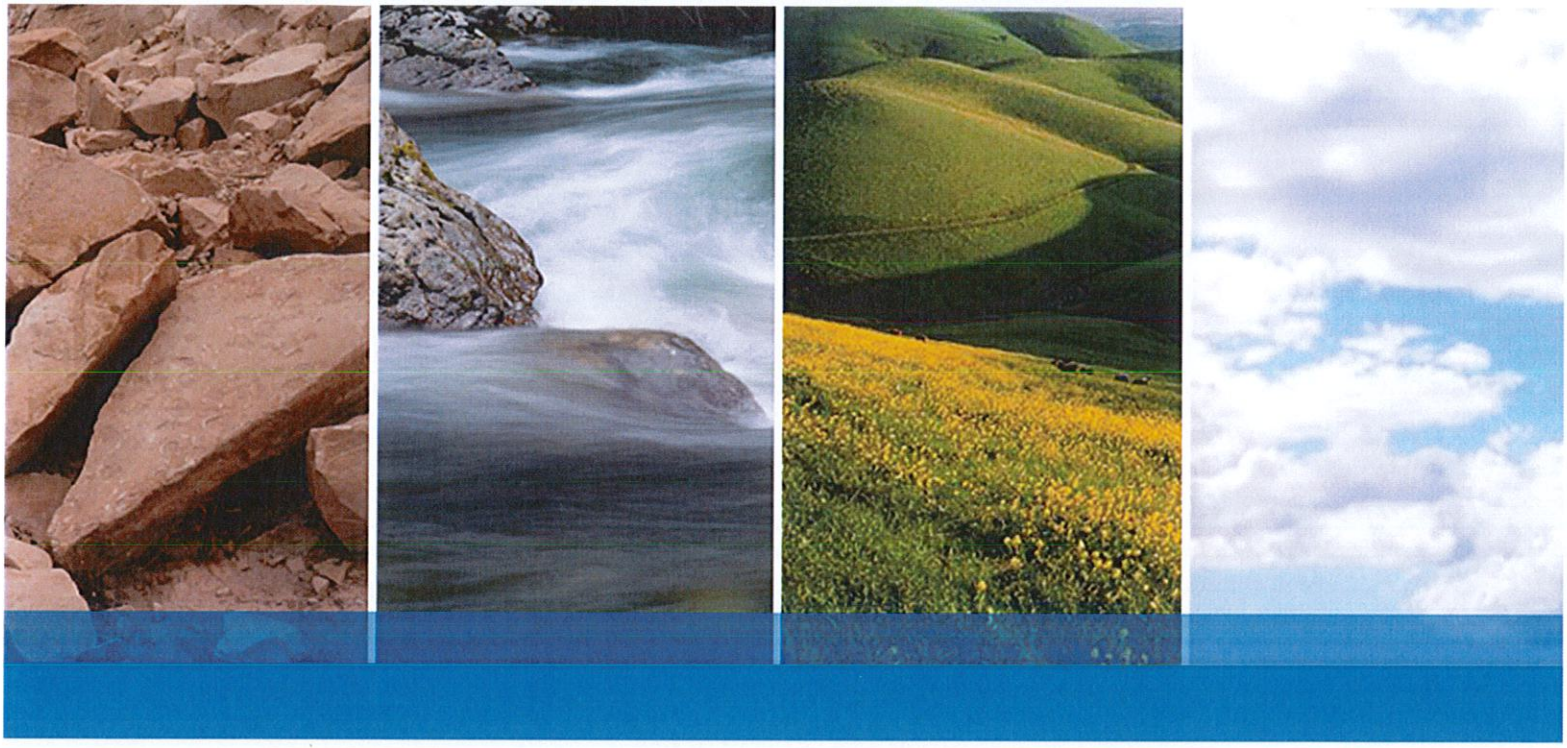
- Datum is annotated
- Documentation is reviewed for adherence to QA/QC procedures
- Measurement is repeated to check the error
- Duplicate sample is reanalyzed
- Calibrations are checked and/or repeated
- Measuring device is repaired or replaced
- Sample is re-collected

The Quality Assurance Manager will be responsible for initiating and approving corrective actions. All corrective actions will be handled individually.



APPENDIX E

HEALTH AND SAFETY PLAN



ENGEO

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Appendix I

Voluntary Cleanup Agreement

STATE OF CALIFORNIA
ENVIRONMENTAL PROTECTION AGENCY
DEPARTMENT OF TOXIC SUBSTANCES CONTROL

In the Matter of:	Docket No. **HSA-FY18/19-110**
Skipolini Property	Voluntary Cleanup Agreement
Proponent:	Health and Safety Code Section 25355.5(a)(1)(C)
Jacqueline M. Seeno **Cyrus Land Investments, LLC** **4021 Port Chicago Hwy** **Concord, CA 94520**	

The California Department of Toxic Substances Control (DTSC) and Cyrus Land Investments, LLC. (Proponent) enter into this Voluntary Cleanup Agreement (Agreement) and agree as follows:

1. Site. This Agreement applies to the property located at 7281 Lone Tree Way, in Contra Costa County, California 94513 (Site), identified by Contra Costa Assessor's Parcel Numbers 018-080-022, and any off-site area to which hazardous substances have or may have migrated from the Site. The Site is approximately 2.96 acres in size and is bordered by residential homes to the east and approximately 125 feet to the north. The site is bound by a ranch compound, a railroad row and fallow land to the west and south. A Site diagram and a Site location map are attached as Exhibits A and B.

2. Jurisdiction. This Agreement is entered into by DTSC and Proponent pursuant to Health and Safety Code section 25355.5(a)(1)(C) which authorizes DTSC to enter into an enforceable agreement to oversee the investigation and/or remediation of a release or threatened release of any hazardous substance at or from the Site.

3. Purpose. The purpose of this Agreement is for Proponent to investigate and/or remediate a release or threatened release of any hazardous substance at or from the Site under the oversight of DTSC. The purpose of this Agreement is also for DTSC to obtain reimbursement from Proponent for DTSC's oversight costs incurred pursuant to this Agreement.

4. Ownership. The Site is owned by Cyrus Land Investments, LLC.

5. Substances Found at the Site. Based on the information available to DTSC and Proponent, the Site is or may be contaminated with hazardous substances, including **Lead**.

6. Scope of Work and DTSC Oversight. DTSC shall review and provide Proponent with written comments on all Proponent's deliverables as described in Exhibit C (Scope of Work) and other documents applicable to the scope of the project. DTSC

shall provide oversight of field activities, including sampling and remedial activities, as appropriate. Proponent agrees to perform all the work required by this Agreement. Proponent shall perform the work in accordance with applicable local, state and federal statutes, regulations, ordinances, rules and guidance documents, in particular, Health and Safety Code section 25300 et seq., as amended.

7. Additional Activities. DTSC and Proponent may amend this Agreement to include additional activities in accordance with Paragraph 17 of this Agreement. If DTSC expects to incur additional oversight costs for these additional activities, it will provide an estimate of the additional oversight costs to Proponent.

8. Endangerment During Implementation.

8.1. Proponent shall notify DTSC's Project Manager immediately upon learning of any condition that may pose an immediate threat to public health or safety or the environment. Within seven days of the onset of such a condition, Proponent shall furnish a report to DTSC, signed by Proponent's Project Manager, setting forth the conditions and events that occurred and the measures taken in response thereto.

8.2. In the event DTSC determines that any activity (whether or not pursued in compliance with this Agreement) may pose an imminent or substantial endangerment to the health or safety of people on the Site or in the surrounding area or to the environment, DTSC may order Proponent to conduct additional activities in accordance with Paragraph 7 of this Agreement or to stop further implementation of this Agreement for such period of time as may be needed to abate the endangerment. DTSC may request that Proponent implement interim measures to address any immediate threat or imminent or substantial endangerment.

9. Access. Proponent shall provide, and/or obtain access to the Site and take all reasonable efforts to obtain access to offsite areas to which access is necessary to implement the Agreement. Such access shall be provided to DTSC's employees, contractors, and consultants at all reasonable times. Nothing in this paragraph is intended or shall be construed to limit in any way the right of entry or inspection that DTSC or any other agency may otherwise have by operation of law.

10. Sampling, Data and Document Availability. When requested by DTSC, Proponent shall make available for DTSC's inspection, and shall provide copies of, all data and information concerning contamination at or from the Site, including technical records and contractual documents, sampling and monitoring information and photographs and maps, whether or not such data and information was developed pursuant to this Agreement. For all final reports, Proponent shall submit one hard (paper) copy and one electronic copy with all applicable signatures and certification stamps as a text-readable Portable Document Formatted (pdf) file compatible with Adobe Acrobat or a formatted file compatible with Microsoft Word.

11. Record Preservation. Proponent shall retain, during the implementation of

this Agreement and for a minimum of six years after its termination, all data, reports, and other documents that relate to the performance of this Agreement. If DTSC requests that some or all of these documents be preserved for a longer period of time, Proponent shall either comply with the request, deliver the documents to DTSC, or permit DTSC to copy the documents at Proponent's expense prior to destruction.

12. Notification of Field Activities. Proponent shall inform DTSC at least seven days in advance of all field activities pursuant to this Agreement and shall allow DTSC and its authorized representatives to take duplicates of any samples collected by Proponent pursuant to this Agreement.

13. Project Managers. Within 14 days of the effective date of this Agreement, DTSC and Proponent shall each designate a Project Manager and shall notify each other in writing of the Project Manager selected. The Proponent's Project Manager shall have the technical expertise in project management, regulatory compliance, and hazardous substance site cleanup sufficient to fulfill his or her responsibilities. Each Project Manager shall be responsible for overseeing the implementation of this Agreement and for designating a person to act in his/her absence. All communications between DTSC and Proponent, and all notices, documents and correspondence concerning the activities performed pursuant to this Agreement shall be directed through the Project Managers. Each party may change its Project Manager with at least seven days prior written notice.

14. Proponent's Consultant and Contractor. All engineering work performed pursuant to this Agreement shall be under the direction and supervision of a registered professional engineer licensed in California, with expertise in hazardous substance site cleanup. All geological work performed pursuant to this Agreement shall be under the direction and supervision of a registered professional geologist licensed in California, with expertise in hazardous substance site cleanup. Proponent's contractors and consultants shall have the technical expertise sufficient to fulfill his or her responsibilities. Within 14 days of the effective date of this Agreement, Proponent shall notify DTSC's Project Manager in writing of the name, title, and qualifications of the registered professional engineer and/or professional geologist and of any contractors or consultants and their personnel to be used in carrying out the work under this Agreement in conformance with applicable state law, including but not limited to, Business and Professions Code sections 6735 and 7835.

15. DTSC Review and Approval. All work performed pursuant to this Agreement is subject to DTSC's review and approval. If DTSC determines that any report, plan, schedule or other document submitted for approval pursuant to this Agreement fails to comply with this Agreement or fails to protect public health or safety or the environment, DTSC may (a) return comments to Proponent with recommended changes and a date by which the Proponent must submit to DTSC a revised document incorporating or addressing the recommended changes; or (b) modify the document in consultation with Proponent and approve the document as modified. All DTSC approvals and decisions made regarding submittals and notifications will be communicated to Proponent in

writing by DTSC's Branch Chief or his/her designee. No informal advice, guidance, suggestions or comments by DTSC regarding reports, plans, specifications, schedules or any other writings by the Proponent shall be construed to relieve Proponent of the obligation to obtain such written approvals.

16. Payment.

16.1. Proponent agrees to pay 1) all costs incurred by DTSC in association with preparation of this Agreement, and for oversight activities, including review of documents, conducted prior to the effective date of this Agreement, and (2) all costs incurred by DTSC in providing oversight pursuant to this Agreement, including review of the documents described in Exhibit C and associated documents, and oversight of field activities. Costs incurred include interest on unpaid amounts that are billed and outstanding more than 60 days from the date of the invoice. An estimate of DTSC's oversight costs is attached as Exhibit D. It is understood by the parties that Exhibit D is an estimate and cannot be relied upon as the final cost figure. DTSC may provide an updated or revised cost estimate as the work progresses. DTSC will bill Proponent quarterly. Proponent agrees to make payment within 30 days of receipt of DTSC's billing. Such billings will reflect any amounts that have been advanced to DTSC by Proponent.

16.2. In anticipation of oversight activities to be conducted, Proponent shall make an advance payment of **$20254** to DTSC no later than 10 days after this Agreement is fully executed. It is expressly understood and agreed that DTSC's receipt of the entire advance payment as provided in this paragraph is a condition precedent to DTSC's obligation to provide oversight, review of or comment on documents. If the advance payment exceeds DTSC's final costs, DTSC will refund the difference within 120 days after the performance of this Agreement is completed or after this Agreement is terminated pursuant to Paragraph 18 of this Agreement.

16.3. All payments made by Proponent pursuant to this Agreement shall be by check payable to the "Department of Toxic Substances Control", and bearing on its face the project code for the Site (Site # **202227-11**) and the docket number of this Agreement. Upon request by Proponent, DTSC may accept payments made by credit cards or electronic funds transfer. Payments by check shall be sent to:

Accounting Office
Department of Toxic Substances Control
1001 I Street, 21st Floor
P.O. Box 806
Sacramento, CA 95812-0806

A photocopy of the check shall be sent concurrently to DTSC's Project Manager.

16.4. DTSC shall retain all cost records associated with the work performed under this Agreement as may be required by state law. DTSC will make all documents that

support DTSC's cost determination available for inspection upon request in accordance with the Public Records Act, Government Code section 6250 et seq.

17. Amendments. This Agreement may be amended in writing by mutual agreement of DTSC and Proponent. Such amendment shall be effective the third business day following the day the last party signing the amendment sends its notification of signing to the other party. The parties may agree to a different effective date.

18. Termination for Convenience.

18.1. Except as otherwise provided in this paragraph, each party to this Agreement reserves the right to unilaterally terminate this Agreement for any reason. Termination may be accomplished by giving a 30-day advance written notice of the election to terminate this Agreement to the other party. In the event that this Agreement is terminated under Paragraph 18.1, Proponent shall be responsible for DTSC costs through the effective date of termination.

18.2. If operation and maintenance activities are required for the final remedy, Proponent may not terminate the Agreement under Paragraph 18.1 upon DTSC's approval of an Operation and Maintenance Plan as proposed by Proponent, unless an Operation and Maintenance Agreement is entered into between DTSC and Proponent or between DTSC and a party responsible for the required operation and maintenance activities.

19. Incorporation of Exhibits, Plans and Reports. All exhibits are incorporated into this Agreement by reference. All plans, schedules and reports that require DTSC's approval and are submitted by Proponent pursuant to this Agreement are incorporated in this Agreement upon DTSC's approval.

20. Reservation of Rights. DTSC reserves all of its statutory and regulatory powers, authorities, rights, and remedies under applicable laws to protect public health or the environment, including the right to recover its costs incurred therefor. Proponent reserves all of its statutory and regulatory rights, defenses and remedies available to Proponent under applicable laws.

21. Non-Admission of Liability. By entering into this Agreement, Proponent does not admit to any finding of fact or conclusion of law set forth in this Agreement or any fault or liability under applicable laws.

22. Proponent Liabilities. Nothing in this Agreement shall constitute or be considered a covenant not to sue, release or satisfaction from liability by DTSC for any condition or claim arising as a result of Proponent's past, current, or future operations or ownership of the Site.

23. Government Liabilities. The State of California or DTSC shall not be liable for

any injuries or damages to persons or property resulting from acts or omissions by Proponent or by related parties in carrying out activities pursuant to this Agreement, nor shall the State of California or DTSC be held as a party to any contract entered into by Proponent or its agents in carrying out the activities pursuant to this Agreement.

24. Third Party Actions. In the event that Proponent is a party to any suit or claim for damages or contribution relating to the Site to which DTSC is not a party, Proponent shall notify DTSC in writing within 10 days after service of the complaint in the third-party action. Proponent shall pay all costs incurred by DTSC relating to such third-party actions, including but not limited to responding to subpoenas.

25. California Law. This Agreement shall be governed, performed and interpreted under the laws of the State of California.

26. Severability. If any portion of this Agreement is ultimately determined not to be enforceable, that portion will be severed from the Agreement and the severability shall not affect the enforceability of the remaining provisions of the Agreement.

27. Parties Bound. This Agreement applies to and is binding, jointly and severally, upon Proponent and its agents, receivers, trustees, successors and assignees, and upon DTSC and any successor agency that may have responsibility for and jurisdiction over the subject matter of this Agreement. Proponent shall ensure that its contractors, subcontractors and agents receive a copy of this Agreement and comply with this Agreement.

28. Effective Date. The effective date of this Agreement is the date of signature by DTSC's authorized representative after this Agreement is first signed by Proponent's authorized representative. Except as otherwise specified, "days" means calendar days.

29. Representative Authority. Each undersigned representative of the party to his Agreement certifies that she or he is fully authorized to enter into the terms and conditions of this Agreement and to execute and legally bind the party to this Agreement.

30. Counterparts. This Agreement may be executed and delivered in any number of counterparts, each of which when executed and delivered shall be deemed to be an original, but such counterparts shall together constitute one and the same document.

Mark Piros _____ Date: 3/15/2019

Mark Piros
Acting Branch Chief
Department of Toxic Substances Control

_____ Date: 2/28/19

Jacqueline M. Seeno
Cyrus Land Investments LLC

EXHIBITS

A - SITE LOCATION MAP

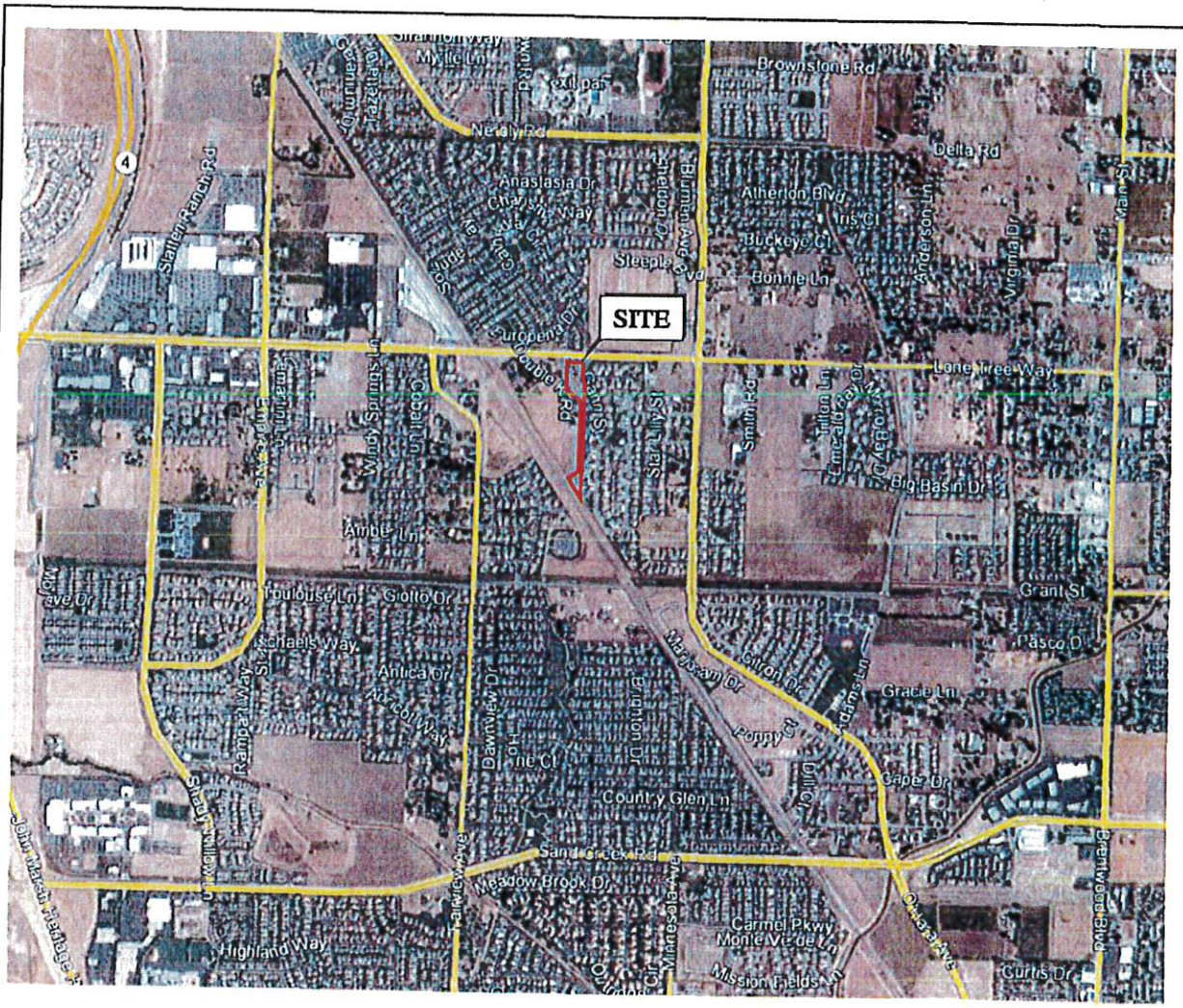
B - SITE DIAGRAM

C - SCOPE OF WORK

D - COST ESTIMATE

EXHIBIT A

SITE LOCATION MAP



BASE MAP SOURCE: GOOGLE EARTH PRO

ENGEO
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VICINITY MAP
SKIPOLINI PROPERTY
BRENTWOOD, CALIFORNIA

PROJECT NO.: 11133.001.000	FIGURE NO
SCALE: AS SHOWN	1
DRAWN BY: DLB / CHECKED BY: SM	

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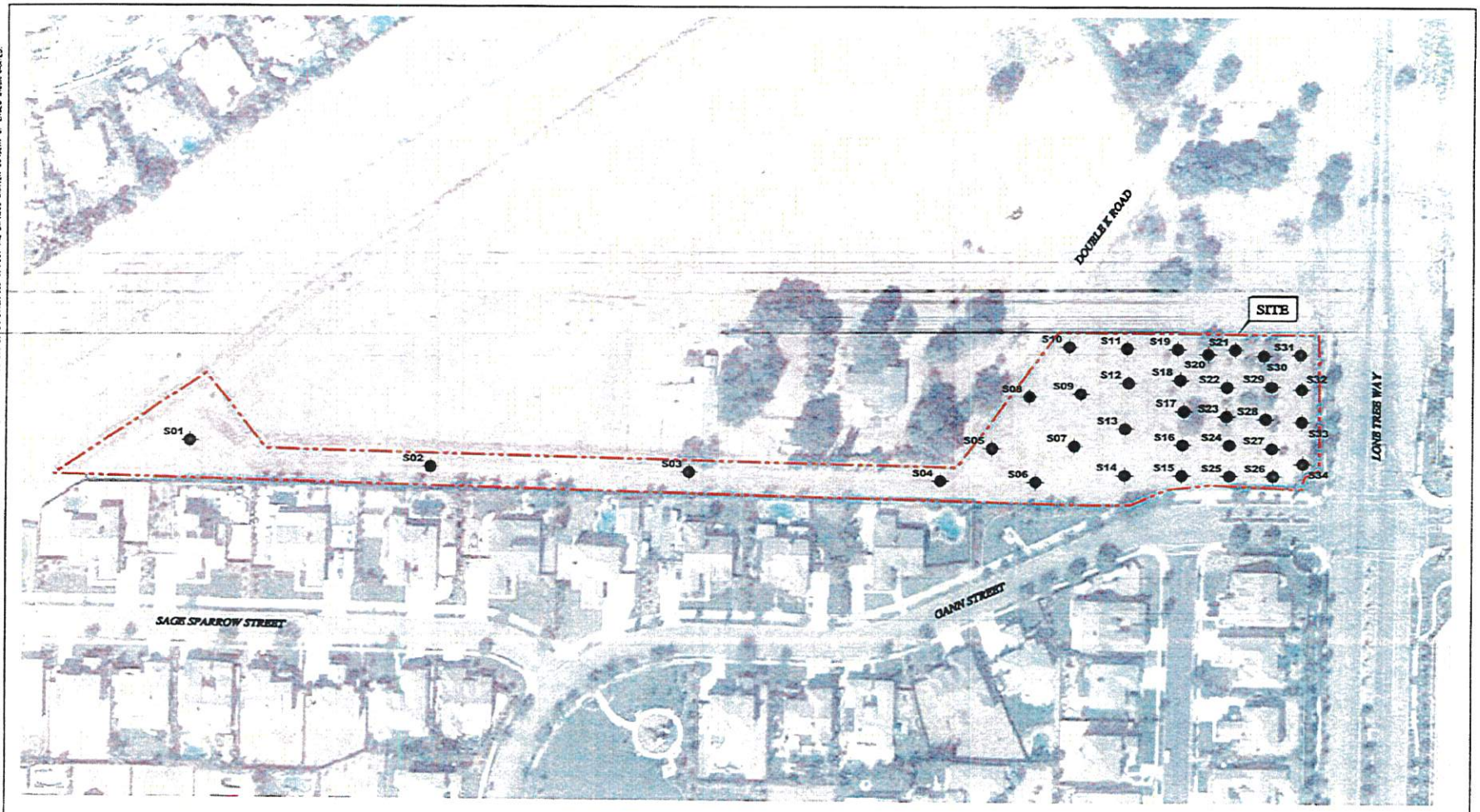
ORIGINAL FIGURE PRINTED IN COLOR

EXHIBIT B

SITE DIAGRAM



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0 HOLT 120
0 METERS 50

EXPLANATION
ALL LOCATIONS ARE APPROXIMATE

S34 LEAD SAMPLE

BASE MAP SOURCE: GOOGLE EARTH PRO

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LEAD SAMPLE LOCATION PLAN
SKIPOLINI PROPERTY
BRENTWOOD, CALIFORNIA

PROJECT NO.: 11133.001.000	FIGURE NO.
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ORIGINAL FIGURE PRINTED IN COLOR

EXHIBIT C
SCOPE OF WORK

The following Tasks will be completed as part of this Agreement:

TASK 1.

Submittal of Existing Data and Scoping Meeting

The Proponent will submit to DTSC all background information, sample analysis results, environmental assessment reports, and any other information pertinent to the hazardous substance management and/or release, characterization and cleanup of the Site. DTSC will review the information to identify areas and media of concern, and to determine the additional work, if any, required to complete the investigation/remediation of the Site. Following DTSC's initial review, a scoping meeting will be held to discuss whether further site characterization is necessary, and, if so, how the characterization will be conducted for the Site and how they will be implemented.

TASK 2 Remedy Selection Document.

2.1 Removal Action Workplan. ENGEO has prepared a Removal Action Workplan (RAW) dated February 2, 2016, pending DTSC's approval. The Removal Action Workplan includes:

(a) a description of the onsite contamination;
(b) the goals to be achieved by the removal action;
(c) Sampling and Analysis Plan with corresponding Quality Assurance Plan to confirm the effectiveness of the RAW, if applicable; and
(d) a brief overall description of methods that will be employed during the removal action to ensure the health and safety of workers and the public during the removal action. A detailed community air monitoring plan shall be included if requested by DTSC.

TASK 3.

California Environmental Quality Act (CEQA). In order to meet its CEQA obligation, DTSC will prepare the necessary CEQA documents. If required, the Proponent shall submit the information necessary for DTSC to prepare these documents.

(a) technical and operational plans and engineering designs for implementation of the approved remedial or removal action alternative(s);
(b) a schedule for implementing the construction phase;
(c) a description of the construction equipment to be employed;
(d) a site specific hazardous waste transportation plan (if necessary);
(e) any required registration requirements for contractors, transporters and other persons conducting the removal and remedial activities for the Site;

TASK 4.

Implementation of Final Removal Action Workplan. Upon DTSC approval of the final Removal Action Workplan (RAW), the Proponent shall implement the removal action, as approved.

TASK 5. Implementation Report. Within thirty (30) days of completion of field activities, the Proponent shall submit an Implementation Report documenting the implementation of the final RAW and noting any deviations from the approved plan.

TASK 6.

Changes During Implementation of the Final RAW. During implementation of the final RAW and RDIP, DTSC may specify such additions, modifications and revisions to the RAW or RDIP as deemed necessary to protect human health and safety or the environment or to implement the RAW.

TASK 7.

Public Participation.

7.1 The Proponent shall conduct appropriate public participation activities given the nature of the community surrounding the Site and the level of community interest. The Proponent shall work cooperatively with DTSC to ensure that the affected and interested public and community are involved in DTSC's decision-making process. Any such public participation activities shall be conducted in accordance with Health and Safety Code sections 25358.7, the DTSC Public Participation Policy and Procedures Manual, and with DTSC's review and approval.

7.2 A scoping meeting may be held to determine the appropriate activities that will be conducted to address public participation.

7.3 The Proponent shall prepare a community profile to examine the level of the community's knowledge of the Site; the types of community concerns; the proximity of the Site to homes and/or schools, day care facilities, churches, etc.; the current and proposed use of the Site; media interest; and involvement of community groups and elected officials. The community profile also includes a mailing list for the Site.

7.4 The Proponent shall develop and submit fact sheets to DTSC for review and approval when specifically requested by DTSC. The Proponent shall be responsible for printing and distribution of fact sheets upon DTSC approval using the approved community mailing list.

7.5 The Proponent shall publish, in a major local newspaper(s), a public notice announcing the availability of the RAW for public review and comment. The public comment period shall last a minimum of thirty (30) days.

7.6 DTSC may require that the Proponent hold at least one public meeting to inform the public of the proposed activities and to receive public comments on the RAW.

7.7 Within four (4) weeks of the close of the public comment period, DTSC will prepare a response to the public comments received. If required, the Proponent shall submit the information necessary for DTSC to prepare this document.

7.8 If appropriate, the Proponent will revise the RAW on the basis of comments received from the public, and submit the revised RAW to DTSC for review

and approval. If significant or fundamental changes are required, additional public participation activities, including an additional review and comment period, may be required. The Proponent will also notify the public of any significant changes from the action proposed in the RAW.

TASK 8.

Quality Assurance/Quality Control (QA/QC) Plan. All sampling and analysis conducted by the Proponent under this Agreement shall be performed in accordance with a QA/QC Plan submitted by the Proponent and approved by DTSC. The QA/QC Plan will describe:

(a) the procedures for the collection, identification, preservation and transport of samples;
(b) the calibration and maintenance of instruments;
(c) the processing, verification, storage and reporting of data, including chain of custody procedures and identification of qualified person(s) conducting the sampling and of a laboratory certified or approved by DTSC pursuant to Health and Safety Code section 25198; and
(d) how the data obtained pursuant to this Agreement will be managed and preserved in accordance with the Preservation of Documentation section of this Agreement.

TASK 9.

Health and Safety Plan. The Proponent will submit a Site Health and Safety Plan in accordance with California Code of Regulations, Title 8, section 5192. This plan should include, at a minimum the following elements:

(a) Site Background/History/Workplan;
(b) Key Personnel and Responsibilities
(c) Job Hazard Analysis/Summary;
(d) Employee Training;
(e) Personal Protection;
(f) Medical Surveillance;
(g) Air Surveillance;
(h) Site Control;
(i) Decontamination;
(j) Contingency Planning;
(k) Confined Space Operations;
(l) Spill Containment;
(m) Sanitation;
(n) Illumination; and
(o) Other applicable requirements based on the work to be performed.

DTSC's *Interim Draft Site Specific Health and Safety Plan Guidance Document for Site Assessment/Investigation, Site Mitigation Projects, Hazardous Waste Site Work Closure, Post Closure, and Operation and Maintenance Activities* (DTSC, December 2000) can be used as a reference tool, The Health and Safety Plan should cover all measures, including contingency plans, which will be taken during field activities to

protect the health and safety of the workers at the Site and the general public from exposure to hazardous waste, substances or materials. The Health and Safety Plan should describe the specific personnel, procedures and equipment to be utilized.

All contractors and all subcontractors shall be given a copy of the Health and Safety Plan prior to entering the Site. Any supplemental health and safety plans prepared by any subcontractor shall also be prepared in accordance with the regulations and guidance identified above. The prime contractor responsible for this subcontractor will be responsible for ensuring that all subcontractor supplemental health and safety plans follow these regulations and guidelines.

EXHIBIT D

COST ESTIMATE WORKSHEET

Date: February 2019

Site Code: 202227

Title	Project Manager	Supervisor	Toxicology	Geology	Public Participation	HQ CEQA	Legal	Clerical
Classification	Hazardous Substances Engineer	Supervising Hazardous Substances Engineer	Staff Toxicologist	Engineering Geologist	Public Participation Specialist	Associate Environmental Planner	Staff Counsel	Office Technician
TASK:								
Voluntary Cleanup Agreement	24	1					21	0.5
Review of Existing Data	8	1						0.5
Finishing RAW	8	1	4	1				0.5
CEQA	8	1				16		0.5
Public Participation	8	1			20			0.5
RAW Implementation	8	1		6				0.5
Review RAW Completion Report	8	1	4	6				0.5
Certification	3	1					1	1
Contingency (15%)	11.3	1.1	1.2	2.0	3.0	2.4	3.3	0.6
Total No. Hours/Class	86.3	8.6	9.2	15.0	23.0	18.4	25.3	4.6
Hourly Rate/Class	$224	$277	$185	$225	$146	$161	$277	$88
Cost/Class	$19,320	$2,389	$1,702	$3,364	$3,358	$2,962	$7,008	$405
Advance Payment	$20,254							
Total Estimated Payment	**$40,508**							