DRAFT

INITIAL STUDY
MITIGATED NEGATIVE DECLARATION

FOR

LAGOON VALLEY SELF STORAGE

August 16, 2019

Lead Agency

City of Vacaville
Community Development Department
650 Merchant Street
Vacaville, CA 95688

Consultant

Raney Planning & Management
1501 Sports Drive, Suite A
Sacramento, CA 95834

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PROJECT INFORMATION

Project Title
Lagoon Valley Self Storage (File No. 18-263)

Lead Agency Name and Address
City of Vacaville
Community Development
650 Merchant Street
Vacaville, CA 95688

Contact Person and Phone Number
Albert Enault
Associate Planner
Tel (707) 449-5364
Fax (707) 449-5423
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Project Location
5920 Cherry Glen Road
Vacaville, CA 95688
Assessor's Parcel Number: 0127-040-140
Coordinates: 38°20'17.7", -122°01'01.6"

Project Sponsor
Ron Smith
Praxis Properties, LLC.
5701 Lonetree Boulevard
Rocklin, CA 95765
Tel (916) 257-0802
ronsmithllc@gmail.com

General Plan
According to the City of Vacaville General Plan, the project site is designated as Highway Commercial. The Highway Commercial designation adjoins Interstate highways and includes specialty retailing, restaurants, hotels/motels, and commercial recreation and entertainment, designed to attract primarily visitor business and shopping. Development in this designation should be high-quality in order to enhance views of Vacaville from the highway. As proposed, the project is consistent with the Highway Commercial designation.

Zoning
According to the City of Vacaville Zoning Map, the project site is zoned General Commercial (CG) with a Special Standards Overlay (SS-1 Overlay). The CG zoning district allows for both small and large commercial development, primarily on sites located along major streets and adjacent to the freeway. The SS-1 overlay district includes additional regulations that restrict development potential due to limited public utilities. As proposed, the project would be consistent with the CG zoning district and the Special Standards Overlay District (SS-1).

PROJECT DESCRIPTION

The proposed project is to construct a 98,000 sq. ft. self-storage facility on a vacant 6-acre parcel of land located at 5920 Cherry Glen Road, north of Interstate 80 (I-80) in Vacaville, California (see Figure 1 and Figure 2). The project site is mostly vacant with several dilapidated structures located on the southern and western portions of the site, which would require demolition. The self-storage facility consists of 10 storage buildings with a 1,136 sq. ft. office and a 1,900 sq. ft. live-in manager's unit (see Figure 3). The storage buildings range in size from 5,100 sq. ft. to 15,680 sq. ft. The storage facility includes single-story and two-story buildings with standard units and climate control units. The perimeter of the property would be enclosed by 8 ft. tall tubular steel ornamental fencing with decorative landscaping. The proposed project would include design elements and materials similar to the adjacent New Life Church located south of the project site. Maximum building height is approximately 25 ft. The proposed project would provide ornamental landscaping comprised of 44 assorted trees and 330 assorted shrubs situated along the perimeter of the project site.

Site Access and Parking

Primary site access would be provided on Cherry Glen Road at the southwestern border of the project site with secondary access for emergency vehicles located at the northwestern portion of the site on Cherry Glen Road. A motorized gate and keypad would provide entry into the secure storage areas. Both the primary and secondary entrances would allow for emergency vehicles to access the secure portions of the site through the use of keyed lock boxes. Four parking stalls and four bicycle racks would be located outside the perimeter fence, next to the main office building at the primary site access point.

Vegetation

The site is comprised of Valley Oak (*Quercus lobata*) Savanna habitat with non-native grass understory interspersed among thirty-four (34) trees that are primarily Valley Oaks. Vegetation within this community type consists primarily of annual grasses and herbaceous plant species. These include, but are not limited to wild oats (*Avena* sp.), filaree (*Erodium* spp.), brome/chess (*Bromus* sp.), field mustard (*Brassica rapa* ssp. *syvestris*), and Italian rye (*Lolium multiflorum*). Laguna Creek flows in an easterly direction along the north side of Cherry Glen Road and east side of the neighboring "Pottery Paradise".

Utilities

The proposed project would include the installation of an on-site water system consisting of an 188,000-gallon water storage tank and 1,500 gallon-per-minute (GPM) fire pump, located in the southeastern portion of the project site. The new system would provide domestic water service to the manager's unit and fire flow water for the project site. An existing on-site well would supply water to the proposed 188,000-gallon water storage tank, and a backflow device would be installed to avoid stagnant water in the tank. Wastewater from the manager's unit would be treated by a new on-site septic tank and drain field located in the northwestern portion of the project site.

Surrounding Land Uses

Surrounding land uses include the New Life Church to the south, Pottery Paradise to the north, I-80 to the east, and an agricultural field to the west.

FIGURE 1. LOCATION MAP

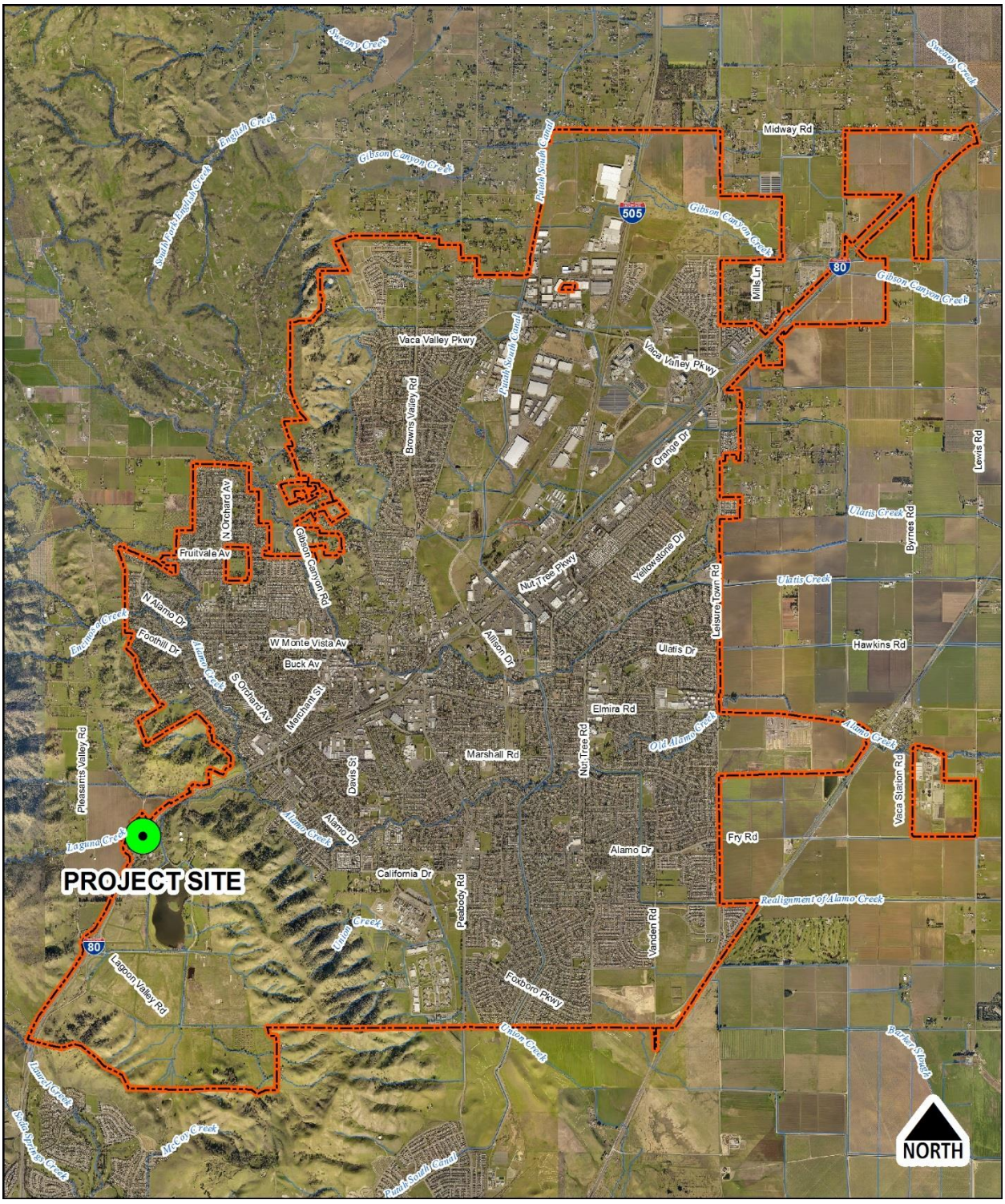

FIGURE 2. PROXIMITY MAP

FIGURE 3. SITE MAP

OTHER DISCRETIONARY ACTION REQUIRED

Implementation of the proposed project would require the following discretionary actions by the City of Vacaville:

- Adoption of the Initial Study/Mitigated Negative Declaration;
- Adoption of the Mitigation Monitoring and Reporting Program; and
- Approval of Design Review land use entitlement.

TRIBAL CONSULTATION

In compliance with Assembly Bill (AB) 52 (Public Resources Code Section 21080.3.1), a project notification letter was mailed via UPSP to the Yocha Dehe Wintun Nation. The letter was mailed on January 28, 2019 and a response was not received within the mandatory 30-day response period. On April 5, 2019, the City received a response letter dated March 27, 2019 from the Yocha Dehe Wintun Nation (YDWN). In the response, YDWN did not request to initiate formal consultation with the Lead Agency. Instead, YDWN noted that the project could impact known cultural resources and recommended incorporating mitigation measures to ensure cultural monitors are present during initial ground disturbing activities. In addition, YDWN requested the Lead Agency incorporate their "Treatment Protocol" (Appendix I) into the mitigation measures to help reduce impacts to tribal cultural resources. Lastly, YDWN requested a copy of the draft IS/MND for review upon completion. More information regarding this item can be found under Section XVIII (TRIBAL CULTURAL RESOURCES) of this document.

PURPOSE OF THIS DOCUMENT

This Initial Study/Mitigated Negative Declaration (IS/MND) provides an environmental analysis pursuant to the California Environmental Quality Act (CEQA) for the proposed project. The applicant has submitted this application to the City of Vacaville, which is the Lead Agency for the purposes of CEQA review. The IS/MND contains an analysis of the environmental effects of construction and operation of the proposed project.

In August 2015, the City of Vacaville adopted the City of Vacaville General Plan and the City of Vacaville General Plan and Energy and Conservation Action Strategy (ECAS) Environmental Impact Report (EIR). The General Plan and ECAS EIR was a program-level EIR, prepared pursuant to Section 15168 of the CEQA Guidelines (Title 14, California Code of Regulations, Sections 15000 *et seq*.). The General Plan and ECAS EIR analyzed full implementation of the City of Vacaville General Plan and identified measures to mitigate the significant adverse project and cumulative impacts associated with the General Plan. Pursuant to CEQA Guidelines Section 15150(a), the City of Vacaville General Plan and General Plan and ECAS EIR are incorporated by reference. Both documents are available at the City of Vacaville, 650 Merchant Street, Vacaville, CA 95688.

The impact discussions for each section of this IS/MND have been largely based on information in the City of Vacaville General Plan and the City of Vacaville General Plan and ECAS EIR. The mitigation measures prescribed for environmental effects described in this IS/MND would be implemented in conjunction with the project, as required by CEQA, and the mitigation measures would be incorporated into the project. In addition, findings and a project Mitigation Monitoring and Reporting Program (MMRP) would be adopted in conjunction with approval of the project should the project be approved.

CIRCULATION PERIOD

August 16, 2019 through September 16, 2019 (5:00 p.m.)

Please send written comments to:

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ENVIRONMENTAL CHECKLIST

The following checklist contains the environmental checklist form presented in Appendix G of the CEQA Guidelines. The checklist form is used to describe the impacts of the proposed project. A discussion follows each environmental issue area identified in the checklist. Included in each discussion are project-specific mitigation measures required, where necessary, as part of the proposed project.

For this checklist, the following designations are used:

Potentially Significant Impact: An impact that could be significant, and for which mitigation has not been identified. If any potentially significant impacts are identified, an EIR must be prepared.

Less-Than-Significant With Mitigation Incorporated: An impact that requires mitigation to reduce the impact to a less-than-significant level.

Less-Than-Significant Impact: Any impact that would not be considered significant under CEQA relative to existing standards.

No Impact: The project would not have any impact.

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	☐ Agricultural Resources	☐ Air Quality
☒ Biological Resources	☒ Cultural Resources	☐ Energy
☒ Geology/Soils	☒ Greenhouse Gas Emissions	☐ Hazards/Hazardous Material
☐ Hydrology/Water Quality	☐ Land Use/Planning	☐ Mineral Resources
☐ Noise	☐ Population/Housing	☐ Public Services
☐ Recreation	☐ Transportation	☒ Tribal Cultural Resources
☐ Utilities/Service Systems	☐ Wildfire	

☐ Mandatory Findings of Significance

ENVIRONMENTAL DETERMINATION

☐ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

☒ 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.

ALBERT ENAULT, Associate Planner

August 16, 2019
Date

I. AESTHETICS

Would the project:	Potentially Significant Impact	Less-Than-Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a. Have a substantial adverse effect on a scenic vista?	☐	☐	✖	☐
b. Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State scenic highway?	☐	☐	✖	☐
c. In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	☐	☐	✖	☐
d. Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	✖	☐	☐

Affected Environment

As noted under the project description, the project site is mostly vacant with several dilapidated structures located on the southern and western portions of the site. The site is comprised of Valley Oak (*Quercus lobata*) Savanna habitat with non-native grass understory interspersed among thirty-four (34) trees that are primarily Valley Oaks. Image 1 and Image 2 depict the existing condition of the project site as seen from Cherry Glen Road and I-80. As shown in the images, the site is located in a non-urbanized area in the southwest corner of Vacaville city limits.

According to the Conservation Element of the Vacaville General Plan (pg. COS-24), most of Vacaville's scenic resources are associated with the open space, natural resources, and agricultural uses of the Planning Area. Such areas include riparian corridors (habitat and vegetation zones associated with the banks and floodplains of a river, stream, or lake) that run throughout the city, views of the rural and undeveloped lands surrounding the city, and Vacaville's hillside areas. Although views of the surrounding ridgelines and hilltops are an important contributor to the identity of the city, the General Plan addresses development on ridgelines and hills in the Safety Element in order to acknowledge and prevent risks to life and property that can result from such development.

The Vacaville General Plan includes goals, policies and actions designed to protect unofficial scenic views important to the identity of the City such as Policy COS-P8.1, which directs the City to preserve scenic features and the feel of a city surrounded by open space, and preserve view corridors to the hills and other significant natural areas. In addition, Policy COS-P8.2 directs the City to maintain major ridgelines and hillsides as open space.

IMAGE 1. CHERRY GLEN ROAD

Source: Google Earth (2019).

IMAGE 2. INTERSTATE 80

Source: Google Earth (2019).

Discussion

a. Would the project have a substantial adverse effect on a scenic vista?

According to the Conservation Element of the Vacaville General Plan (pg. COS-24), many of the scenic resources that are valued by Vacaville residents, such as the ridgelines of the Vaca Mountains and English Hills, are located outside the city limits or even beyond the Planning Area boundary. There are no State-designated scenic highways in Vacaville. Throughout the City, visibility of these resources are intermittent and partially obscured by existing trees and development.

As depicted by Image 1 and Image 2, views of the surrounding Vaca Mountains and Lagoon Valley are partially obscured by existing trees located on the project site and surrounding rural/agricultural land. Although there are no on-site scenic vistas, development of the project has the potential to impact views as seen from vehicles traveling on I-80 and Cherry Glen Road. However, the impact is expected to be less than significant, because: (1) the maximum building height will not exceed 25 ft., which is comparable to existing trees that already partially obscure scenic resources; and (2) the view from moving vehicles on I-80 will be interrupted for only brief period as they pass by the project site. Therefore, the proposed project would have a **less-than-significant impact.**

b. Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State scenic highway?

The proposed project would not damage scenic resources such as rock outcroppings or historic buildings within a State scenic highway, because these resources are not located on the site. The project has the potential to impact scenic tree resources. Specifically, the site contains thirty-four (34) existing trees; development would require the removal of nine (9) oak trees. The removal of these trees could damage the scenic tree resources at the site, resulting in a potentially significant impact.

However, this potentially significant impact would be reduced to less-than significant through project design. Specifically, the project has been designed to preserve twenty-five (25) existing trees throughout the site. In addition, the project will add approximately 44 assorted trees and 330 assorted shrubs situated along the perimeter of the project site. The combination of tree preservation and additional landscaping will reduce this impact to less-than significant. Therefore, the Project will have a **less-than-significant impact** on scenic vistas and would not substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State scenic highway.

c. In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?

The project site is located in a non-urbanized area within the City of Vacaville. Nearby visibility of the site is limited to vehicle traffic traveling southbound on I-80 and along Cherry Glen Road, which are not defined as a public view. However, the site can be seen from a public view within Lagoon Valley Park/Peña Adobe Park. As noted in the project description, the site is primarily vacant and contains two dilapidated structures that would be demolished

with implementation of the project. The proposed project would change the existing visual character of the site from a primarily vacant lot, consisting of ruderal vegetation and interspersed with oak trees, to a developed self-storage facility with oak trees. Although the change will be recognizable from public views on the hills in Lagoon Valley, the visual appearance is not expected to substantially degrade the public view of the site and its surrounding areas, because: (1) the exterior of the proposed structures would be designed with elevations similar to those of the adjacent church building; (2) the project will be designed around existing trees to help minimum changes to the tree canopy as seen from public views; and (3) the surrounding areas around the project site will not be affected by the development. Therefore, the project would have a **less-than-significant impact.**

d. Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

Currently, the site does not contain any sources of lighting or glare. The proposed project would introduce new sources of light from building and parking lot lighting. Section 14.09.127.110 (Performance Standards – Lighting and Glare) of the Vacaville Land Use and Development Code establishes standards designed to reduce light pollution and eliminate potential issues from glare that could create a hazard or nuisance to other properties or impact traffic on adjacent roads. As proposed, the project would introduce new light sources that could have a potentially significant impact on nighttime views in the area. Therefore, the Lead Agency will require the project sponsor to implement Mitigation Measure AES-1 to reduce impacts to less-than-significant. **Less than significant impact with mitigation measures incorporated.**

Impact Conclusion

The Project will have a less-than-significant impact on aesthetics with implementation of Mitigation Measure AES-1.

Mitigation Measures

AES-1 Prior to the issuance of building permits for any development on the project site, the project applicant shall submit a lighting plan for the project to the City of Vacaville Community Development Department for review and approval, demonstrating that proposed lighting is compliant as specified by the Section 14.09.127 of the City of Vacaville Land Use and Development Code. The lighting plan shall include, but not necessarily be limited to, the following provisions:

- Lighting shall be shielded and directed so as not to create a hazard or nuisance to other properties or impact traffic on adjacent streets;
- Exterior lighting shall be installed to identify building entrances and to promote on-site safety or security;
- All exterior lighting shall contain motion sensor features that allow dimmer lights after 5 minutes without motion detection.
- Parking lot lighting shall comply with the standards of the Off-Street Parking and Loading Design Guideline, including, but not limited to, the following:
  - Exterior lighting shall be a minimum of one foot candle and a maximum of six foot candles;

- A photometric plan demonstrating compliance with these lighting standards and a site plan showing the location and design of exterior lighting fixtures shall be required:
    - The Lighting plan shall be subject to the approval of the Director;
    - The requirement for a photometric plan may be waived if the Director determines that the plan is not necessary to demonstrate compliance with the lighting standards;
- Flickering or flashing lights shall not be permitted;
- A reduction in the minimum lighting or an exception to the maximum lighting standard requirement may be granted by the Director if the applicant or developer can demonstrate to the satisfaction of the Director that the minimum lighting is unnecessary or that additional lighting is needed.

II. AGRICULTURE AND FOREST RESOURCES

Would the project:	Potentially Significant Impact	Less-Than-Significant with Mitigation Incorporated	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?	☐	☐	☐	✖
b. Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	✖
c. Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	☐	☐	☐	✖
d. Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	✖
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?	☐	☐	☐	✖

Affected Environment

As noted under the project description, the project site is mostly vacant with several dilapidated structures located on the southern and western portions of the site. The site is comprised of Valley Oak (*Quercus lobata*) Savanna habitat with non-native grass understory interspersed among thirty-four (34) trees that are primarily Valley Oaks. According to Figure COS-2 (Important Farmlands) of the Vacaville General Plan, the site is designated as "Grazing Land," which is defined as land on which the existing vegetation is suited for grazing of livestock. According to the Solano County Important Farmland Map 2016, published by the California Department of Conservation, designates the project site as "other land." Other land is defined as land not included on any other mapping category. Typical 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 40 acres.[1]

Discussion

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?

As noted above, the project site is not defined as farmland under the Vacaville General Plan or Solano County Important Farmland Map. Therefore, the project would not result in the

[1] California Department of Conservation. *Solano County Important Farmland Map 2016.* August 2017.

conversion of Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to non-agricultural uses. **No impact.**

b. Conflict with existing zoning for agricultural use, or a Williamson Act contract?

According to the General Plan and ECAS EIR, approximately 199 acres of Prime Farmland and 1,079 acres of non-prime farmland have active Williamson Act Contracts in the EIR Study Area. According to the Department of Conservation, the project site is not under a Williamson Act Contract[2]. Thus, the proposed project would not conflict with existing zoning for agricultural use or a Williamson Act contract. Given that the proposed project would not conflict with existing zoning for agricultural use and would not conflict with a Williamson Act contract, **no impact** would occur as a result of implementation of the proposed project.

c. Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?

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, Timberland Production zoning, or 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.

d. Result in the loss of forest land or conversion of forest land to non-forest use?

See Section c above, the project will not result in the loss of forest land or the conversion of forest land. **No impact.**

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?

According to the Solano County Important Farmland Map (2016), the surrounding properties to the west are defined as "Other Land." The project will not require or affect existing characteristics of nearby properties. No other lands will require development. **No impact.**

Impact Conclusion

The Project will have no impact on agricultural resources.

Mitigation Measures

No mitigation is required.

2 California Department of Conservation. *Solano County Williamson Act FY 2013/2014*. July 2019. URL:ftp://ftp.consrv.ca.gov/pub/dlrp/wa/Solano_13_14_WA.pdf

III. AIR QUALITY

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a. Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	✖	☐
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?	☐	☐	✖	☐
c. Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	✖	☐
d. Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	☐	☐	✖	☐

Affected Environment

The City of Vacaville is located in the Sacramento Valley Air Basin (SVAB) and the majority of the City, including the project site is under the jurisdiction of the Yolo-Solano Air Quality Management District (YSAQMD). The Federal Clean Air Act (CAA) and the California Clean Air Act (CCAA) require that Federal and State ambient air quality Standards (AAQS) be established, respectively, for six common air pollutants, known as criteria pollutants. The SVAB is designated nonattainment for the federal particulate matter 2.5 microns in diameter ($PM_{2.5}$) and the State particulate matter 10 microns in diameter (PM_{10}) standards, as well as for both the federal and State ozone standards.

The CAA requires each state to prepare an air quality control plan referred to as a State Implementation Plan (SIP). The SIPs are modified periodically to reflect the latest emissions inventories, planning documents, and rules and regulations of the air basins, as reported by their jurisdictional agencies. Due to the nonattainment designations, YSAQMD, along with the other air districts in the SVAB region, periodically prepares and updates air quality plans that provide emission reduction strategies to achieve attainment of the federal AAQS, including control strategies to reduce air pollutant emissions via regulations, incentive programs, public education, and partnerships with other agencies.

General conformity requirements of the SIP include whether a project would cause or contribute to new violations of any federal AAQS, increase the frequency or severity of an existing violation of any federal AAQS, or delay timely attainment of any federal AAQS. In addition, a project would be considered to conflict with, or obstruct implementation of, an applicable air quality plan if the project would be inconsistent with the emissions inventories contained in the air quality plan. Emission inventories are developed based on projected increases in population, employment, regional vehicle miles traveled (VMT), and associated area sources within the region, which are based on regional projections that are, in turn, based on General Plans and zoning designations for the region.

Due to the nonattainment designations of the area, YSAQMD has developed plans to attain the State and federal standards for ozone and particulate matter. The plans include the 2013 Ozone Attainment Plan, the $PM_{2.5}$ Implementation/Maintenance Plan, and the 2012 Triennial Assessment and Plan Update. Adopted YSAQMD rules and regulations, as well as the thresholds of significance, have been developed with the intent to ensure continued attainment

of AAQS, or to work towards attainment of AAQS for which the area is currently designated nonattainment, consistent with applicable air quality plans. Thus, by exceeding the YSAQMD's mass emission thresholds for operational or construction emissions of ROG, NO_X, or PM_{10}, a project would be considered to conflict with or obstruct implementation of the YSAQMD's air quality planning efforts. The YSAQMD mass emission thresholds for operational and construction emissions are shown in Table 1 below.

TABLE 1. YSAQMD THRESHOLD OF SIGNIFICANCE

Pollutant	Construction Thresholds	Operational Thresholds
ROG	10 tons/yr	10 tons/yr
NO_X	10 tons/yr	10 tons/yr
PM_{10}	80 lbs/day	80 lbs/day
Source: YSAQMD. Handbook for Assessing and Mitigating Air Quality Impacts. July 11, 2007.		

To assess the proposed project's potential impacts related to construction and operational emissions of the pollutants presented in Table 1 above, the proposed project's operational emissions were estimated using the California Emissions Estimator Model (CalEEMod). CalEEMod is a statewide model designed to provide a uniform platform for government agencies, land use planners, and environmental professionals to quantify air quality emissions, including GHG emissions, from land use projects. Where project-specific information is available, such information should be applied in the model. Based on information provided by the project applicant, the proposed project's modeling assumed the following:

- Construction would begin in May of 2019;
- Construction would occur over an approximately six-month period;
- An average daily trip rate of 2.5 was assumed for the self-storage facility, and an average daily trip rate of 9.52 was assumed for the manager's residence, based on the ITE *Trip Generation Manual*;
- The project would require the import of approximately 4,885 cubic yards of soil during grading;
- A total of 6.0 acres of land would be disturbed; and
- The project would comply with YSAQMD rules and regulations (i.e., low-VOC [volatile organic compounds] cleaning supplies and paint).

The proposed project's estimated emissions associated with construction and operations are presented and discussed in further detail below. A discussion of the proposed project's contribution to cumulative air quality conditions is provided below as well. All CalEEMod results are included in this Initial Study (Appendix B).

Discussion

a. Conflict with or obstruct implementation of the applicable air quality plan?

The following sections present a discussion of potential emissions related to construction and operations of the proposed project.

Construction Emissions

The proposed project's estimated construction-related emissions are presented in Table 2. As shown in the table, the proposed project's construction emissions of ROG, NO_X, and PM_{10} would be below the applicable YSAQMD thresholds of significance.

TABLE 2. MAXIMUM PROJECT CONSTRUCTION-RELATED EMISSIONS

Pollutant	Project Emissions	YSAQMD Thresholds of Significance
ROG	0.86 tons/yr	10 tons/yr
NO_X	1.74 tons/yr	10 tons/yr
PM_{10}	20.65 lbs/day	80 lbs/day
Source: CalEEMod, February 2019 (see Appendix B).		

Based on the above, the proposed project's construction-related emissions would not result in a contribution to the region's nonattainment status of ozone or PM and would not violate an air quality standard or contribute substantially to an existing or projected air quality violation.

All projects within the YSAQMD, including the proposed project, are required to comply with all YSAQMD rules and regulations for construction, including Rule 2.1 (Control of Emissions), Rule 2.28 (Cutback and Emulsified Asphalts), Rule 2.5 (Nuisance), Rule 2.14 (Architectural Coatings), and Rule 2.11 (Particulate Matter Concentration). The rules and regulations are not readily applicable in CalEEMod and are, therefore, not included in the project-specific modeling. Because compliance with the rules and regulations would result in some additional reduction in emissions, construction emissions from the project would likely be slightly reduced from what is presented in Table 2 due to compliance with the rules and regulations.

Operational Emissions

The proposed project's estimated operational-related emissions are presented in Table 3.

TABLE 3. MAXIMUM PROJECT OPERATIONAL-RELATED EMISSIONS

Pollutant	Project Emissions	YSAQMD Thresholds of Significance
ROG	0.57 tons/yr	10 tons/yr
NO_X	0.80 tons/yr	10 tons/yr
PM_{10}	2.37 lbs/day	80 lbs/day
Source: CalEEMod, February 2019 (see Appendix B).		

As shown in the table, the proposed project's operational emissions of ROG, NO_X, and PM_{10} would be below the applicable YSAQMD thresholds of significance. Therefore, the proposed project's operational-related emissions would not result in a contribution to the region's

nonattainment status of ozone or PM and would not violate an air quality standard or contribute substantially to an existing or projected air quality violation.

Conclusion

As stated previously, the applicable regional air quality plans include the 2013 Ozone Attainment Plan, the $PM_{2.5}$ Implementation/Maintenance Plan, and the 2012 Triennial Assessment and Plan Update. According to YSAQMD, if a project would not result in significant and unavoidable air quality impacts, after the application of all feasible mitigation, the project may be considered consistent with the air quality plans. Based on the above, the proposed projects criteria pollutant emissions would be below applicable YSAQMD thresholds. As such, the project would not be considered to conflict with or obstruct implementation of regional air quality plans. Because the proposed project would not conflict with or obstruct implementation of the applicable air quality plans, violate any air quality standards or contribute substantially to an existing or projected air quality violation, or result in a cumulatively considerable net increase in any criteria air pollutant, impacts would be considered less than significant. **Less-than significant impact.**

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?

The proposed project site is within an area currently designated as nonattainment for Ozone, PM_{10}, and $PM_{2.5}$. By nature, air pollution is largely a cumulative impact. Thus, the proposed project, in combination with other proposed and pending projects in the region would significantly contribute to air quality effects within the SVAB, resulting in an overall significant cumulative impact. However, any single project is not sufficient enough in size to, alone, result in nonattainment of AAQS. Instead, a project's individual emissions contribute to existing cumulatively significant adverse air quality impacts. If a project's contribution to the cumulative impact is considerable, then the project's incremental impact on air quality would be considered significant

In developing thresholds of significance for air pollutants, YSAQMD considered the emission levels for which a project's individual emissions would be cumulatively considerable. If a project exceeds the identified significance thresholds, then that project's emissions would be cumulatively considerable, resulting in a significant adverse air quality impact to the region's existing air quality conditions. As discussed above, implementation of the proposed project would result in construction-related and operational emissions below YSAQMD's thresholds of significance. Therefore, based on the project's consistency with YSAQMD's thresholds of significance, the proposed project would not result in a significant incremental contribution to the cumulatively significant impact. **Less-than significant impact.**

c. Expose sensitive receptors to substantial pollutant concentrations?

According to the Vacaville General Plan (pg. COS-31), *sensitive receptors* include those segments of the population that are most susceptible to poor air quality, such as children, elderly people, and sick people, as well as sensitive land uses, such as schools, hospitals, parks, and residential communities. The proposed project would not involve the construction of any new land uses that would be considered sensitive receptors. The project site is not located within close proximity to any land uses which contain sensitive receptors.

The major pollutant concentrations of concern are localized carbon monoxide (CO) emissions and Toxic Air Contaminants (TAC) emissions, which are addressed in further detail below.

Localized CO Emissions

Localized concentrations of carbon monoxide (CO) are related to the levels of traffic and congestion along streets and at intersections. The YSAQMD recommends the use of screening thresholds to assess a project's potential to create an impact through the creation of CO hotspots. A violation of the CO standard could occur if a proposed project would reduce the peak-hour level of service (LOS) of any street or intersections from an acceptable LOS to an unacceptable LOS, or significantly increase traffic delay at an intersection currently operating at an unacceptable LOS. As discussed further in Section XVII, Transportation, of this IS/MND, the proposed project would not result in impacts to the circulation network, nor would the project result in degradation of peak-hour LOS at any intersections or roadway segments in the project area. Therefore, the proposed project is not anticipated to generate localized CO emissions that would contribute to an exceedance of AAQS nor would the project expose sensitive receptors to substantial concentrations of localized CO.

TAC Emissions

Another category of environmental concern is TACs. The CARB's *Air Quality and Land Use Handbook: A Community Health Perspective* (Handbook) provides recommended setback distances for sensitive land uses from major sources of TACs, including, but not limited to, freeways and high traffic roads, distribution centers, and rail yards. 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 associated with TACs are a function of both the concentration of emissions and the duration of exposure, where the higher the concentration and/or the longer the period of time that a sensitive receptor is exposed to pollutant concentrations would correlate to a higher health risk.

The proposed project would not involve any land uses or operations that would be considered major sources of TACs, including DPM. As such, the proposed project would not generate any substantial pollutant concentrations during operations. However, short-term, construction-related activities could result in the generation of TACs, specifically DPM, from on-road haul trucks and off-road equipment exhaust emissions. Construction is temporary and occurs over a relatively short duration in comparison to the operational lifetime of the proposed project. Specifically, as noted above, construction would occur over an approximately six-month period. Grading activities, when emissions would be most intensive, would occur over the period of approximately seven weeks. The exposure period typically analyzed in health risk assessments is 30 years or greater, which is substantially longer than the six-month construction period associated with the proposed project.

Because construction equipment on-site would not operate for any long periods of time and would be used at varying locations within the site, associated emissions of DPM would not occur at the same location (or be evenly spread throughout the entire project site) for long periods of time. Health risks associated from TACs are a function of three items: concentration of emissions produced; proximity of receptors to emission sources; and

duration of exposure. A sensitive receptor that is located close to an emission source and exposed for a long period, has a higher potential to experience health risks. Construction associated with implementation of the proposed project would be temporary, and sensitive receptors are not located within close proximity to the project site. Due to the relatively short duration of potential exposure to construction-related emissions, and the absence of sensitive receptors in the project area, the proposed project would not expose sensitive receptors to pollutants for a permanent or extended period of time.

Considering the short-term nature of construction activities, the regulated and intermittent nature of the operation of construction equipment, and the highly dispersive nature of DPM, sensitive receptors would not be exposed to high concentrations of DPM for any extended period of time. For the aforementioned reasons, sensitive receptors would not be exposed to substantial pollutant concentrations as a result of the proposed project.

Conclusion

Based on the above discussion, the proposed project would not expose any sensitive receptors to substantial concentrations of localized CO or TACs from construction or operation. Therefore, the proposed project would result in a **less-than-significant** impact related to the exposure of sensitive receptors to substantial pollutant concentrations.

d. Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

Due to the subjective nature of odor impacts, the number of variables that can influence the potential for an odor impact, and the variety of odor sources, quantitative methodologies to determine the presence of a significant odor impact do not exist. According to the YSAQMD, common types of facilities that are known to produce odors include, but are not limited to, wastewater treatment facilities, chemical or fiberglass manufacturing, landfills, composting facilities, food processing facilities, refineries, dairies, and asphalt or rending plants.[3] The project site is not located in the vicinity of any such uses. Commercial land uses, such as the proposed project, are not typically associated with the creation of substantial objectionable odors. As a result, the proposed project operations would not create any objectionable odors that would affect a substantial number of people.

The YSAQMD regulates objectionable odors through Rule 2.5 (Nuisance), which prohibits any person or source from emitting air contaminants or other material that result in any of the following: cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public; endanger the comfort, repose, health, or safety of any such persons or the public; or have a natural tendency to cause injury or damage to business or property. Rule 2.5 is enforced based on complaints. If complaints are received, the YSAQMD is required to investigate the complaint, as well as determine and ensure a solution for the source of the complaint, which could include operational modifications. Thus, although not anticipated, if odor complaints are made during construction or operation of the project, the YSAQMD would ensure that such odors are addressed and any potential odor effects reduced to less than significant.

[3] Yolo-Solano Air Quality Management District. *Handbook for Assessing and Mitigating Air Quality Impacts* [pg. 14]. July 11, 2007. Available at: http://www.ysaqmd.org/documents/CEQAHandbook2007.pdf. Accessed January 2019.

For the aforementioned reasons, construction and operation of the proposed project would not result in other emissions, such as those leading to odors, that would adversely affect a substantial number of people, and a **less-than-significant** impact related to objectionable odors would result.

Impact Conclusion

The Project will have a less-than-significant impact on air quality.

Mitigation Measures

No mitigation is required.

IV. BIOLOGICAL RESOURCES

Would the project:	Potentially Significant Impact	Less-Than-Significant with Mitigation Incorporated	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 Wildlife or U.S. Fish and Wildlife Service?	☐	✖	☐	☐
b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Wildlife or US Fish and Wildlife Service?	☐	✖	☐	☐
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?	☐	☐	✖	☐
d. Interfere substantially with the movement of any resident or migratory fish or wildlife species or with established resident or migratory wildlife corridors, or impede the use of wildlife nursery sites?	☐	☐	✖	☐
e. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	✖	☐	☐
f. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Conservation Community Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	✖	☐

Affected Environment

The project sponsor hired Barnett Environmental to conduct an evaluation of wetlands and biological resources potentially present at the project site (Appendix E). Their evaluation included a search of the U.S. Fish & Wildlife Service's *National Wetland Inventory*, EcoAtlas's *California Aquatic Resources Inventory,* and the NRCS *Web Soil Survey and Hydric Soil Map Units for Solano County, California* to determine the presence of any wetlands, waters of the U.S., or waters of the State on the project site. In addition, the California Department of Fish and Wildlife (CDFW) California Natural Diversity Database (CNDDB), the U.S. Fish and Wildlife Service's *Ipac* Database, and the California Native Plant Society's (CNPS) *Inventory of Rare & Endangered Plans in California* were queried to determine the habitat potential for special-status plant and wildlife species on the project. On May 16, 2018, Barnett Environmental conducted a field survey that recorded observations of dominant vegetation communities, plant and animal species or signs thereof, and the suitability of onsite habitats and those immediately adjacent to the project site for their ability to support special-status plant or animal species.

According to their evaluation, the site is comprised of Valley Oak (*Quercus lobata*) Savanna habitat with non-native grass understory interspersed among thirty-four (34) trees that are primarily Valley Oaks. Vegetation within this community type consists primarily of annual grasses and herbaceous plant species. These include, but are not limited to wild oats (Avena

sp.), filaree (Erodium spp.), brome/chess (Bromus sp.), field mustard (Brassica rapa ssp. syvestris), and Italian rye (Lolium multiflorum). No terrestrial wildlife was observed on the site during either of the field surveys and the ongoing disturbance of the annual grassland and encroaching oak savanna habitat at this location likely precludes the presence of most wildlife species that commonly use such grasslands. The occasional western fence lizard (*Sceloporus occidentalis*) and western rattlesnake (*Crotalus viridis*) could be seen here, as well as mammals such as the western gray squirrel (*Sciurus griseus*) and deer mouse (*Peromiscus* sp.), and common birds like the northern flicker (*Colaptes auratus*), common raven (*Corvus corax)*, northern mockingbird (*Mimus polyglottos*), California and spotted towhees (*Pipilo* sp.) and western scrub jay (*Aphelocoma coerulescens*). Occasional raptors such as the red-tailed hawk (*Buteo jamaicensis*), northern harrier (*Circus cyaneus*), and turkey vulture (*Cathartes aura*) can also be seen soaring overhead.

Discussion

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 Wildlife or U.S. Fish and Wildlife Service?

Critical Habitat

The Federal Endangered Species Act (FESA) requires the federal government to designate critical habitat for any listed species. Critical habitat is defined as specific areas within the geographical area occupied by the species at the time of listing, if such areas contain physical or biological features essential to conservation, and those features may require special management considerations or protection; as well as specific areas outside the geographical area occupied by the species if the agency determines that the area itself is essential for conservation. According to the biological evaluation, critical habitat does not exist within the project site area.

Special-Status Plants

Special-status plants generally occur in relatively undisturbed areas within vegetation communities such as vernal pools, marshes and swamps, chenopod scrub, seasonal wetlands, riparian scrub, and areas with unusual soils characteristics. The grassland habitat within the project site has been disturbed by past agricultural uses of the site, development of areas adjacent to the site, grading of the site, and periodic disking. Due to the history of intense disturbance of the site and the adjacent area, Barnett Environmental concluded that, while only two special-status plant species, the Contra Costa goldfields (*Lasthenia conjugens*) and showy Indian clover (*Trifolium amoenum*), have been known to occur in the vicinity of the project site, the site survey and a query of the CNDDB Rarefind resulted in negative records of either species within the vicinity of the project site. Thus, the site does not contain the potential for any special-status plant species to occur.

Special Status Wildlife

Queries were generated from CNDDB, CNPS, and Ipac to determine whether the project site contains or has the potential to contain special-status animal species. A total of six (6) special-status wildlife species were identified with the potential to inhabit areas surrounding the project site. The special-status wildlife species identified included: valley elderberry

longhorn beetle (*Desmocerus californicus dimorphus*); Delta green ground beetle (*Elaphrus viridis*); California red-legged frog (*Rana draytonii*); giant garter snake (*Thamnophis gigas*); California tiger salamander (*Ambystoma californiense*); and Swainson's hawk (*Buteo swainsoni*). A query of the CNDDB Rarefind database indicated that the above listed special-status wildlife species have not been recorded to inhabit the project site area. In addition, Barnett Environmental determined that, although the project site could provide low-quality potential habitat for Swainson's hawk, the site does not represent habitat for any other species covered under the draft Solano Multispecies Habitat Conservation Plan (SMSHCP). Further information related to the potential presence of Swainson's hawk on the project site is provided below.

Swainson's Hawk

The Swainson's hawk is a California threatened, large, broad-winged bird-of-prey that frequents open country. The Swainson's hawk is a long-distance migrator that typically nests in the Central Valley from March to August 31st and over-winters in Mexico or South America. The Swainson's Hawk forages in agricultural row-crops and grasslands. Urban areas or dense vegetation do not provide suitable foraging habitat for Swainson's hawk. Sacramento, Yolo, and San Joaquin counties support most of the Central Valley Swainson's hawk breeding population. Narrow riparian systems and scattered Valley oak trees, combined with suitable agricultural foraging habitat, provide high-quality habitat conditions in the Central Valley where Swainson's hawks actively nest from March through August 31st. This species has a moderate potential to occur on-site given that the project site provides grassland habitat with scattered oaks. A total of 11 documented CNDDB Swainson's hawk occurrences exist within a five-mile radius of the project site, with the nearest occurrence approximately 215 feet southwest. Swainson's hawks were not observed onsite during the May 2018 site assessment. However, considering the history of nearby sightings of the species and the suitability of the project site for the species, the proposed project could result in a potentially significant impact on Swainson's hawk because the project would remove potential foraging habitat.

Migratory Bird Treaty Act (MBTA)

Raptors (birds of prey), migratory birds, and other avian species are protected by a number of state and federal laws. The federal MBTA prohibits the killing, possessing, or trading of migratory birds except in accordance with regulations prescribed by the Secretary of Interior. Section 3503.5 of the California Fish and Wildlife Code states, "It is unlawful to take, possess, or destroy any birds in the order Falconiformes or Strigiformes (birds-of-prey) or to take, possess, or destroy the nest or eggs of any such bird except as otherwise provided by this code or any regulation adopted pursuant thereto." Because the on-site trees and ruderal grasses could provide habitat for MBTA protected species, site disturbance associated with implementation of the proposed project could have an adverse effect either directly or through habitat modifications, on raptors, nesting birds, or other birds protected under the MBTA.

Conclusion

Based on the above discussion, the site clearing and tree removal activities associated with the proposed project could result in a reduction of suitable habitat for Swainson's hawk and other MBTA protected species. Therefore, implementation of the proposed project could result in a potentially significant impact to Swainson's hawk and MBTA protected species.

The lead agency will require the project sponsor to implement Mitigation Measure BIO-1 and BIO-2 to reduce impacts to less-than-significant. **Less than significant impact with mitigation measures incorporated.**

b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Wildlife or US Fish and Wildlife Service?

According to the Conservation Element of the Vacaville General Plan (pg. COS-4), Vacaville contains three broad **natural community** types that encompass a wide range of habitats. The distinction between the following natural community types and agriculture is based on soil types, land form, and land use.

- **Valley Floor Grassland and Vernal Pool Natural Community:** This community includes areas that currently support, or have historically supported, vernal pool habitats surrounding grasslands. This community includes known wetlands, including in the areas around Interstate 505 that are subject to various business park policy plans.
- **Inner Coast Range Natural Community:** This community consists of ridges and valleys within the Inner Coast Range that contain a number of plant communities, including grassland, oak woodland, oak savanna, and mixed chaparral/scrub brush.
- **Riparian, Stream, and Freshwater Marsh Natural Community:** This community occurs within the other natural communities and encompasses all freshwater, aquatic, marsh, and riparian habitats. Alamo Creek and Ulatis Creek, two major riparian and stream habitats in Vacaville, have well-developed riparian plant communities, but the majority of the areas in Vacaville are dominated by non-native species. Although the riparian habitat within the city is narrow and characterized by a mix of native and non-native trees and shrubs, it provides important habitat linking the Vaca Mountains to the valley floor.

As shown on Figure COS-1 (Natural Community Boundaries) of the Conservation Element, the site is part of the Inner Coast Range natural community, with an oak woodland plant community. Development of the proposed project will result in a loss of oak woodland plant community, which is considered a significant impact. In accordance with Vacaville General Plan Policy COS-P1.14, the project-sponsor has designed the project around existing oaks trees to minimum impacts from development, the result of which will help save twenty-four (24) existing oak trees at the project site. In addition, the project-sponsor will be required to mitigate all impacted oak woodland habitat by preserving oak woodland with similar tree canopy densities at a 3:1 ratio (preservation:impact), in accordance with General Plan Policy COS-A1.7. The combination of project design and compliance with Mitigation Measure BIO-4 will reduce impacts to a less-than-significant. **Less-than significant impact with mitigation measures incorporated.**

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?

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.

The project site has been disturbed by disking for weed abatement, is relatively level, and is well drained by on-site soils. The site assessment performed by Barnett Environmental determined that jurisdictional wetlands and "other wetlands of the United States" do not exist within the project site. Thus, the proposed project would not have a substantial adverse effect on state or federally protected wetlands through direct removal, filling, hydrological interruption, or other means. **No impact.**

d. Interfere substantially with the movement of any resident or migratory fish or wildlife species or with established resident or migratory wildlife corridors, or impede the use of wildlife nursery sites?

The project site is adjacent to existing development to the southwest and northwest as well as I-80 to the southeast. According to the Solano HCP, the project site is located near, but not within, the Vacaville-Fairfield Green Belt corridor.[4] As a result, the project site does not support a wildlife corridor and does not contain any watercourses that would support migratory fish. Therefore, the development of the project site would result in a **less-than-significant impact.**

e. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

Section 14.09.131 of the Vacaville Land Use and Development Code sets forth criteria for the preservation of native tree species, healthy trees, large specimens, and visually prominent trees. The 34 existing on-site trees were evaluated in an Arborist Report conducted by Kurt Stegen, Consulting Arborist, on August 20, 2018.[5] All 34 trees within the project site were tagged, evaluated for health and structural condition, and appraised for value. Pursuant to Section 14.09.131 of the Vacaville Land Use and Development Code, impacts to any tree greater than 31 inches in circumference at 4.5 feet above the ground surface requires a City permit. The proposed project would result in development on the project site and a total of 9 trees would be removed to accommodate the proposed structures, six of which are greater than 31 inches in circumference at 4.5 feet above the ground surface. Trees that would be removed with implementation of the project include both Valley oaks, live oaks, and a walnut tree. Implementation of the proposed project would result in the removal of Valley oak and live oak trees from the project site, some of which would be in excess of the City's standard of 31 inches circumference. Therefore, the Lead Agency will require the project sponsor to implement Mitigation Measures BIO-3 and BIO-5 which would ensure that the proposed project would not conflict with any local policies and ordinances protecting biological resources, such as the City's tree preservation ordinance. **Less than significant impact with mitigation measures incorporated.**

4 Solano County Water Agency, *Solano Habitat Conservation Plan [pg. 4-79].* October 2012.

5 Kurt Stegen Consulting Arborist. *Arborist Report (File No. 18-263).* August 20, 2018.

f. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Conservation Community Plan, or other approved local, regional, or state habitat conservation plan?

The project site is within the boundaries of the Solano Multi-Species Habitat Conservation Plan (SMSHCP), which is a guidance document for regional conservation and environmental permitting for private and public development projects.[6] The SMSHCP has not yet been adopted and, as noted previously, the project site is within the range of potential habitat for several wildlife species, many of which are covered under the SMSHCP. However, Barnett Environmental determined that, although the project site could provide low-quality potential habitat for Swainson's hawk, the site does not represent habitat for any other species covered under the SMSHCP. Applicable avoidance measures for Swainson's hawk have been incorporated in Mitigation Measure BIO-1 and BIO-2. As such, in the event that the SMSHCP is adopted prior to submittal of improvement plans for the proposed project, applicable mitigation measures consistent with the SMSHCP would be implemented. Therefore, the proposed project would not conflict with the applicable provisions of the SMSHCP and a ***less-than-significant*** impact would occur related to conflicts with an adopted Habitat Conservation Plan, Natural Conservation Community Plan, or other approved local, regional, or state habitat conservation plan.

Impact Conclusion

The Project will have a less-than-significant impact on biological resources, with mitigation measures incorporated.

Mitigation Measures

BIO-1 Avoidance Mitigation – Swainson's Hawk and other Special-Status Bird Species protected under the MBTA.

a. If any site disturbance or construction activity for any phase of development begins outside of the February 1st to August 31st breeding season, a preconstruction survey for active nests shall not be required.

   If any site disturbance or construction activity for any phase of development is scheduled to begin between February 1st and August 31st, a qualified biologist shall conduct a preconstruction survey for active tree nests and ground nests from publicly accessible areas within 14 days prior to site disturbance for any phase of development. The survey area shall cover the construction site and a 100-foot radius surrounding the construction site. The preconstruction survey shall be submitted to the City of Vacaville for review. If nesting migratory birds are not found, then further mitigation measures are not required.

b. If active nests of a migratory bird, or other CDFW-protected bird are discovered that may be adversely affected by any site disturbance, or an injured or killed bird is found, the project applicant shall immediately:

   - *Stop all work within a 100-foot radius of the discovery.*
   - *Notify the City of Vacaville Development Department.*

[6] Solano County Water Agency, *Solano Habitat Conservation Plan.* October 2012.

- *Do not resume work within the 100-foot radius until authorized by the biologist.*
- *The biologist shall establish a minimum 100-foot Environmentally Sensitive Area (ESA) around the nest. The ESA may be reduced if the biologist determines that a smaller ESA would still adequately protect the active nest. Further work may not occur within the ESA until the biologist determines that the nest is no longer active.*

BIO-2 Foraging Mitigation – Prior to submitting plans for Grading or Building Permits, the project sponsor shall mitigate for the loss of 6.0-acres of Swainson's hawk foraging habitat using either of the following options:

a. Mitigation may be purchased through a CDFW approved mitigation bank located in Solano County. The project-sponsor shall provide evidence showing proof of purchase of lands within the mitigation bank; or
b. Mitigation may be purchased in accordance with Chapter 14.28.001 (Agricultural and Avian Foraging Habitat Impact Mitigation Program) of the Vacaville Land Use and Development Code.

BIO-3 Tree Avoidance Mitigation – Implementation of the following mitigation measures would reduce the impact to a less than significant level.

Prior to Improvement Plan approval, the plans shall include a list of tree protection methods for review and approval by the City of Vacaville Community Development Department. The list of tree protection methods shall be implemented during construction of the project. The list of tree protection methods shall include, but not be limited to, the following:

- *The project applicant shall design a Fencing Plan requiring the installation of a minimum five-foot tall chain link or substitute fence at the outermost edge of the protected zone of each tree or groups of protected trees. Exceptions to this policy may occur in cases where protected trees are located on slows that will not be graded. The Fencing Plan shall be implemented prior to the commencement of any grading operations.*
- *The Fencing Plan shall require that signs be installed on the fence in four equidistant locations around each individual protected tree. The size of each sign must be a minimum of two feet by four feet and contain the following message: "Warning, this fence shall not be removed or relocated without written authorization from the City of Vacaville Community Development Department."*
- *Signs placed on fencing around a grove of protected trees shall be placed at approximately 50-foot intervals.*
- *Approved fencing shall remain in place throughout the entire construction period and shall not be removed, relocated, taken down, or otherwise modified in whole or in part without prior written authorization from the City of Vacaville Community Development Department.*

BIO-4 Oak Woodland Mitigation – Prior to obtaining Grading or Building Permits, the project-sponsor shall mitigate all impacted oak woodland by preserving oak woodland with similar tree canopy densities at a 3:1 ratio, in accordance with General Plan Policy COS-A1.7 of the Conservation Element.

BIO-5 Tree Replacement Mitigation – Prior to any removal of protected trees within the project site, the project applicant shall obtain a tree removal permit from the City of Vacaville. In conjunction with submittal of a tree removal permit application, the applicant shall submit a site plan showing all protected trees proposed for removal for review and approval by the City of Vacaville Community Development Department. In accordance with Chapter 14.09.131, Tree Preservation Guidelines, of the Vacaville Land Use and Development Code, the project shall mitigate onsite for the adversely affected trees by replacing and replanting the removed trees as follows:

- Trees with a diameter at breast height (dbh) of 6 to 10 inches shall be replaced at a ratio of two replacement trees to one removed tree (2:1).
- Trees with a dbh of 10.1 to 18 inches shall be replaced at a ratio of 4:1.
- Trees with a dbh of 18.1 to 36 inches shall be replaced at a ratio of 6:1.
- Trees with a dbh over 36 inches shall be replaced at a ratio of 8:1.

V. CULTURAL RESOURCES

Would the project:	Potentially Significant Impact	Less-Than-Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a. Cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5?	☐	✖	☐	☐
b. Cause a substantial adverse change in the significance of a unique archaeological resource pursuant to Section 15064.5?	☐	✖	☐	☐
c. Disturb any human remains, including those interred outside of dedicated cemeteries.	☐	✖	☐	☐

Affected Environment

The project site is currently undeveloped and vacant with the exception of two dilapidated structures, a house-trailer and an office trailer, in the southern and western portions. A field survey of the project site performed by Peak & Associates, Inc. on June 14, 2018, included a complete inspection of the site. The results of the survey indicated that the topography of the site appears to have been previously leveled for agricultural use and irrigation lines and connection points are visible. In addition, as noted during the field survey, the project site was at least five feet lower than nearby I-80, indicating possible previous grading of the site for construction soil. Historic or prehistoric resources were not observed within the project site during the June 14 field survey.

Discussion

a. Cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5?

Historical resources are features that are associated with the lives of historically-important persons and/or historically-significant events, that embody the distinctive characteristics of a type, period, region or method of construction, or that have yielded, or may be likely to yield, information important to the pre-history or history of the local area, California, or the nation. Examples of typical historical resources include, but are not limited to, buildings, farmsteads, rail lines, bridges, and trash scatters containing objects such as colored glass and ceramics.

A records search of the California Historical Resources Information System (CHRIS) performed by the Northwest Information Center (NWIC) at Sonoma State University, was conducted on June 6, 2018.[7] The NWIC concluded that cultural resources studies that cover the project site have been conducted and the project site does not contain any recorded archeological resources or any historic buildings or structures on any lists of historic resources.

In addition to the field survey, Peak & Associates, Inc. performed a trenching program on June 27, 2018 in order to inspect subsurface soils for cultural resource deposits. A total of 27 trenches, measuring between eight to 10 feet long and three to six feet deep, with a width of between 24 to 36 inches, were dug throughout the project site. Soils removed from

[7] Northwest Information Center. *Records Search for the Praxis Properties Storage Facility Project.* June 6, 2018.

all of the trenches indicated that cultural deposits were not present; however, trench #11 revealed a broken projectile point at a depth of two to three feet.

The point type is consistent with Stockton serrated type, and appears to have been made from opaque black obsidian, consistent with a known source in nearby Napa County. Approximately 40 percent of the removed soil from trench #11 was screened in a 1/8-inch mesh screen to ensure that a cultural deposit was not present. The results of the screening determined that the artifact was an isolated find and other artifacts or foreign objects were not located.

The Vacaville General Plan puts forth Goals and Policies designed to protect and enhance cultural resources for their aesthetic, scientific, educational, and cultural values such as Policy COS-P6.4, which requires that, in the event that cultural resources, including archaeological or paleontological resources, are uncovered, construction must stop until appropriate mitigation is implemented.

Based on the above and considering the potential for previous grading to have occurred and the negative results for cultural deposits determined through the field survey and trenching program, surficial historic resources are not expected within the project site. However, the potential exists that site grading associated with implementation of the proposed project could result in disturbance of previously unknown subsurface historic resources.

Considering that unknown archaeological resources, including human remains, and/or historic resources have the potential to exist on-site, ground-disturbing activity related to project construction could encounter such resources. Therefore, the proposed project could cause a substantial adverse change in the significance of a historic or archaeological resource pursuant to CEQA Guidelines Section 15064.5 and/or disturb human remains, including those interred outside of formal cemeteries during construction. Therefore, impacts could be considered potentially significant*.* The Lead Agency will require the project sponsor to implement Mitigation Measures CUL-1 and CUL-2 to reduce impacts to less than significant. **Less than significant impact with mitigation measures incorporated.**

b. Cause a substantial adverse change in the significance of a unique archaeological resource pursuant to Section 15064.5?

As stated above, a CHRIS records search performed by the NWIC at Sonoma State University concluded that the project site does not contain any recorded archeological resources or any historic buildings or structures on any lists of historic resources. Although archeological resources were not reported to have occurred at the project site, the potential exists for ground disturbing activities associated with implementation of the proposed project to encounter such resources. Thus, the proposed project could cause a substantial adverse change in the significance of a unique archaeological resource pursuant to Section 15064.5, and a potentially significant impact could occur. The Lead Agency will require the project sponsor to implement Mitigation Measures CUL-1 and CUL-2 to reduce impacts to less-than-significant levels. **Less than significant impact with mitigation measures incorporated.**

c. Disturb any human remains, including those interred outside of dedicated cemeteries.

The possibility exists for unknown archaeological resources, including human remains, and/or historic resources to occur on-site. As such, the proposed project could potentially

disturb human remains, including those interred outside of dedicated cemeteries, and a potentially significant impact could occur. The Lead Agency will require the project sponsor to implement Mitigation Measures CUL-1 and CUL-2 to reduce impacts to less-than-significant levels. **Less than significant impact with mitigation measures incorporated.**

Impact Conclusion

The Project will have a less-than-significant impact on cultural resources, with mitigation measures incorporated.

Mitigation Measures

CUL-1 In the event of the accidental discovery or recognition of any human remains, all work shall stop and the City shall be notified of the discovery. Further excavation or disturbance of the find or any nearby area reasonably suspected to overlie adjacent human remains shall not occur until compliance with the provisions of CEQA Guidelines Section 15064.5(e)(1) and (2) has occurred. The Guidelines specify that in the event of the discovery of human remains other than in a dedicated cemetery, no further excavation at the site or any nearby area suspected to contain human remains shall occur until the Solano County Coroner has been notified to determine if an investigation into the cause of death is required. If the coroner determines that the remains are Native American, then, within 24 hours, the Coroner must notify the Native American Heritage Commission, which in turn will notify the most likely descendants who may recommend treatment of the remains and any grave goods. The potential exists that the Native American Heritage Commission may be unable to identify a most likely descendant, the most likely descendant fails to make a recommendation within 48 hours after notification by the Native American Heritage Commission, or the landowner or his authorized agent rejects the recommendation by the most likely descendant and mediation by the Native American Heritage Commission fails to provide a measure acceptable to the landowner. In such a case, the landowner or his authorized representative shall rebury the human remains and grave goods with appropriate dignity at a location on the property not subject to further disturbances. Should human remains be encountered, a copy of the resulting County Coroner report noting any written consultation with the Native American Heritage Commission shall be submitted as proof of compliance to the City's Community Development Department.

CUL-2 In the event a potentially significant cultural resource is encountered during subsurface earthwork activities, all construction activities within a 100-foot radius of the find shall cease the City shall be notified. Workers should avoid altering the materials until an archaeologist who meets the Secretary of Interior's Professional Qualification Standards for archaeology has evaluated the find. The Applicant shall include a standard inadvertent discovery clause in every construction contract to inform contractors of this requirement. The qualified archeologist shall make recommendations to the Lead Agency on the measures that shall be implemented to protect the discovered resources, including but not limited to, culturally appropriate temporary and permanent treatment, which may include avoidance of cultural resources, in-place preservation, and/or re-burial on project property so the resource(s) are not subject to further disturbance in perpetuity. If avoidance is determined to be infeasible, pursuant to CEQA Guidelines Section 15126.4(b)(3)(C), a data recovery plan, which makes provisions for adequately recovering the

scientifically consequential information from and about the historical resource, shall be prepared and adopted prior to any excavation being undertaken. Such studies shall be deposited with the California Historical Resources Regional Information Center. If necessary, excavation and evaluation of the finds shall comply with Section 15064.5 of the CEQA Guidelines.

Potentially significant cultural resources include, but are not limited to, stone, bone, glass, wood, or shell artifacts or features, including hearths, structural remains, or historic dumpsites. Any previously undiscovered resources found during construction within the project site shall be recorded on appropriate Department of Parks and Recreation (DPR) 523 forms and will be submitted to the City of Vacaville, the Northwest Information Center, and the State Historic Preservation Officer (SHPO), as required.

VI. ENERGY

Would the project:	Potentially Significant Impact	Less-Than-Significant with Mitigation Incorporated	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?	☐	✖	☐	☐
b. Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	☐	☐	✖	☐

Affected Environment

As noted under the project description, the project site is mostly vacant with several dilapidated structures located on the southern and western portions of the site. Substantial amounts of energy is not currently consumed on-site. The proposed project is to construct a 98,000 sq. ft. self-storage facility on a vacant 6-acre parcel of land located at 5920 Cherry Glen Road, north of I-80 in Vacaville California. The project site is mostly vacant with several dilapidated structures located on the southern and western portions of the site, which would require demolition. The self-storage facility consists of 10 storage buildings with a 1,136 sq. ft. office and a 1,900 sq. ft. live-in manager's unit. The storage buildings range in size from 5,100 sq. ft. to 15,680 sq. ft. The storage facility includes single-story and two-story buildings with standard units and climate control units.

Energy Setting

Energy resources include electricity, natural gas and other fuels. The production of electricity requires the consumption or conversion of energy resources, including water, wind, oil, gas, coal, solar, geothermal, and nuclear resources, into energy. Energy production and energy use both result in the depletion of nonrenewable resources (e.g., oil, natural gas, coal, etc.) and emission of pollutants. Energy usage is typically quantified using the British Thermal Unit (BTU). The BTU is the amount of energy that is required to raise the temperature of one pound of water by one degree Fahrenheit. As points of reference, the approximate amount of energy contained in a gallon of gasoline, 100 cubic feet (one therm) of natural gas, and a kilowatt hour of electricity are 123,000 BTUs, 100,000 BTUs, and 3,400 BTUs, respectively. According to the Vacaville General Plan (pg. COS-28), the commercial/industrial sector's energy demands constitute approximately 47 percent of total energy consumption within Vacaville city limits, with 25% from electricity and 23% from natural gas.

Electricity

Electricity, a consumptive utility, is a man-made resource. The production of electricity requires the consumption or conversion of energy resources, including water, wind, oil, gas, coal, solar, geothermal, and nuclear resources, into energy. The delivery of electricity involves a number of system components, including substations and transformers that lower transmission line power (voltage) to a level appropriate for on-site distribution and use. The electricity generated is distributed through a network of transmission and distribution lines commonly called a power grid. Conveyance of electricity through transmission lines is typically responsive to market demands.

Energy capacity, or electrical power, is generally measured in watts while energy use is measured in watt-hours. For example, if a light bulb has a capacity rating of 100 watts, the energy required to keep the bulb on for 1 hour would be 100 watt-hours. If ten 100 watt bulbs were on for 1 hour, the energy required would be 1,000 watt-hours or 1 kilowatt-hour (kWh). On a utility scale, a generator's capacity is typically rated in megawatts, which is one million watts, while energy usage is measured in megawatt-hours or gigawatt-hours (GWh), which is one billion watt-hours.

Natural Gas

Natural gas is a combustible mixture of simple hydrocarbon compounds (primarily methane) that is used as a fuel source. Natural gas consumed in California is obtained from naturally occurring reservoirs and delivered through high-pressure transmission pipelines. The natural gas transportation system is a nationwide network. Natural gas is used in electricity generation, space heating, cooking, water heating, industrial processes, and as a transportation fuel. Natural gas is measured in terms of cubic feet.

California Energy Consumption

According to the California Energy Commission (CEC), total system electric generation for California in 2017 was 292,039 gigawatt-hours (GWh).[8] California's non-CO2 emitting electric generation categories (nuclear, large hydroelectric, and renewable generation) accounted for more than 56 percent of total in-state generation for 2017. California's in-state electric generation was 206,336 GWh and electricity imports were 85,703 GWh. According to the CEC, nearly 45 percent of the natural gas burned in California was used for electricity generation, with the remainder consumed in the residential (21 percent), industrial (25 percent), and commercial (9 percent) sectors.[9] In 2012, total natural gas demand in California for industrial, residential, commercial, and electric power generation was 2,313 billion cubic feet. According to the CEC, gasoline has remained the dominant fuel within the transportation sector, with diesel fuel and aviation fuels following.[10] In 2016, California consumed approximately 15 billion gallons of gasoline and approximately 3.35 billion gallons of diesel fuel. An increasing amount of electricity is being used for transportation energy, which is chiefly attributed to the acceleration of light-duty plug-in electric vehicles. In 2016, transportation in California, consisting of light-duty vehicles, medium/heavy-duty vehicles, trolleys, and rail transit, consumed approximately 1.53 million megawatt hours (MWh).

California Green Building Standards Code

The 2016 California Green Building Standards Code, otherwise known as the CALGreen Code (CCR Title 24, Part 11), is a portion of the California Building Standards Commission (CBSC), which became effective with the rest of the CBSC on January 1, 2017. The purpose of the CALGreen Code is to improve public health, safety, and general welfare by enhancing the design and construction of buildings through the use of building concepts having a reduced negative impact or positive environmental impact and encouraging sustainable construction practices. The provisions of the code apply to the planning, design, operation, construction, use, and occupancy of every newly constructed building or structure throughout California. Requirements of the CALGreen Code include, but are not limited to, the following measures:

8 California Energy Commission. *Total System Electric Generation.* 2017.

9 California Energy Commission. *Supply and Demand of Natural Gas in California.* 2019.

10 California Energy Commission. *Integrated Energy Policy Report.* 2017.

- Compliance with relevant regulations related to future installation of Electric Vehicle charging infrastructure in residential and non-residential structures;
- Indoor water use consumption is reduced through the establishment of maximum fixture water use rates;
- Outdoor landscaping must comply with the California Department of Water Resources' Model Water Efficient Landscape Ordinance (MWELO), or a local ordinance, whichever is more stringent, to reduce outdoor water use;
- Diversion of 65 percent of construction and demolition waste from landfills;
- Mandatory periodic inspections of energy systems (i.e., heat furnace, air conditioner, mechanical equipment) for nonresidential buildings over 10,000 sf to ensure that all are working at their maximum capacity according to their design efficiencies; and
- Mandatory use of low-pollutant emitting interior finish materials such as paints, carpet, vinyl flooring, and particle board.

Building Energy Efficiency Standards

The 2016 Building Energy Efficiency Standards is a portion of the CBSC, which expands upon energy-efficiency measures from the 2013 Building Energy Efficiency Standards resulting in a five percent reduction in energy consumption from the 2013 standards for commercial structures. Energy reductions relative to previous Building Energy Efficiency Standards are achieved through various regulations including requirements for the use of high efficacy lighting, improved water heating system efficiency, and high-performance attics and walls.

Vacaville General Plan

The proposed project is subject to the goals and policies outlined in the Vacaville General Plan aimed at reducing energy consumption. The following policies from the General Plan are particularly applicable to the subject project:

- POLICY COS-P10.1 – Encourage the development of energy generated by renewable fuel sources within the city, provided that significant adverse environmental impacts associated with such development can be successfully mitigated.

- POLICY COS-P10.3 – Encourage the installation of solar voltaic panels on new homes and businesses through reduced building permit fees or other incentives.

- POLICY COS-P10.4 – Encourage the use of solar water and pool heaters.

- POLICY COS-P11.1 – Require that new development incorporate energy-efficient design features for HVAC, lighting systems, and insulation that exceed Title 24.

- POLICY COS-P11.2 – Require that site and structure designs for new development promote energy efficiency.

Discussion

a. Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?

Construction Energy Use

Construction of the proposed project would involve on-site energy demand and consumption from the use of oil in the form of gasoline and diesel fuel for construction worker vehicle trips, hauling and materials delivery truck trips, and operation of off-road construction equipment. In addition, diesel-fueled portable generators may be necessary to provide additional electricity demands for temporary on-site lighting, welding, and for supplying energy to areas of the site where energy supply cannot be met via a hookup to the existing electricity grid. Project construction would not involve the use of natural gas appliances or equipment.

Even during the most intense period of construction, due to the different types of construction activities (e.g., site preparation, grading, building construction), only portions of the project site would be disturbed at a time, with operation of construction equipment occurring at different locations on the project site, rather than a single location. In addition, all construction equipment and operation thereof would be regulated per the CARB In-Use Off-Road Diesel Vehicle Regulation. The In-Use Off-Road Diesel Vehicle Regulation is intended to reduce emissions from in-use, off-road, heavy-duty diesel vehicles in California by imposing limits on idling, requiring all vehicles to be reported to CARB, restricting the addition of older vehicles into fleets, and requiring fleets to reduce emissions by retiring, replacing, or repowering older engines, or installing exhaust retrofits. The In-Use Off-Road Diesel Vehicle Regulation would subsequently help to improve fuel efficiency and reduce GHG emissions.

Consumption of such resources would be temporary and would cease upon the completion of construction. Excess vehicle idling during construction would result in wasteful inefficient consumption of energy. Therefore, the Lead Agency will require implementation of mitigation measure ENG-1, which limits idling to no more than 5 minutes. As mitigated, construction activities would not result in inefficient energy consumption during construction. **Less than significant impact with mitigation measures incorporated.**

Operation

Following implementation of the proposed project, PG&E would provide electricity and natural gas to the project site. Energy use associated with operation of the proposed project would be typical of warehouse uses, requiring electricity and natural gas for interior and exterior building lighting, heating, ventilation, and air conditioning (HVAC), electronic equipment, machinery, appliances, security systems, and more. Maintenance activities during operations, such as landscape maintenance, would involve the use of electric or gas-powered equipment. In addition to on-site energy use, the proposed project would result in transportation energy use associated with vehicle trips generated by employee commutes and the movement of goods. CalEEMod was used to estimate energy use at project operation (Appendix B).

At operation, the proposed project would result in the consumption of approximately 364,857 kWh of electricity per year (0.36 GWh of electricity per year). As described above, in 2017, the total system electric generation for California was 292,039 GWh. The project's consumption of electricity at operation would represent approximately 0.0001 percent of the 2017 statewide total system electric generation, which is an insignificant fraction of statewide consumption.

At operation, the proposed project would result in the consumption of approximately 2,116,670 kBTU of natural gas per year (2,075,166 cubic feet of natural gas per year). As noted above, California consumed a total of 2,313 billion cubic feet of natural gas in 2012. The project's consumption of natural gas at operation would represent approximately 0.000000897 percent of the 2012 statewide annual natural gas consumption, which is an insignificant fraction of statewide consumption.

At operation, the proposed project would result in the consumption of petroleum-fuel related to vehicular travel quantified as vehicle miles traveled (VMT) to and from the project site. Table 4 presents the projected consumption of approximately 5,218 gallons of diesel and 40,157 gallons of gasoline per year, for a total of 45,375 gallons of petroleum-based fuels per year. The projected annual fuel consumption is based on an annual estimate of 1,063,275 VMT for the Project as generated from CalEEMod, and fuel efficiency rates obtained from the U.S. Department of Transportation and Federal Highway Administration's publication titled, "Our Nation's Highways 2011." The estimates are conservative since they assume that no electric, hybrid, or other alternative fuel use vehicles are in the fleet mix. Federal and state laws and regulations will continue to require further improvements in fuel efficiency in motor vehicles produced and/or sold in the United States and total annual consumption of petroleum-based fuel is expected to decrease over time.

TABLE 4. ESTIMATED PETROLEUM-BASED FUEL USAGE AT OPERATION

MOBILE SOURCE	FLEET MIX[A]	GENERATION FACTOR[B,C]	ANNUAL CONSUMPTION (IN GALLONS)
Diesel (gallons)	13.89%	147,688/28.3 mpg	5,218
Gasoline (gallons)	86.11%	915,586/22.8 mpg	40,157
Total Gasoline Usage			**45,375**

Source: CalEEMod Data; Notes: mpg = miles per gallon

A Data Source: USDOT and FHWA, Our Nation's Highways 2011, Chapter 5, Motor Fuel, Fuel Consumption by State and Type, https://www.fhwa.dot.gov/policyinformation/pubs/hf/pl11028/onh2011.pdf

B Data Source: California Department of Transportation, 2007 California Motor Vehicle Stock, Travel and Fuel Forecast, http://www.energy.ca.gov/2008publications/CALTRANS-1000-2008-036/CALTRANS-1000-2008-036.PDF

C Diesel fuel contains roughly 10-15% more energy per gallon than gasoline. US Department of Energy, Model Year 2017 Fuel Economy Guide, http://www.fueleconomy.gov/feg/pdfs/guides/FEG2017.pdf

In 2016, California consumed approximately 15 billion gallons of gasoline and approximately 3.35 billion gallons of diesel fuel. As shown in Table 4 above, operation of the proposed project would use approximately 40,157 gallons of gasoline and 5,218 gallons of diesel. The project's consumption of gasoline would represent approximately 0.000002 percent of the 2016 statewide annual gasoline consumption, which is an insignificant fraction of statewide consumption. The project's consumption of diesel would represent approximately 0.000001 percent of the 2016 statewide annual diesel consumption, which is an insignificant fraction of statewide consumption.

Petroleum-based fuel consumption during Project operation would result in small percentage of the total petroleum-based fuel consumed by the State of California. Therefore, the Project would not result in the wasteful, inefficient, and unnecessary consumption of petroleum-based fuel during Project operation. As such, operational-related energy impacts related to the consumption of petroleum-based fuel would be less than significant.

In conclusion, energy would be consumed through construction activities, general operational activities in the new building, and daily vehicle use. While the long-term operation of the project would result in an increase in energy consumption compared to existing conditions, the project will incorporate design measures (related to electricity, natural gas and water use) in compliance with Title 24 and Vacaville General Plan to minimize energy consumption. As such, the project would promote energy efficiency. Therefore, operation of the proposed project would not result in the wasteful, inefficient, and unnecessary consumption of energy, and a ***less-than-significant*** impact would occur.

b. Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

The CARB has recently prepared the *2017 Climate Change Scoping Plan Update* (2017 Scoping Plan),[11] which builds upon previous efforts to reduce GHG emissions and is designed to continue to shift the California economy away from dependence on fossil fuels. The 2017 Scoping Plan includes examples of local actions (municipal code changes, zoning changes, policy directions, and mitigation measures) that would support the State's climate goals. The examples provided include, but are not limited to, enforcing idling time restrictions for construction vehicles, utilizing existing grid power for electric energy rather than operating temporary gasoline/diesel-powered generators, and increasing use of electric and renewable fuel-powered construction equipment. The regulation described above, with which the proposed project must comply, would be consistent with the intention of the 2017 Scoping Plan.

Based on the above, the temporary increase in energy use occurring during construction of the proposed project would not result in a significant increase in peak or base demands or require additional capacity from local or regional energy supplies. In addition, operations of the proposed project would be required to comply with all applicable regulations related to energy conservation and fuel efficiency, which would help to reduce the temporary increase in demand. Therefore, the proposed project would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency, and a ***less-than-significant*** impact would occur.

Impact Conclusion

Energy consumed by the project will have a less-than-significant impact on the environment, with the following mitigation measure incorporated.

[11] California Air Resources Board. *The 2017 Climate Change Scoping Plan Update.* January 20, 2017.

Mitigation Measures

ENG-1 Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes (as required by the California airborne toxics control measure Title 13, Section 2485 of California Code of Regulations [CCR]). Clear signage shall be provided for construction workers at all access points.

VII. GEOLOGY AND SOILS

Would the project:	Potentially Significant Impact	Less-Than-Significant with Mitigation Incorporated	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.	☐	☐	✖	☐
ii. Strong seismic ground shaking?	☐	☐	✖	☐
iii. Seismic-related ground failure, including liquefaction?	☐	☐	✖	☐
iv. Landslides?	☐	☐	✖	☐
b. Result in substantial soil erosion or the loss of topsoil?	☐	☐	✖	☐
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?	☐	☐	✖	☐
d. Be located on expansive soil, as defined in Table 18-1B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?	☐	✖	☐	☐
e. Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	☐	☐	✖	☐
f. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☐	✖	☐

Affected Environment

The project-sponsor hired Gularte & Associates, Inc. to prepare a site-specific Geotechnical Report (Appendix H). According to the report, the project site is generally flat and predominantly covered by short grasses and weeds, with trees scattered throughout. The project site is located at an elevation of approximately 222 feet above mean sea level and does not contain discernable elevation changes. The site is located near the western margin of the Sacramento Valley, slightly within the Coast Ranges. The hills directly to the north of the site are composed of Miocene-age sedimentary rocks (shales and sandstones) predominately from the Forbes Formation, the Guinda Formation, the Funks Formation, and the Yolo Formation. Project site soils are comprised predominantly of the Yolo series of soils, including silty clay and Brentwood clayey loam.

Discussion

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.

The California Division of Mines and Geology prepared a Fault Activity Map of California in 2010 which indicates the locations of several known active faults in the vicinity of the project site. Active faults, as included in the Alquist-Priolo Earthquake Fault Zones, are typically characterized by displacement of Holocene deposits, evidence of fault creep, and well-defined seismic activity on traces on known faults. According to the United States Geological Survey (USGS) Earthquake Hazards Program, the nearest fault to the project site is the potentially active Vaca-Kirby Hills fault located approximately 0.25-mile east, which is a part of the Great Valley Fault Zone. In addition, the Cordelia fault zone and Green Valley fault are located 14 and 15 miles southwest of the project site, respectively. Other potentially active faults in the area include the Rogers Creek, West Napa, Hayward, Greenville, Green Valley-Concord, and Calaveras faults. Thus, the project site does not contain any known faults and the project would not be subject to risks related to fault rupture.

ii. Strong seismic ground shaking?

A 1999 survey performed by the USGS compiled earthquake fault research for the San Francisco Bay Area in order to determine the probability of fault segment rupture. The results of the survey indicated that the probability of a magnitude 6.7 or greater earthquake occurring within the next 30 years is approximately 70 percent. According to the 2008 Seismic Motion Interpolator prepared by the California Division of Mines and Geology, there is a 10 percent chance that the project site would experience a horizontal ground acceleration of 0.44g-force (g) in the next 50 years. A horizontal ground acceleration of 0.44g is considered to be a relatively high level of ground shaking in California. The General Plan and ECAS EIR requires that all new structures be designed to meet the current California Building Standards Commission (CBSC) requirements in addition to implementing General Plan Policies SAF-P1.5, SAF-P1.6, and SAF-P1.7, which require geotechnical studies be prepared for projects to determine geologic stability. In compliance with the foregoing General Plan Policies, a Geotechnical Report was prepared for the project site by Gularte & Associates, which concluded that, although the project site could be subject to seismic ground shaking, site conditions were considered suitable for the proposed project. As a result of compliance with the aforementioned policies and CBSC requirements, the impacts of fault rupture and ground shaking are considered less than significant.

iii. Seismic-related ground failure, including liquefaction?

Liquefaction refers to the loss of soil strength resulting from shaking of water-saturated, granular soils. This weakening of the soils can make the soil act like quicksand.[12]

[12] City of Vacaville. *General Plan and ECAS EIR* [Chapter 4.6]. August 2015.

According to the Vacaville General Plan, Vacaville has areas with very low, low, and moderate risk of liquefaction. However, areas along and adjacent to major water ways, feature high and very high susceptibility to liquefaction. A site survey performed by Gularte & Associates determined that, due to the relatively flat topography of the project site, the risk of soil liquefaction to occur is considered to be insignificant.

iv. Landslides?

Landslides and slope instability are characterized by the movement of soils and surficial deposits and bedrock down steep slopes. The General Plan and ECAS EIR states that the majority of the City of Vacaville is within flat land that is not susceptible to landslides outside of specific mapped areas along the western portion of the City.

The City of Vacaville is located between two geomorphic provinces known as the Great Valley geomorphic province and the Coast Ranges geomorphic province. The project site is located at an elevation of approximately 222 feet above mean sea level (MSL). The topography of the site is generally flat with no discernable elevation changes and primary drainage flows to the southeast. The hills directly north of the project site are composed of Miocene-age sedimentary rocks. A U.S. Department of Agriculture (USDA) Soil Conservation Service (SCS) survey of the project site determined that soils on the project site are comprised predominantly of the Yolo Series of soils which consist mostly of silty clay and the Brentwood clayey loam.

Conclusion

Given that the project site is not within an Alquist-Priolo Special Studies Zone, implementation of the proposed project would not be subject to risk due to the rupture of a known earthquake fault. The City of Vacaville General Plan and ECAS EIR indicates that the City of Vacaville is located in a seismically active zone; however, development of the project site with the proposed structures would be required to comply with the seismic requirements set forth by the CBSC and the above-mentioned General Plan Policies related to seismic ground shaking, including liquefaction. Compliance with current CBSC requirements and related General Plan policies, would ensure that the proposed project would result in a **less-than-significant** impact related to exposing people to the risk of loss, injury, or death involving strong seismic ground shaking or seismic-related ground failure, liquefaction, or landslides.

b. Result in substantial soil erosion or the loss of topsoil?

During the early stages of construction activities, topsoil would be exposed due to grading of the site. After grading and prior to overlaying the ground surface with impervious surfaces and structures, the potential exists for topsoil loss to occur due to wind and water erosion. However, pursuant to Chapter 14.19.242 (Grading – Permit and Procedures) of the Vacaville Land Use and Development Code, the proposed project would include a construction Erosion and Sediment Control Plan, which includes erosion prevention requirements for construction activities. The Erosion and Sediment Control Plan also includes regulations for vehicle entrance and exit points as well as silt fences that would be used to prevent any sediment contained in runoff from exiting the site. In addition, the proposed project would be required to comply with Section 14.26.030 of the Vacaville Land Use and Development Code, which establishes Best Management Practices (BMPs) to control erosion and Policy COS-P.14.5, which requires the implementation of BMPs to

minimize erosion resulting from construction or from new impervious surfaces. Considering the application of the Erosion and Sediment Control Plan, and compliance with Policy COS-P14.5, the proposed project would not result in substantial soil erosion or the loss of topsoil and a **less-than-significant** impact would result.

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?

A review of the site geology and ground water conditions indicated that groundwater was encountered at a depth of five to eight feet below ground surface throughout the project site. The groundwater findings were consistent with data obtained from the Department of Water Resources, which lists groundwater levels to be between five and 15 feet below ground surface. Generally, soils saturated with groundwater can be more susceptible to landslide, later spreading, subsidence, or liquefaction. Despite the presence of groundwater at relatively shallow depths at the site, per the Geotechnical Report prepared for the proposed project, the risk of lateral spreading from landslide and liquefaction is considered low because liquefiable soils were not encountered on the project site during the survey. In addition, the topography of the site is relatively flat with an approximately two percent grade or less, and fine grained-soils comprise much of the subsurface soils. Thus, the risk of landslide and lateral spread are considered to be insignificant and the proposed project would not result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse. Therefore, a **less-than-significant** impact would occur.

d. Be located on expansive soil, as defined in Table 18-1B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?

Laboratory testing of project site soils was performed by Gularte & Associates, Inc. in order to evaluate the expansion potential of on-site soils. An expansion index test was performed on soil boring samples taken throughout the project site, the results of which indicated that the on-site soils have a low potential for expansion. Based on information in the Geotechnical Report prepared by Gularte & Associates, Inc., the project site soils would be considered suitable for the anticipated loads associated with implementation of the proposed project provided the recommendations from the report are properly implemented. Mitigation Measure GEO-1 requires compliance with recommendations from the Geotechnical Report, and would ensure that the foundations and pavements associated with implementation of the proposed project are designed to reduce the impact of expansive soils. In addition, new development within the City of Vacaville is required to comply with the CBSC, which contains structural design standards for building foundations. Therefore, with implementation of CBSC design standards and recommendations from the Geotechnical Report, the proposed project could have a potentially significant impact. Thus, the Lead Agency will require the project sponsor to implement Mitigation Measures GEO-1GEO-1 and GEO-2 to reduce impacts to less-than-significant. **Less than significant impact with mitigation measures incorporated.**

e. Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?

General Plan Policy PUB-P13.3 requires that new habitable structures located within the City limits connect to the public wastewater collection system. However, while future

improvements to wastewater facilities are planned for the project site area, current City wastewater infrastructure does not exist in the project site vicinity. Thus, installation of an on-site septic tank or alternative wastewater disposal system is required for the proposed project. The proposed project would include an 188,000-gallon water storage tank to provide for on-site water service and fire flow. In addition, the proposed project would make use of an on-site septic system comprised of a Presby Advanced Enviro-Septic (AES) Wastewater Treatment System. The AES system would be located in the northwestern portion of the project site. A preliminary on-site sewage disposal design study prepared by the applicant indicated that the property would be able to accommodate the AES within the specified location (Appendix C). Therefore, based on the conclusions of the Preliminary Onsite Sewage Disposal Design Recommendations, the project site soils could adequately support the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater, and a **less-than-significant** impact would result.

f. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

The City's General Plan and ECAS EIR indicates that the EIR study area is underlain with Quaternary alluvial deposits dating from the Holocene and Late Pleistocene. Although, only a single fossil locality has been identified within the EIR Study area, the possibility exists that ground-disturbing construction associated with development allowed under the General Plan could result in damage to, or destruction of, paleontological resources. The General Plan puts forth policies designed to provide mitigation of impacts to paleontological resources. Policy COS-P.6 directs that on-site excavation or other activities cease if paleontological resources are encountered, and appropriate mitigation measures be implemented. Policy COS-P.4 requires that all paleontological resources on a project site either be preserved in situ or adequately documented as a condition for removal.

The General Plan and ECAS EIR determined that the above General Plan policies would provide for protection of paleontological resources within the EIR study area by requiring work to stop in order to prevent additional disturbance of finds discovered during construction, and, as a result, a less-than-significant impact to paleontological resources would result with buildout of the General Plan. Because the proposed project is consistent with the General Plan and would be subject to the aforementioned General Plan policies, impacts to paleontological resources related to development of the project site have been previously analyzed in the General Plan and ECAS EIR. As such, compliance with General Plan policies COS-P6.3 and COS-P6.4 would ensure that the proposed project would result in a **less-than-significant** impact related to directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.

Impact Conclusion

The Project will have a less-than-significant impact on geology and soils, with the following mitigation measures implemented.

Mitigation Measures

GEO-1 Prior to issuance of a grading permit, the applicant/developer shall incorporate the recommendations of a design-level geotechnical report into the Improvement Plans for approval by the City Engineer.

GEO-2 During construction, the applicant/developer shall ensure that construction activities are conducted in adherence to City of Vacaville General Plan Policies COS-P6.3 and COS-P6.4. The project applicant shall demonstrate compliance with the foregoing requirement through inclusion of the following language on all site grading plans:

- Policy COS-P6.3 Require that areas found to contain significant historic or prehistoric artifacts be examined by a qualified consulting archaeologist or historian for appropriate protection and preservation.
- Policy COS-P6.4 Require that if cultural resources, including archaeological or paleontological resources, are uncovered during grading or other on-site excavation activities, construction shall stop until appropriate mitigation is implemented.

Inclusion of the language above shall be included on grading plans and verified by the City Engineer through review and approval prior to approval of a grading permit.

VIII. GREENHOUSE GAS EMMISSIONS

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	✖	☐	☐
b. Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gasses?	☐	☐	✖	☐

Affected Environment

The proposed project is to construct a 98,000 sq. ft. self-storage facility on a vacant 6-acre parcel of land located at 5920 Cherry Glen Road, north of I-80 in Vacaville California. The project site is mostly vacant with several dilapidated structures located on the southern and western portions of the site, which would require demolition. The self-storage facility consists of 10 storage buildings with a 1,136 sq. ft. office and a 1,900 sq. ft. live-in manager's unit. The storage buildings range in size from 5,100 sq. ft. to 15,680 sq. ft. The storage facility includes single-story and two-story buildings with standard units and climate control units. The perimeter of the property would be enclosed by 8 ft. tall tubular steel ornamental fencing with decorative landscaping.

Emissions of greenhouse gases (GHGs) contributing to global climate change are attributable in large part to human activities associated with the industrial/manufacturing, utility, transportation, residential, and agricultural sectors. Therefore, the cumulative global emissions of GHGs contributing to global climate change can be attributed to every nation, region, and city, and virtually every individual on earth. An individual project's GHG emissions are at a micro-scale level relative to global emissions and effects to global climate change; however, an individual project could result in a cumulatively considerable incremental contribution to a significant cumulative macro-scale impact. As such, impacts related to emissions of GHG are inherently considered cumulative impacts.

A number of regulations currently exist related to GHG emissions, predominantly AB 32, Executive Order S-3-05, and Senate Bill (SB) 32. AB 32 sets forth a statewide GHG emissions reduction target of 1990 levels by 2020. Executive Order S-3-05 sets forth a transitional reduction target of 2000 levels by 2010, the same target as AB 32 of 1990 levels by 2020, and further builds upon the AB 32 target by requiring a reduction to 80 percent below 1990 levels by 2050. SB 32 also builds upon AB 32 and sets forth a transitional reduction target of 40 percent below 1990 levels by 2030. In order to implement the statewide GHG emissions reduction targets, local jurisdictions are encouraged to prepare and adopt area-specific GHG reduction plans and/or thresholds of significance for GHG emissions. The City of Vacaville adopted the ECAS, which was designed with the goal of achieving compliance with the foregoing State requirements for the reduction of GHG emissions, as well as State goals for the conservation of natural resources. The ECAS is implemented through municipal and communitywide emissions reduction and resource conservation measures. Potential environmental impacts resulting from implementation of the City's General Plan and ECAS were addressed in the General Plan and ECAS EIR.

Discussion

a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

The project is expected to generate GHG emissions from construction-related activities and operational activities. Total project construction and operational GHG emissions were estimated using the methodology discussed earlier under Air Quality. For this project, GHG emissions were calculated for construction and operational activities, which are shown in Table 5. As shown below, the total unmitigated annual GHG emissions for construction and operations would be 920.41 $MTCO_2e$.

TABLE 5. ESTIMATED UNMITIGATED GHG EMISSIONS

Emissions Source	Project ($MTCO_2e$)
Construction GHG Emissions	
Total Construction Emissions	242.62
Operational GHG Emissions	
Area	0.28
Energy	75.02
Mobile (Typical)	510.54
Waste	45.83
Water	46.10
Total Annual Operational Emissions	677.79
Total Project GHG Emissions	**920.41**
Employees	3
Project GHG efficiency-based metric ($MTCO_2e$/year/SP)	306.80

Notes:

$MTCO_2e$ = million metric tons of carbon dioxide equivalents

$MTCO_2e$/year/SP = million metric tons of carbon dioxide equivalents per year per service population

A threshold of significance for construction or operation-related GHG emissions has not been established by the regional air quality management district, YSAQMD. As compared to the city-wide emissions forecasted for 2020 (1,202,710 $MTCO_2e$), project-related GHG emissions would represent approximately 0.002 percent of the 2020 city-wide emissions, which is insignificant. Although insignificant, the additional GHG emissions generated by the new project may have a potentially significant impact on the environment.

By implementing Mitigation Measure GHG-1, which requires that that on-site renewable energy systems are capable of generating 15 percent of the project's anticipated energy demand, total project GHG emissions would be reduces to 912.14 MTCO2e, as shown in Table 6 **TABLE 7. CONSTRUCTION EQUIPMENT NOISE**below. Implementation of Mitigation Measures GHG-2 through GHG-5 would further reduce project GHG emissions and resulting impacts to the environment.

TABLE 6. ESTIMATED MITIGATED GHG EMISSIONS

Emissions Source	Project ($MTCO_2e$)
Construction GHG Emissions	
Total Construction Emissions	242.63
Operational GHG Emissions	
Area	0.28
Energy	66.73
Mobile (Typical)	510.55
Waste	45.83
Water	46.10
Total Annual Operational Emissions	669.51
Total Project GHG Emissions	**912.14**
Employees	3
Project GHG efficiency-based metric ($MTCO_2e$/year/SP)	152.02

Notes:

$MTCO_2e$ = million metric tons of carbon dioxide equivalents

$MTCO_2e$/year/SP = million metric tons of carbon dioxide equivalents per year per service population

The City is committed to reducing GHG emissions through the implementation of reduction measures outlined in the ECAS. The City has an overall goal to reduce GHG emissions by 21.7 percent. The project would be subject to various ECAS policies that help reduce GHG emissions, which have been included as the project sponsor will be required to implement mitigation measures GHG-1 through GHG-5. Implementation of the mitigation measures will reduce impacts from GHG emissions to less-than-significant. **Less than significant with mitigation measures incorporated.**

b. Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gasses?

As noted above, the City is committed to reducing GHG emissions through the implementation of reduction measures outlined in the ECAS. As proposed, there are no aspects of the project that would conflict with City policies aimed at reducing GHG emissions. The project sponsor will be required to implement several reduction measures to ensure the project is reducing its overall footprint contribution of GHG emissions. Therefore, a **less-than-significant** impact would occur.

Impact Conclusion

The Project will have a less-than-significant impact on Greenhouse Gas Emissions, with mitigation measures incorporated.

Mitigation Measures

GHG-1 In accordance with Renewable Energy and Low Carbon Fuels Measure RE-5 from the ECAS, the project sponsor shall demonstrate that on-site renewable energy systems, capable of generating 15 percent of the project's anticipated energy demand, have been included within the project site. Implementation of this measure shall be performed prior to issuance of Building Permits, subject to review and approval by the City Planner.

GHG-2 In accordance with Renewable Energy and Low Carbon Fuels Measure RE-5 from the ECAS, the project sponsor shall demonstrate that all new buildings being constructed can allow for the easy, cost-effective installation of future solar energy systems, unless prohibited by topographical conditions or other site-specific constraints. "Solar ready" features should include: proper solar orientation (i.e. south-facing roof area sloped at 20° to 55° from the horizontal); clear access on the south sloped roof (i.e. no chimneys, heating vents, plumbing vents, etc.); electrical conduit installed for solar electric system wiring; plumbing installed for solar hot water system; and space provided for a solar hot water storage tank. Implementation of this measure shall be performed prior to issuance of Building Permits, subject to review and approval by the City Planner.

GHG-3 In accordance with Communitywide Measure EC-1 from the ECAS, the project sponsor shall use energy-efficient lighting technologies that meet or exceed Title 24 standards in the residential manager's unit. Implementation of this measure shall be performed prior to issuance of Building Permits, subject to review and approval by the City Planner.

GHG-4 In accordance with Communitywide Measure EC-3 from the ECAS, the project sponsor shall incorporate any combination of the following strategies to reduce heat gain for fifty (50) percent of the non-roof impervious site landscape, which includes roads, sidewalks, courtyards, parking lots, and driveways:

a. Shaded within five years of occupancy;
b. Paving materials with a Solar Reflectance Index (SRI) of at least 29, as determined in accordance with American Society for Testing and materials (ASTM) Standards E1918 or C1549;
c. Open grid pavement system; or
d. Parking spaces underground, under deck, under roof, or under a building. Any roof used to shade or cover parking must have an SRI of at least 29.

Implementation of this measure shall be performed prior to issuance of Building Permits, subject to review and approval by the City Planner.

GHG-5 In accordance with Communitywide Measure EC-4 from the ECAS, the project sponsor shall use LED, induction, or other energy-efficient lighting for parking lot lights. Implementation of this measure shall be performed prior to issuance of Building Permits, subject to review and approval by the City Planner.

IX. HAZARDS AND HAZARDOUS MATERIALS

Would the project:	Potentially Significant Impact	Less-Than-Significant with Mitigation Incorporated	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?	☐	☐	✖	☐
b. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the likely release of hazardous materials into the environment?	☐	☐	✖	☐
c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	✖	☐
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?	☐	☐	☐	✖
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?	☐	☐	☐	✖
f. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	✖
g. Expose people or structures, either directly or indirectly, to the risk of loss, injury or death involving wildland fires?	☐	☐	✖	☐

Affected Environment

The proposed project is to construct a 98,000 sq. ft. self-storage facility on a vacant 6-acre parcel of land located at 5920 Cherry Glen Road, north of I-80 in Vacaville California. The project site is mostly vacant with several dilapidated structures located on the southern and western portions of the site, which would require demolition. The self-storage facility consists of 10 storage buildings with a 1,136 sq. ft. office and a 1,900 sq. ft. live-in manager's unit. The storage buildings range in size from 5,100 sq. ft. to 15,680 sq. ft. The storage facility includes single-story and two-story buildings with standard units and climate control units. The perimeter of the property would be enclosed by 8 ft. tall tubular steel ornamental fencing with decorative landscaping.

Discussion

a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

The proposed project involves the construction of a self-storage facility, office, and manager's residence. Self-storage facilities are not typically associated with the routine transport, use, or disposal of hazardous materials. However, construction activities would involve the use of heavy equipment, which would contain fuels, oils, and various other products such as concrete, paints, and adhesives. The project contractor would be required to comply with all California Health and Safety Codes and local ordinances regulating the handling, storage, and transportation of hazardous and toxic materials, as overseen by the California Environmental Protection Agency (EPA) and Department of Toxic Substances Control (DTSC). Should an accidental release of hazardous materials occur during construction, the City (or City crews) and/or contractor, is required to notify the Vacaville Fire Department (VFD) who would then monitor the conditions and recommend appropriate remediation measures.

Because project construction and operations would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials, or through reasonably foreseeable upset and accident conditions involving the likely release of hazardous materials into the environment, impacts would be considered **less-than significant.**

b. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the likely release of hazardous materials into the environment?

A Phase I Environmental Site Assessment (ESA) was prepared for the project site by Gularte & Associates, Inc. on June 1, 2018.[13] The Phase I ESA included a review of State and federal records, historical aerial site photographs, and historical topographic maps as well as a site reconnaissance in order to determine the presence of hazardous materials within the project site. Records indicate that the site was previously used as an orchard until the late 1950s. The use of the site for agricultural purposes such as an orchard indicate that pesticides or herbicides may have been used. During the May 22, 2018 site reconnaissance, indications of hazardous materials, soil staining, or other deleterious materials were not observed on the project site. The results of the Phase I ESA indicate that indications of past hazardous materials impacts to the project site do not exist, including the use, handling or storage of hazardous materials. In addition, site reconnaissance, database review, and review of historical photographs of the site indicated that evidence of underground storage tanks (USTs) or aboveground storage tanks (ASTs) have not existed within the project site.

Based on the above, evidence that would indicate hazardous materials impacts to the site, or of potentially deleterious environmental conditions affecting the site do not exist. As such, the proposed project would not create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the likely release of hazardous materials into the environment. Therefore, a **less-than-significant** impact would occur.

13 Gularte & Associates, Inc. *Phase I Environmental Site Assessment. 5920 Cherry Glen Road.* June 1, 2018.

c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

The project site is not located within one-quarter mile of an existing or proposed school. The nearest existing school to the project site, Eugene Padan Elementary School, is located approximately 1.75-miles east of the site. Therefore, the project would have a **less-than-significant** impact related to hazardous emissions or the handling of hazardous or acutely hazardous materials, substances, or wastes within one-quarter mile of an existing or proposed school.

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?

The project site is not located on a site that is included on a list of hazardous materials sites compiles pursuant to Government Code Section 65962.5.[14] Therefore, the project would not create a significant hazard to the public or the environment, and **no impact** associated with such would occur.

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?

The proposed project is not located in the vicinity of a private airstrip or within an airport land use plan. The closest airport to the site, identified in the General Plan and ECAS EIR as the Nut Tree Airport, is located approximately four miles northeast of the project site. Therefore, implementation of the proposed project would not place residents or workers within two-miles of any private airstrips or within an airport land use plan, and the proposed project would not create a safety hazard, thus resulting in **no impact**.

f. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

The proposed project does not include any modifications to the surrounding roadways or circulation networks. The proposed project would include two entrances for emergency access at the southwestern and northwestern portions of the site. Therefore, the project would not construct barriers that would impede the implementation of an emergency response plan. As a result, the proposed project would not impair or physically interfere with an adopted emergency response plan and **no impact** would occur.

g. Expose people or structures, either directly or indirectly, to the risk of loss, injury or death involving wildland fires?

According to the CAL FIRE Fire and Resource Assessment Program, the project site is not located within a Very High Fire Hazard Severity Zone and the nearest Very High Fire Hazard

[14] California Department of Toxic Substances Control. *EnviroStor*. Available at: http://www.envirostor.dtsc.ca.gov. Accessed January 2019.

Severity Zone to the project site is to the northwest of the project site.[15] The project site is located at the southern edge of the City of Vacaville, is surrounded on three sides by existing development, and is not located in or near a State Responsibility Area. Therefore, the proposed project would not be subject to risks related to wildfires, and a **less-than-significant** impact would occur.

Impact Conclusion

The Project will have a less-than-significant impact on hazards and hazardous materials.

Mitigation Measures

No mitigation required.

[15] California Department of Forestry and Fire Protection. *Solano County, Draft Fire Hazard Severity Zones in LRA*. June 2008.

X. HYDROLOGY AND WATER QUALITY

Would the project:	Potentially Significant Impact	Less-Than-Significant with Mitigation Incorporated	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?	☐	☐	✖	☐
b. Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	☐	☐	✖	☐
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;	☐	☐	✖	☐
ii. Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;	☐	☐	✖	☐
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	☐	☐	✖	☐
iv. Impede or redirect flood flows?	☐	☐	✖	☐
d. In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	☐	☐	✖	☐
e. Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	☐	☐	✖	☐

Affected Environment

The proposed project is to construct a 98,000 sq. ft. self-storage facility on a vacant 6-acre parcel of land located at 5920 Cherry Glen Road, north of I-80 in Vacaville California. The project site is mostly vacant with several dilapidated structures located on the southern and western portions of the site, which would require demolition. The self-storage facility consists of 10 storage buildings with a 1,136 sq. ft. office and a 1,900 sq. ft. live-in manager's unit. The storage buildings range in size from 5,100 sq. ft. to 15,680 sq. ft. The storage facility includes single-story and two-story buildings with standard units and climate control units. The perimeter of the property would be enclosed by 8 ft. tall tubular steel ornamental fencing with decorative landscaping.

Discussion

a. Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?

The City of Vacaville requires construction activities that disturb one or more acres of land comply with the National Pollution Discharge Elimination System (NDPES) Construction General Permit that regulates stormwater leaving construction sites. In addition, a Stormwater Pollution Prevention Plan (SWPPP) that includes best management practices (BMPs) must be prepared, implemented, and monitored for its effectiveness. BMPs implemented as part of the SWPPP must be designed to prevent or reduce potential erosion control such as mulch covering, temporary seeding, binders, fiber rolls, temporary vegetation, or permanent seeding. The City's NPDES permit requires that any projects that would create or replace 10,000 sf or more of impervious surfaces must submit a Stormwater Control Plan (SWCP) with their development permit. Section 14.27.030.150 (Stormwater Management and Rainwater Retention) of the Vacaville Land Use and Development Code, requires that stormwater management practices minimize runoff and increase groundwater recharge in addition to implementing BMPs into the landscape and grading plans. Compliance with the above would ensure the propossed project would have a **less-than-significant impact.**

b. Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?

Groundwater in the City of Vacaville is extracted primarily from the Solano subbasin of the Sacramento Valley groundwater subbasin. According to the General Plan and ECAS EIR, the projected 2035 groundwater demand could be met with current water management conditions and the Solano subbasin is not expected to become overdrawn. Based on the 2015 City of Vacaville Urban Water Management Plan (UWMP), groundwater and surface water supplies are projected to meet or exceed projected water demands even during extended drought conditions and the City's future water supply will be adequate to offset future water demands during normal, single-dry, and multi-dry years.[16]. Goal COS-13 of the Vacaville General Plan includes policies and actions designed to conserve water and reduce demands on water supply and groundwater resources. Such policies include Policy COS-P13.6 which encourages the use of recycled or non-potable water for landscape irrigation purposes. In addition, Goal COS-14 implements policies and actions designed to protect the quality and supply of surface water and groundwater resources.

The proposed project would include the addition of impervious surfaces over a total of approximately 97,583 sf. The addition of impervious surfaces to the site would impede stormwater infiltration over that area, which could reduce the groundwater recharge rate over the affected area, and could potentially lead to increased run-off to City infrastructure or to off-site waterways. However, the project area is relatively small, and increased run-off would not be expected to have a significant impact on City infrastructure, off-site waterways or ground water recharge by itself. Nevertheless, the proposed project would include a bioretention basin located in the northeast end of the property. The bioretention basin would be sized to exceed the minimum volume requirement necessary to adequately treat all runoff from the proposed impervious surfaces during the 0.2-percent-annual-chance flood.

[16] City of Vacaville Utilities Department. *2015 Urban Water Management Plan Update.* July 2016.

The General Plan and ECAS EIR determined that groundwater demand for General Plan buildout could be met with the water supply planned for under existing water management conditions. Because the proposed project is consistent with the General Plan land use designation and zoning for the site, it was, therefore, analyzed in the General Plan and ECAS EIR. Although the project would include continued use of the existing on-site well, self-storage facilities, such as the proposed project, do not generally consume high amounts of water. Therefore, the proposed project would not substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project would impede sustainable groundwater management of the basin and a **less-than-significant impact** would result.

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;

As stated above, the City of Vacaville requires construction activities that disturb one or more acres of land comply with the NDPES Construction General Permit through preparation and implementation of a SWPPP that includes BMPs designed to prevent or reduce erosion. Such control measures include, but are not limited to mulch covering, temporary seeding, binders, fiber rolls, temporary vegetation, or permanent seeding. The City's NPDES permit requires that any projects that would create or replace 10,000 sf or more of impervious surfaces must submit a SWCP with their development permit. Section 14.27.030.150 (Stormwater Management and Rainwater Retention) of the Vacaville Land Use and Development Code, requires that stormwater management practices minimize runoff and increase groundwater recharge in addition to implementing BMPs into the landscape and grading plans. As such, implementation of the SWPPP and BMPs, as well as compliance with the NDPES Construction General Permit and standards for stormwater management and rainwater detention set forth in Section 14.27.030.150 of the Vacaville Land Use Code would ensure the proposed project would have a ***less-than-significant*** impact.

ii. Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;

Runoff would gravity flow to the bioretention area where the stormwater would be able to infiltrate the soil in a similar manner to what currently occurs on the project site. Because the proposed bioretention facility would be designed with adequate capacity to capture and treat runoff from proposed impervious surfaces, the proposed project would not substantially increase the rate or amount of surface runoff in a manner which could result in flooding on- or off-site. In addition to reducing runoff and allowing for groundwater recharge, the bioretention areas would also treat incoming runoff by filtering stormwater through permeable soil layers. The process of stormwater moving through the soil layers would remove pollutants from the stormwater before further subsurface infiltration or discharge to City infrastructure. As a result, the proposed project would not lead to the degradation of water quality or the violation of water quality standards due to operational stormwater runoff and a **less-than-significant** impact would occur.

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

As stated above, the proposed bioretention facility would be designed with adequate capacity to capture and treat runoff from proposed impervious surfaces. In addition to reducing runoff and allowing for groundwater recharge, the bioretention areas would also treat incoming runoff by filtering stormwater through permeable soil layers. The process of stormwater moving through the soil layers would remove pollutants from the stormwater before further subsurface infiltration or discharge to City infrastructure. As such, the proposed project would not create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial sources of polluted runoff, and a **less-than-significant impact** would occur.

iv. Impede or redirect flood flows?

The inclusion of a bioretention basin sized for the proposed self-storage facility would ensure that flood flows would be adequately handled and would not be redirected off-site or to neighboring properties. As such, a **less-than-significant impact** would occur.

d. In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?

According to the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) (Panel No. 06095C0259E) for the project site, the site is located within a shaded Zone X.[17] A Shaded Zone X is given to the areas between the limits of the base flood and the 0.2-percent-annual-chance or 500-year flood. As such, the project site area is located within a moderate flood hazard area. The Vacaville Land Use and Development Code Chapter 14.18.228 includes provisions for flood hazard reduction. Section 14.18.228.010.A requires that all new construction be adequately anchored to prevent flotation, collapse, or lateral movement of the structure resulting from hydrodynamic and hydrostatic load. Section 14.18.228.010.B (Provisions of Flood Hazard Reduction) of the Vacaville Code requires all new construction would be required to use flood resistant materials as specified in FEMA Technical Bulleting TB 2-93. Furthermore, new construction within a Shaded X zone must be elevated to or above the base flood elevation.

Compliance with the provisions for flood hazard reduction set forth in Chapter 14.18.228 in addition to performance standards set forth in Chapter 14.09.127 of the Vacaville Land Use and Development Code, would ensure that the proposed project would not release pollutants due to project inundation.

The project area is located approximately 50 miles inland from the Pacific Ocean and tsunamis typically affect coastlines and areas up to one-quarter mile inland. Therefore, due to the distance of the project site to the coast, potential impacts related to a tsunami affecting the project site are minimal. In addition, the City of Vacaville is located

[17] Federal Emergency Management Agency, National Flood Insurance Program. *Flood Insurance Rate Map Number 06095C0259E.* Effective May 4, 2009.

approximately 10 miles southeast of Lake Berryessa and 10 miles north of Suisun Bay. Given the distance from any enclosed bodies of water, the project site would not be subject to inundation by seiche. As such, a **less-than-significant** impact would occur related to the release of pollutants due to the inundation of the project site by flood, tsunamis, or seiche.

e. Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

During the early stages of construction activities, topsoil would be exposed due to grading of the site. After grading 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, which would adversely affect water quality. However, the proposed project includes a construction Erosion and Sediment Control Plan, which includes erosion prevention instructions for construction activities pursuant to Section 14.19.242 of the Vacaville Land Use and Development Code. The Erosion and Sediment Control Plan also includes regulations for vehicle entrance and exit points as well as silt fences that would be used to prevent any sediment contained in runoff from exiting the site. As such the proposed project would not result in a construction related degradation of water quality.

The California Legislature passed the Sustainable Groundwater Management Act (SGMA) in September 2014. The SGMA applies statewide, including to the Solano Subbasin and Suisin-Fairfield Valley Basin from which the City of Vacaville operates a network of 11 monitoring wells. The Department of Water Resources (DWR) is required to prioritize the groundwater basins and subbasins in California as either High, Medium, Low, or Very Low. Per the UWMP, the Solano Subbasin was ranked medium priority and the Suisin-Fairfield Basin was ranked very low priority. In addition, the Solano Subbasin was not listed as in a critical conditional of overdraft and is not projected to become overdrafted with continuance of current management conditions.

Given that the proposed project would be consistent with the current General Plan land use and zoning designations for the site, the project would not result in increased use of groundwater supplies beyond what has been anticipated by the City and accounted for in the UWMP. In addition, the proposed self-storage use would be anticipated to require relatively low water demand, as water would be used primarily for irrigation, employee restrooms, and the manager's unit. Consequently, the proposed project would not result in any conflicts with the management of groundwater in the project area.

Based on the above, the proposed project would not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan and a **less-than-significant** impact would occur.

Impact Conclusion

The Project will have a less-than-significant impact on hydrology and water quality.

Mitigation Measures

No mitigation required.

XI. LAND USE AND PLANNING

Would the project:	Potentially Significant Impact	Less-Than-Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a. Physically divide an established community?	☐	☐	✖	☐
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?	☐	☐	✖	☐

Affected Environment

The proposed project is to construct a 98,000 sq. ft. self-storage facility on a vacant 6-acre parcel of land located at 5920 Cherry Glen Road, north of I-80 in Vacaville California. The project site is mostly vacant with several dilapidated structures located on the southern and western portions of the site, which would require demolition. The self-storage facility consists of 10 storage buildings with a 1,136 sq. ft. office and a 1,900 sq. ft. live-in manager's unit. The storage buildings range in size from 5,100 sq. ft. to 15,680 sq. ft. The storage facility includes single-story and two-story buildings with standard units and climate control units. The perimeter of the property would be enclosed by 8 ft. tall tubular steel ornamental fencing with decorative landscaping.

The project site is designated as Highway Commercial. The Highway Commercial designation adjoins Interstate highways and includes specialty retailing, restaurants, hotels/motels, and commercial recreation and entertainment, designed to attract primarily visitor business and shopping. Development in this designation should be high-quality in order to enhance views of Vacaville from the highway. As proposed, the project is consistent with the Highway Commercial designation.

The project site is zoned General Commercial (CG) with a Special Standards Overlay (SS-1 Overlay). The CG zoning district allows for both small and large commercial development, primarily on sites located along major streets and adjacent to the freeway. The SS-1 overlay district includes additional regulations that restrict development potential due to limited public utilities. As proposed, the project would be consistent with the CG zoning district and the Special Standards Overlay District (SS-1).

Discussion

a. Physically divide an established community?

A project risks dividing an established community if the project would introduce infrastructure or alter land use so as to change the land use conditions in the surrounding community, or isolate an existing land use. The project site does not contain existing housing or other development, and the proposed project would be consistent with the surrounding adjacent commercial uses to the southwest and northeast. The proposed project would not alter the existing general development trends in the area or isolate an existing land use. As such, the proposed project would not physically divide an established community and a **less-than-significant impact** would occur.

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?

The project site is currently designated Highway Commercial per the City's General Plan and is zoned General Commercial with SS-1 Overlay. Land designated for Highway Commercial and General Commercial uses are intended to provide spaces for specialty retailing, restaurants, hotels/motels, and commercial recreation and entertainment, designed to attract primarily visitor businesses and shopping. The proposed project would be consistent with the General Plan designation and zoning. Thus, the design and intended use of the proposed structure is consistent with the type and intensity of uses anticipated for the site in the General Plan and generally analyzed in the General Plan and ECAS EIR. In addition, the project would be required to comply with all applicable development standards established by Chapter 14.12.176 (Standard Improvements) and Chapter 14.09.084 (Commercial Districts Development Standards) of the City's Land Use and Development Code, such as maximum lot coverage, maximum building heights, and building setback requirements.

General Plan Policy PUB-P13.3 requires that new habitable structures located within the City limits connect to the public wastewater collection system. However, while future improvements to wastewater facilities are planned for the project site area, current City wastewater infrastructure does not exist in the project site vicinity. Thus, the proposed project would include construction of an on-site septic tank. As discussed in Section VII, Geology and Soils, of this IS/MND, impacts related to the construction of an on-site septic system would be less than significant.

Given that the proposed project is consistent with the City's General Plan and Land Use and Development Code, the project would not cause a significant environmental impact due to conflicts with a land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect. Furthermore, as discussed throughout this IS/MND, the proposed project would not result in any significant environmental effects that cannot be mitigated to a less-than-significant level by the mitigation measures provided herein. Therefore, a **less-than-significant impact** would occur related to the creation of a conflict with any land use plan, policy or regulation adopted for the purpose of avoiding or mitigating an environmental effect.

Impact Conclusion

The Project will have a less-than-significant impact on land use and planning.

Mitigation Measures

No mitigation required.

XII. MINERAL RESOURCES

Would the project:	Potentially Significant Impact	Less-Than-Significant with Mitigation Incorporated	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?	☐	☐	☐	✖
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?	☐	☐	☐	✖

Affected Environment

The proposed project is to construct a 98,000 sq. ft. self-storage facility on a vacant 6-acre parcel of land located at 5920 Cherry Glen Road, north of I-80 in Vacaville California. The project site is mostly vacant with several dilapidated structures located on the southern and western portions of the site, which would require demolition. The self-storage facility consists of 10 storage buildings with a 1,136 sq. ft. office and a 1,900 sq. ft. live-in manager's unit. The storage buildings range in size from 5,100 sq. ft. to 15,680 sq. ft. The storage facility includes single-story and two-story buildings with standard units and climate control units. The perimeter of the property would be enclosed by 8 ft. tall tubular steel ornamental fencing with decorative landscaping.

According to the U.S. Geological Survey, the Vacaville Planning Area contains limited mineral resources that are viable for extraction or currently being extracted. Near the southern boundary of the Planning Area, in the vicinity of Cement Hill, limestone deposits show evidence of some historic use. Stone quarries in the Vaca Mountains produced dimensioned and ornamental stone. Although the western hills contain sandstone and conglomerates which may be used for sands, gravel, and stone, none of these resources are currently being mined. Commercial extraction is not expected within the planning period, therefore policies and land use designations for mineral resource areas are not included in the General Plan. The site has not been designated by the Vacaville General Plan as an area containing mineral resources. Therefore, development of the project site will have no impact on mineral resources in the region.

Discussion

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?

According to the USGS, the Vacaville Planning Area contains limited mineral resources that are being extracted. Near the southern boundary of the Planning Area in the vicinity of Cement Hill, limestone deposits show evidence of some historic use. Stone quarries in the Vaca Mountains produced dimensioned and ornamental stone. Although the western hills contain sandstone and conglomerates which may be used for sands, gravel, and stone, such resources are not currently being mined. Commercial extraction is not expected within the planning period, therefore policies and land use designations for mineral resource areas are not included in the General Plan. The project site has not been designated by the General Plan as an area containing mineral resources.

Based on the above, the proposed project would not result in the loss of availability to a known mineral resource that would be of value to the region or the loss of a locally important mineral resource recovery site. Therefore, the proposed project would result in **no impact** related to mineral resources.

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?

The project site has not been designated by the General Plan as an area containing mineral resources. Thus, the proposed project would not 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, and **no impact** would occur.

Impact Conclusion

The Project will have no impact on mineral resources.

Mitigation Measures

No mitigation required.

XIII. NOISE

Would the project result in:	Potentially Significant Impact	Less-Than-Significant with Mitigation Incorporated	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?	☐	☐	✖	☐
b. Generation of 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?	☐	☐	☐	✖

Affected Environment

As noted under the project description, the project would construct a 98,000 sq. ft. self-storage facility on a vacant 6-acre parcel of land located at 5920 Cherry Glen Road, north of I-80 in Vacaville California. The self-storage facility consists of 10 storage buildings with a 1,136 sq. ft. office and a 1,900 sq. ft. live-in manager's unit. The storage buildings range in size from 5,100 sq. ft. to 15,680 sq. ft. The storage facility includes single-story and two-story buildings with standard units and climate control units. The following terms are referenced in this discussion:

- Decibel (dB): A unit of sound energy intensity. An A-weighted decibel (dBA) is a decibel corrected for the variation in frequency response to the typical human ear at commonly encountered noise levels. All references to decibels (dB) in this report will be A-weighted unless noted otherwise.
- Day-Night Average Level (Ldn): The average sound level over a 24 hour period, with a penalty of 10 dB applied to noise occurring during nighttime hours (10:00 PM to 7:00 AM).
- Community Noise Equivalent Level (CNEL): The average sound level over a 24 hour period, with a penalty of 5 dB applied to noise occurring during daytime hours (7:00 AM to 10:00 PM) and a penalty of 10 dB applied to noise occurring during nighttime hours (10:00 PM to 7:00 AM).
- Equivalent Sound Level (L_{eq}): The average sound level over a given time-period.
- Maximum Sound Level (L_{max}): The maximum sound level over a given time-period.
- Median Sound Level (L_{50}): The sound level exceeded 50 percent of the time over a given time-period.

Noise consists of any sounds that may produce physiological or psychological damage and/or interfere with communication, work, rest, recreation, or sleep.[18] Some land uses are considered more sensitive to noise than others, and, thus, are referred to as sensitive noise receptors. Land uses often associated with sensitive noise receptors generally include residences, schools, libraries, hospitals, and passive recreational areas. Noise sensitive land uses are typically given

[18] City of Vacaville. *Vacaville General Plan [pg. NOI-1].* August 2015.

special attention in order to achieve protection from excessive noise. In the vicinity of the project site, the nearest sensitive receptor would be the New Life Church, located to the south of the project site.

The Vacaville General Plan sets forth land use compatibility standards for community noise environments. Sensitive land uses such as schools, libraries, churches, hospitals, and nursing homes are considered to be within the "normally acceptable" range of noise exposure between 50 and 70 CNEL. However, for land uses with no active outdoor use areas, such as the adjacent New Life Church, the proposed project would, instead, be required to ensure acceptable interior noise levels at the church building. Chapter 14.09.127 (Performance Standards) of the Vacaville Land Use and Development Code sets the interior noise standards for the adjacent church land use at 45 dB.

Discussion

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?

During construction of the proposed project, heavy equipment would be used for grading, excavation, paving, and building construction, which would increase ambient noise levels when in use. Noise levels would vary depending on the type of equipment used, how the equipment is operated, and how well the equipment is maintained. In addition, noise exposure at any single point outside the project site would vary depending on the proximity of construction activities to that point. Standard construction equipment, such as graders, backhoes, loaders, and trucks, would be used on-site. Table 7 below shows the maximum noise levels associated with typical construction equipment. Based on the table below, activities involved in typical construction would generate maximum noise levels of up to 85 dB at a distance of 50 feet.

TABLE 7. CONSTRUCTION EQUIPMENT NOISE

TYPE OF EQUIPMENT	MAXIMUM LEVEL, DB AT 50 FEET
Backhoe	78
Compactor	83
Compressor (air)	78
Dozer	82
Dump Truck	76
Excavator	81
Generator	81
Pneumatic Tools	85
Source: Federal Highway Administration, Roadway Construction Noise Model User's Guide, January 2006.	

As one increases the distance between equipment, or increases separation of areas with simultaneous construction activity, dispersion and distance attenuation reduce the effects of combining separate noise sources. The noise levels from a source decrease at a rate of approximately 6 dB per every doubling of distance from the noise source. Project construction activities would take place throughout the project site at various distances from the adjacent church structure. In addition, modern construction typically provides a 25-dB exterior-to-interior noise level reduction with windows closed. Therefore, sensitive receptors exposed to exterior noise of 70 dB CNEL, or less, will typically comply with the City's 45 dB

CNEL interior noise level standard.

The proposed project could generate exterior construction noise levels of up to 85 dB at a distance of 50 feet. Because the project site's property line is approximately 150 feet from the church building, construction on the project site associated with implementation of the proposed project would occur at a minimum of 150 feet from the nearest church structure. At a distance of 150 feet, exterior noise levels at the church would be 67 dB CNEL/L_{dn}, and, considering the 25-dB exterior-to-interior noise level reduction afforded by the exterior of the church building, interior noise levels would be expected to be less than 45 db CNEL/L_{dn}. Therefore, interior noise levels would comply with the interior noise level standard of 45 dB CNEL.

In addition, project construction activities would be required to comply with General Plan Policy NOI-P4.2 which requires the following construction noise control measures:

- Equip all internal combustion engine-driven equipment with intake and exhaust mufflers that are in good condition and appropriate for the equipment.
- Locate stationary noise-generating equipment as far away as possible from sensitive receptors when sensitive receptors adjoin or are near a construction area.
- Utilize "quiet" air compressors and other stationary noise sources where technology exists.
- Limit hours of operation of outdoor noise sources through conditions of approval.

Operational noise from the proposed project would consist primarily of intermittent vehicle traffic to and from the project site during the hours of operation. Additional noises associated with operation would include sounds of people speaking, and roll-up doors opening and closing. Such noises would not result in 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. Furthermore, the proposed project is consistent with the current General Plan and zoning designations of Highway Commercial and General Commercial for the site, and, consequently, noise related to commercial type operations has been previously anticipated for the site and analyzed in the General Plan and ECAS EIR.

Based on the above, with implementation of control measures set forth in Policy NOI-P4.2, the proposed project would not generate a substantial temporary or permanent increase in noise levels in excess of applicable standards. Therefore, a **less-than-significant** impact would occur.

b. Generation of excessive groundborne vibration or groundborne noise levels?

Groundborne vibration would be generated during construction of the proposed project. The church to the south of the project site would be sensitive to excessive vibrations caused by construction. For structural damage, the California Department of Transportation (Caltrans) uses a vibration limit of 0.5 inches/second, peak particle velocity (in/sec, PPV), for buildings structurally sound and designed to modern engineering standards; 0.2 in/sec PPV for buildings that are found to be structurally sound but where structural damage is a major concern; and a conservative limit of 0.08 in/sec PPV for historic buildings or buildings that are documented to be structurally weakened. All surrounding structures are assumed to be structurally sound, but damage would be a concern so the 0.2 in/sec PPV will be used as a

threshold of significance for structural damage. The threshold of 0.2 in/sec PPV is also used by Caltrans as the threshold for human annoyance caused by vibration. Therefore, activities creating vibrations exceeding 0.2 in/sec PPV would impact sensitive receptors in nearby residences.[19] Table 8 presents typical vibration levels that could be expected from construction equipment at a distance of 25 feet.

TABLE 8. VIBRATION SOURCE LEVELS FOR CONSTRUCTION EQUIPMENT

EQUIPMENT	PPV AT 25 FT (IN/SEC)
Vibratory Roller	0.210
Large Bulldozer	0.089
Caisson drilling	0.089
Loaded trucks	0.076
Jackhammer	0.035
Small bulldozer	0.003
Source: Caltrans, Transportation and Construction Vibration: Guidance Manual. September 2013.	

Project construction activities, such as drilling, the use of jackhammers, and other high-power or vibratory tools, and rolling stock equipment (tracked vehicles, compactors, etc.), may generate groundborne vibration in the immediate vicinity. As shown in Table 8, jackhammers typically generate vibration levels of 0.035 in/sec PPV, while drilling typically generates vibration levels of 0.09 in/sec PPV, and the strongest source of vibrations, vibratory rollers, generates vibration levels of 0.21 in/sec PPV all at a distance of 25 feet. Vibration levels would vary depending on soil conditions, construction methods, and equipment used. It is important to note that groundborne vibrations dissipate with distance. The closest church structure to the project site is approximately 150 feet away. Therefore, the PPV experienced at the church would be reduced from the PPV's reported in the table above. The Caltrans *Transportation and Construction Vibration Guidance Manual* provides a formula for estimating vibration dissipation with distance.[20] Calculations were completed to determine the maximum vibration caused by the construction activities using the Caltrans formula. Because the Vibratory Roller would be the most intense possible source of vibrations, the reference PPV of 0.210 in/sec was used for the calculations. At a distance of 150 feet from the project site any sensitive receptors would receive 0.029 in/sec PPV from the use of a Vibratory Roller, which is well below the 0.2 in/sec PPV significance threshold used for this analysis. Consequently, vibration generated by construction activities associated with the proposed project are not expected to be perceptible at the nearby church, and the construction-generated vibrations would not be expected to result in structural damage to church buildings.

Furthermore, construction activities associated with implementation of the proposed project would be temporary and construction equipment would operate intermittently throughout the course of a day, would be restricted to daytime hours per the City of Vacaville Land Use and Development Code, and would likely only occur over portions of the improvement area at a time. Therefore, the project would not involve the generation of excessive groundbourne vibration or noise levels and a **less-than-significant** impact would result.

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19 Caltrans. *Transportation and Construction Vibration Guidance Manual*. September 2013.

20 $PPV_{Equipment}=PPV_{Reference}(25/D)^{1.1}$

Where: D = distance from equipment to the receiver in feet (assumed to be 150 feet)

PPV_{Ref} = reference PPV at 25 feet.

Source: Caltrans. *Transportation and Construction Vibration Guidance Manual* [pg. 37]. September 2013.

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?

The project site is not located near an existing airport or private airstrip and is not within an area covered by an existing airport land use plan. The nearest airport to the project site is the Vacaville Municipal Airport located approximately 4.15 miles northeast. Therefore, the proposed project would not expose people residing or working in the project area to excessive noise levels and **no impact** would occur.

Impact Conclusion

The Project will create a less-than-significant impact from noise.

Mitigation Measures

No mitigation required.

XIV. POPULATION AND HOUSING

Would the project:	Potentially Significant Impact	Less-Than-Significant with Mitigation Incorporated	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 (e.g., through projects in an undeveloped area or extension of major infrastructure)?	☐	☐	✖	☐
b. Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	✖

Affected Environment

The proposed project is to construct a 98,000 sq. ft. self-storage facility on a vacant 6-acre parcel of land located at 5920 Cherry Glen Road, north of I-80 in Vacaville California. The project site is mostly vacant with several dilapidated structures located on the southern and western portions of the site, which would require demolition. The self-storage facility consists of 10 storage buildings with a 1,136 sq. ft. office and a 1,900 sq. ft. live-in manager's unit. The storage buildings range in size from 5,100 sq. ft. to 15,680 sq. ft. The storage facility includes single-story and two-story buildings with standard units and climate control units. The perimeter of the property would be enclosed by 8 ft. tall tubular steel ornamental fencing with decorative landscaping. The proposed project would include a single, live-in manager's unit.

Discussion

a. Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (e.g., through projects in an undeveloped area or extension of major infrastructure)?

The 6.0-acre project site is currently primarily vacant and bordered to the north and south by existing commercial development. The proposed project would include the construction and operation of 97,583 of office and self-storage space; although the project includes an on-site manager's unit, the provision of a single on-site residential unit would not be considered a substantial inducement of population growth in the area. The proposed project would include construction of on-site water and wastewater infrastructure, and would not include extension of major infrastructure to serve the project or other future development in the project area. Therefore, the proposed project would not induce a substantial unplanned population growth in an area, either directly, or indirectly, and a **less-than-significant** impact would result.

b. Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?

The project site is currently primarily vacant, containing a few dilapidated structures, ruderal vegetation, and oak trees and is bordered to the north and south by existing commercial development. Because residential structures do not currently exist on the project site, the proposed project would not involve the displacement of existing housing or people. Therefore, the proposed project would result in **no impact** related to the displacement of people or housing.

Impact Conclusion

The Project will have a less-than-significant impact on population and housing.

Mitigation Measures

No mitigation required.

XV. PUBLIC SERVICES

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:	Potentially Significant Impact	Less-Than-Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a. Fire protection?	☐	☐	✖	☐
b. Police protection?	☐	☐	✖	☐
c. Schools?	☐	☐	☐	✖
d. Parks?	☐	☐	☐	✖
e. Other Public Facilities?	☐	☐	☐	✖

Affected Environment

The proposed project is to construct a 98,000 sq. ft. self-storage facility on a vacant 6-acre parcel of land located at 5920 Cherry Glen Road, north of I-80 in Vacaville California. The project site is mostly vacant with several dilapidated structures located on the southern and western portions of the site, which would require demolition. The self-storage facility consists of 10 storage buildings with a 1,136 sq. ft. office and a 1,900 sq. ft. live-in manager's unit. The storage buildings range in size from 5,100 sq. ft. to 15,680 sq. ft. The storage facility includes single-story and two-story buildings with standard units and climate control units. The perimeter of the property would be enclosed by 8 ft. tall tubular steel ornamental fencing with decorative landscaping. The project site is located in the incorporated boundaries of the City of Vacaville; all public services and facilities are available to serve the project site, as noted below.

Discussion

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?

Fire protection and emergency services are currently provided to the City of Vacaville by the Vacaville Fire Department (VFD). For emergency medical service, VFD provides Advanced Life Support (ALS), first responder, and ALS transport services, as well as Emergency Medical Service (EMS). These services include responding to minor injury and major traumatic injury incidents, as well as to general and major medical incidents. VFD responds to mass casualty incidents within its larger response area as part of a countywide mutual aid system for ambulances.[21] The VFD staffs 77 fire prevention, suppression, investigation, and administration personnel. A 2003 Standards of Response Coverage evaluation for the VFD determined that staffing levels would need to increase in order to maintain adequate service. The VFD has an adopted response time and success rate of seven minutes for 90 percent of calls. The central facility and administrative offices for the VFD are located at Vacaville

[21] City of Vacaville. *General Plan and Energy and Conservation Action Strategy EIR* [pg. 4-25]. July 2010.

City Hall at 650 Merchant Street. In addition, the VFD has four fire stations throughout the City. Station 71, the Main Station, is the nearest to the project site, located approximately 1.5 miles northeast. In addition, the VFD participates in Mutual Aid Agreements with neighboring fire departments throughout Solano County and statewide.

According to the General Plan and ECAS EIR, by the year 2035, approximately 9,680 new dwelling units would be developed, and an additional 26,500 new residents would dwell in the City. As a result of the projected population growth, additional staff and facilities are likely to be required in order to serve new developments. The proposed project would be required to pay applicable fire protection fees per the City's Master Fee Schedule and the proposed self-storage facility would be constructed in accordance with the fire protection requirements of the 2013 California Fire Code. The VFD and the City's Community Development Department would review the project building plans to ensure compliance with all code requirements. Therefore, the proposed project would have a **less-than-significant** impact related to the need for new or physically altered fire protection facilities, the construction of which could cause significant environmental impacts.

b. Police Protection?

Police Protection service for the City of Vacaville is provided by the Vacaville Police Department (VPD). The VPD provides a 24-hour-a-day, 7-day-a-week communication center, crime suppression and prevention, investigations, traffic patrol, and emergency service. Additional programs include a Special Weapons and Tactics (SWAT) team, Mobile Field Forces (MFF) team, Youth Services, K-9 units, the Family Investigative Response Services Team (FIRST), the Family Resource Center (FRC), and a clinical services department.

The VPD employs 103 sworn officers and 58 non-sworn, full-time personnel and is headquartered at the main police station located at 660 Merchant Street, approximately 1.5-miles northwest of the project site. Additional VPD facilities such as the FRC and FIRST are located at 320 Cernon Street. According to the General Plan and ECAS EIR, by the year 2035, the VPD would require approximately 30 additional officers and associated equipment in order to maintain the City's existing staffing ratio and adopted response time standards.

The proposed project would include the demolition of vacant on-site structures and the construction of a 97,583 sf self-storage facility inclusive of a two-story, live-in manager's unit/office, eight single-story self-storage buildings, and two, two-story self-storage buildings. The operation of the proposed self-storage facility has the potential to increase demand for police protection services, though, given the relatively small number of people who would access the facility each day, the increase would be expected to be minimal. As a result, the project would have a **less-than-significant** impact related to the need for new or physically altered police protection facilities, the construction of which could cause significant environmental effects.

c. Schools?

The proposed project would include the construction of a live-in managers unit. Currently, the applicant proposes two full-time employees and one on-site resident/manager. As such, the proposed project would only introduce a single residential unit and associated residents to the area. Local schools would not be impacted due to the implementation and operation of the proposed project and the resulting increase in population resulting from one additional

residential unit. Thus, the proposed project would result in **no impact** regarding any substantial increase in demand for public facilities such as schools.

d. Parks?

The proposed project would include the construction of a live-in managers unit. Currently, the applicant proposes two full-time employees and one on-site resident/manager. As such, the proposed project would only introduce a single residential unit and associated residents to the area. Local parks would not be impacted due to the implementation and operation of the proposed project and the resulting increase in population resulting from one additional residential unit. Thus, the proposed project would result in **no impact** regarding any substantial increase in demand for public facilities such as parks.

e. Other Public Facilities?

The proposed project would include the construction of a live-in managers unit. Currently, the applicant proposes two full-time employees and one on-site resident/manager. As such, the proposed project would only introduce a single residential unit and associated residents to the area. Local public facilities would not be impacted due to the implementation and operation of the proposed project and the resulting increase in population resulting from one additional residential unit. Thus, the proposed project would result in **no impact** regarding any substantial increase in demand for public facilities such as parks, schools, and government facilities.

Impact Conclusion

The Project will have a less-than-significant impact on fire and police protection services, and no impact to schools, parks and other government facilities.

Mitigation Measures

No mitigation required.

XVI. RECREATION

Would the project:	Potentially Significant Impact	Less-Than-Significant with Mitigation Incorporated	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?	☐	☐	☐	✖
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?	☐	☐	☐	✖

Affected Environment

The proposed project is to construct a 98,000 sq. ft. self-storage facility on a vacant 6-acre parcel of land located at 5920 Cherry Glen Road, north of I-80 in Vacaville California. The project site is mostly vacant with several dilapidated structures located on the southern and western portions of the site, which would require demolition. The self-storage facility consists of 10 storage buildings with a 1,136 sq. ft. office and a 1,900 sq. ft. live-in manager's unit. The storage buildings range in size from 5,100 sq. ft. to 15,680 sq. ft. The storage facility includes single-story and two-story buildings with standard units and climate control units. The perimeter of the property would be enclosed by 8 ft. tall tubular steel ornamental fencing with decorative landscaping.

The City of Vacaville is currently served by a variety of parks and recreational facilities including the following: neighborhood parks, community parks, regional parks, accessible open space, special purpose facilities, bikeways, multi-use trails, and nature trails. In addition, a number of fields and other recreational facilities owned by City schools are made available for public use through policies set forth by individual school districts. The nearest park to the project site is the Lagoon Valley Park/Peña Adobe Park, located across I-80, to the southeast of the project site Further recreational areas include privately own facilities such as golf courses, swim, tennis, and fitness clubs, ice skating and hockey rinks, bowling alleys, and equestrian centers.

Discussion

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?

The proposed project would include construction and operation of a self-storage facility containing a single residence for an on-site manager. As such, the project would not include park facilities or significantly (directly or indirectly) increase population growth. In addition, the project would not increase the use of any existing recreational facilities or the demand for new, or expansion of existing recreational facilities. Therefore, **no impact** to park or recreational facilities would occur as a result of implementation of the proposed project.

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?

The project does not require recreational facilities, nor does the project require the construction or expansion of new public recreational facilities. All improvements will be confined within the project boundaries. As such, the proposed project would result in **no impact** related to requiring the construction or expansion of recreational facilities which might have an adverse physical effect on the environment.

Impact Conclusion

The Project will have no impact on recreation.

Mitigation Measures

No mitigation required.

XVII. TRANSPORTATION

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

Affected Environment

The proposed project is to construct a 98,000 sq. ft. self-storage facility on a vacant 6-acre parcel of land located at 5920 Cherry Glen Road, north of I-80 in Vacaville California. The project site is mostly vacant with several dilapidated structures located on the southern and western portions of the site, which would require demolition. The self-storage facility consists of 10 storage buildings with a 1,136 sq. ft. office and a 1,900 sq. ft. live-in manager's unit. The storage buildings range in size from 5,100 sq. ft. to 15,680 sq. ft. The storage facility includes single-story and two-story buildings with standard units and climate control units. The proposed project would include the construction of a driveway and emergency access on Cherry Glen Road and would not result to any changes to existing roadways in the project vicinity.

Discussion

a. Conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?

The Institute of Traffic Engineer's (ITE) *Trip Generation Handbook* was used to estimate weekday AM, PM, and daily trip generation forecasts for the proposed project.[22] As shown in Table 9 below, implementation of the proposed project would be expected to result in a total of 241 daily vehicle trips, with 14 trips occurring during the AM peak hour and 25 trips occurring during the PM peak hour.

TABLE 9. WEEKDAY PROJECT TRIP GENERATION RATES AND ESTIMATES

KSF[2]	Rate	Daily Trips	AM Peak Hour				PM Peak Hour			
			Rate	In	Out	Total	Rate	In	Out	Total
96.5	2.50	241	0.14	7	6	14	0.26	13	13	25
Source: Institute of Transportation Engineers, 2012.										

The intersections within close proximity to the project site all currently operate at a LOS A during AM and PM peak hours and are expected to maintain a LOS A with buildout of the General Plan. Due to the low number of project-generated trips, the project would not

[22] Institute of Transportation Engineers. *Trip Generation Handbook, 9th Edition*. September 2012.

adversely impact levels of service at nearby signalized intersections or roadways. In addition, because the project is consistent with the site's current land use designation, traffic associated with development of the project site has been accounted for in the City's planning efforts and analyzed in the General Plan and ECAS EIR.

Public transit for the City of Vacaville is provided by City Coach. The project site is not located along any of the current route offerings from City Coach and the nearest bus stop is located at Alamo Plaza, approximately 1.15 miles northeast of the project site. Bike lanes do not currently exist along Cherry Glen Road bordering the project site; however, the proposed project would include four bicycle parking racks. In addition, due to the project site's relatively isolated location, other pedestrian facilities do not exist within the vicinity of the project site.

Based on the above, the proposed project would not conflict with an applicable plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities, and a **less-than-significant** impact would occur.

b. Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?

Section 15064.3 of the CEQA Guidelines provides specific considerations for evaluating a project's transportation impacts. Per Section 15064.3, analysis of vehicle miles travelled (VMT) attributable to a project is the most appropriate measure of transportation impacts. Other relevant considerations may include the effects of the project on transit and non-motorized travel. Except as provided in Section 15064.3(b)(2) regarding roadway capacity, a project's effect on automobile delay does not constitute a significant environmental impact under CEQA. It should be noted that currently, the provisions of Section 15064.3 apply only prospectively; determination of impacts based on VMT is not required Statewide until July 1, 2020.

While the proposed project would not include specific design features to reduce overall VMT such as integrated pedestrian and bicycle infrastructure, or close proximity to transit, the proposed project would result in a relatively small number of daily trips. As stated above, the low number of project-generated trips would not be expected to impact levels of service at nearby signalized intersections. Therefore, implementation and operation of the proposed project would result in a **less-than-significant impact** related to conflicting with CEQA Guidelines section 15064.3, subdivision(b) as a determination of impacts is not required until July 1, 2020.

c. Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

Primary access to the proposed project would be provided by a new driveway on Cherry Glen Avenue located at the southern portion of the project site. The proposed project would not include any modifications to the existing circulation system in the project vicinity that would result in a traffic safety hazard. In addition, an EVA access point would be constructed on Cherry Glen Road at the northern portion of the project site. The proposed project would be consistent with the General Plan land use designation and zoning for the site, and thus, would not substantially increase hazards due to design features or incompatible uses, and emergency access to the project site would be adequate. Therefore, the project would result in a **less-than-significant impact**.

d. Result in inadequate emergency access?

The project has been reviewed by the Vacaville Police and Fire Departments. Both departments have confirmed on-site circulation and off-site access at the site will be adequate for emergency services. As such, the proposed project would not result in inadequate emergency access, and a **less-than-significant** impact would occur.

Impact Conclusion

The Project will have a less-than-significant impact on transportation.

Mitigation Measures

No mitigation required.

XVIII. TRIBAL CULTURAL RESOURCES

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:	Potentially Significant Impact	Less-Than-Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a. 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).	☐	✖	☐	☐
b. 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 resource to a California Native American tribe.	☐	✖	☐	☐

Affected Environment

As noted under Section V (CULTURAL RESOURCES), a cultural resources investigation was performed by Peak & Associates, Inc. on June 14, 2018, included a complete inspection of the site. The results of the survey indicated that the topography of the site appears to have been previously leveled for agricultural use and irrigation lines and connection points are visible. In addition, as noted during the field survey, the project site was at least five feet lower than nearby I-80, indicating possible previous grading of the site for construction soil. Historic or prehistoric resources were not observed within the project site during the June 14 field survey. A search of the Native American Heritage Commission (NAHC) Sacred Lands File did not yield any information regarding the presence of Tribal Cultural Resources within the project site or the immediate area. Furthermore, a search of the CHRIS by the NWIC did not identify any known cultural resources within the project site. The project site has been previously disturbed as a result agricultural use.

In compliance with AB 52 (Public Resources Code Section 21080.3.1), a project notification letter was distributed to the only regionally affiliated tribe that has requested notification, Yocha Dehe Wintun Nation (YDWN). The letter was distributed on January 28, 2019 and requests to consult were not received within the mandatory 30-day response period. On April 5, 2019, the City received a response letter dated March 27, 2019 from the YDWN. In the response, YDWN did not request to initiate formal consultation with the Lead Agency. Instead, YDWN noted that the project could impact known cultural resources and recommended incorporating mitigation measures to ensure cultural monitors are present during development and ground disturbing activities. In addition, YDWN requested the Lead Agency incorporate their “Treatment Protocol” (Appendix I) into the mitigation measures to help reduce impacts to tribal cultural resources. Lastly, YDWN request a copy of the draft IS/MND for review upon completion.

Although YDWN’s response was received more than 30-day after initial notification was provided, the Lead Agency acknowledges the comments from YDWN.

Discussion

a. 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).

The possibility exists that construction of the proposed project could result in a substantial adverse change in the significance of a Tribal Cultural Resource if previously unknown Tribal Cultural Resources are uncovered during grading or other ground-disturbing activities. Thus, a potentially significant impact to Tribal Cultural Resources could occur. Therefore, the Lead Agency will require the project sponsor to implement Mitigation Measures TRC-1 and TRC-2 to ensure impacts to unknown tribal cultural resources are limited to less-than-significant. **Less than significant impact with mitigation measures incorporated.**

b. 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 resource to a California Native American tribe.

As stated above, the potential exists for previously unknown surficial Tribal Cultural Resources to be discovered on-site during ground disturbing activities. As such, the proposed project would have a potentially significant impact. The Lead Agency will require the project sponsor to implement Mitigation Measures TRC-1 and TRC-2 to ensure impacts to unknown Tribal Cultural Resources are less than significant. **Less than significant impact with mitigation measures incorporated.**

Impact Conclusion

The Project will have a less-than-significant impact on Tribal Cultural Resources, with the following mitigation measures implemented.

Mitigation Measures

TRC-1 The project sponsor shall adhere to the YDWN Treatment Protocol for Handling Human Remains and Cultural Items Affiliated with Yocha Dehe Wintun Nation, included as Appendix I.

TRC-2 The project sponsor shall comply with mitigation measures CUL-1 and CUL-2.

XIX. UTILITIES AND SERVICE SYSTEMS

Would the project:	Potentially Significant Impact	Less-Than-Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a. Require or result in the relocation or construction of new or expanded water, wastewater treatment, or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	☐	☐	✖	☐
b. Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years?	☐	☐	✖	☐
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 project's projected demand in addition to the provider's existing commitments?	☐	☐	✖	☐
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?	☐	☐	✖	☐
e. Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	☐	☐	✖	☐

Affected Environment

The proposed project is to construct a 98,000 sq. ft. self-storage facility on a vacant 6-acre parcel of land located at 5920 Cherry Glen Road, north of I-80 in Vacaville California. The project site is mostly vacant with several dilapidated structures located on the southern and western portions of the site, which would require demolition. The self-storage facility consists of 10 storage buildings with a 1,136 sq. ft. office and a 1,900 sq. ft. live-in manager's unit. The storage buildings range in size from 5,100 sq. ft. to 15,680 sq. ft. The storage facility includes single-story and two-story buildings with standard units and climate control units. The perimeter of the property would be enclosed by 8 ft. tall tubular steel ornamental fencing with decorative landscaping. The proposed project would include design elements and materials intended to complement the adjacent New Life Church to the south of the project site and the height of the proposed structures would be comparable to those of the adjacent New Life Church.

Water

The City of Vacaville provides potable water service from three water supply sources, including the Solano Project, State Water Project (SWP), settlement water from the North Bay Aqueduct, and groundwater sources. [23] The California State Water Resources Control Board (CSWRCB) and the nine Regional Water Quality Control Boards (RWCQBs) throughout the state, are charged with protecting and enhancing water quality. The City of Vacaville is under the

[23] City of Vacaville. *Draft General Plan and ECAS EIR* [pg. 4.15-1]. August 2015.

jurisdiction of RWQCB 5 as treated water discharged by the City flows into the Sacramento River through a series of creeks and canals.

Potable water provided within the City limits is supplied by way of a network of existing water mains, reservoirs, groundwater wells, booster pump stations, and treatment plants. Non-potable water, primarily used throughout the City for non-residential landscape irrigation, is provided by the Solano Irrigation District (SID) by way of an existing conveyance system. The project site contains an existing on-site well that produces approximately 100 gallons per minute. The proposed project would provide water and fire flow service to the project site by way of a new water storage tank with a booster pump. The existing well would be used to supply the approximately 188,000-gallon water tank.

As further discussed in Section X (HYDROLOGY AND WATER QUALITY) of this IS/MND, the proposed project would not substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin. Based on the above, the proposed project would have sufficient water supplies available to serve the project and reasonably foreseeable future development.

Wastewater

The General Plan and ECAS EIR determined that the Easterly wastewater treatment plant (WWTP) has adequate capacity to serve the anticipated growth related to build out of the General Plan for the next 16 years without requiring expansion. Despite the adequate available capacity, the Easterly WWTP is currently being expanded to accommodate development of the General Plan through 2035. Expansion of the WWTP would include the construction of a fourth secondary clarifier system and expansion to process areas to increase capacity to beyond 15.0 million gallons per day (MGD).

Discharge from the Easterly WWTP flows into Old Alamo Creek. The General Plan and ECAS EIR determined that, with development allowed by the General Plan, the WWTP would operate similar to current conditions with variations in strengths within typical ranges for municipal wastewater. In addition, General Plan Policy PUB-P-13.4 directs the City to plan, construct, and maintain wastewater treatment facilities to provide a level of wastewater treatment that meets State discharge requirements and to plan for expanding wastewater treatment capacity.

Wastewater needs for the proposed project would be met through the construction of an on-site septic tank and drain field. As discussed throughout this IS/MND, impacts related to the construction of the proposed septic tank would be less than significant. Given that the proposed project would not require connection to City utility infrastructure, impacts related to exceeding the wastewater treatment requirements of the RWQCB would not occur and the proposed project would result in a less-than-significant impact related to exceeding the wastewater treatment requirements of the RWQCB or requiring the construction or expansion of new wastewater treatment facilities, construction of which would cause significant environmental effects.

Stormwater

The General Plan includes policies and actions designed to ensure adequate stormwater facilities are provided by new development, and to reduce increases in stormwater runoff quality resulting from new development. Policy SAF-P2.2 directs the City to assess the adequacy of storm drainage utilities in existing developed areas, and program any needed improvements. Policy SAF-P1.2 requires that the storm drainage needs for each project be evaluated and account for project runoff volumes and flow rates once the drainage area is fully developed. Policy SAF-P3.3 requires a storm Drainage Master Plan be prepared for new development projects to ensure new development adequately provides for on-site drainage facilities necessary to ensure that potential off-site impacts are fully mitigated. The proposed project would include a bio-retention basin designed in compliance with the foregoing City policies and sized to adequately treat all runoff from the proposed imperviously surfaces. Post-project runoff would infiltrate soils at a flow rate consistent with pre-project conditions. Therefore, the proposed project would not result in significant impacts to stormwater drainage infrastructure.

Electricity, Natural Gas, and Telecommunications

The General Plan and ECAS EIR determined that development allowed under the General Plan would create an increased demand for electricity and natural gas. Impacts to such utilities were determined to be less than significant. Pacific Gas and Electric (PG&E) would provide natural gas and electricity to the project site. Telecommunications providers within the City of Vacaville include AT&T, US Sprint, MCI, and Pacific bell. The proposed project would be served by existing services and not require expansion or relocation of utilities infrastructure.

Discussion

a. Require or result in the relocation or construction of new or expanded water, wastewater treatment, or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?

Existing City water, wastewater, stormwater drainage, energy and telecommunications infrastructure would be adequate to serve the proposed project and would not require relocation or expansion as a result of implementation of the proposed project. Given that the proposed project is consistent with the General Plan and zoning designations for the project site, impacts related to such have been analyzed in the General Plan and ECAS EIR and the proposed project would result in a **less-than-significant** impact.

b. Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years?

The proposed project would use the existing on-site well, which would have sufficient water supplies available to serve the project and reasonably foreseeable future development. Therefore, the impact would be **less than significant**.

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 project's projected demand in addition to the provider's existing commitments?

The proposed project would not require connection to City utility infrastructure, and impacts related to exceeding the wastewater treatment requirements of the RWQCB would not occur. Therefore, the impact would be **less than significant**.

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?

The City of Vacaville contracts with Recology Vacaville Solano to provide weekly solid waste and recyclable material collection. Recyclable material collected by Recology Vacaville Solano is sent to the Recology Vallejo facility located at 2021 Broadway Street in Vallejo, California. Solid waste collection for the City of Vacaville is deposited at the Hay Road Landfill, located approximately 9.75 miles southeast of the project site. According to the General Plan and ECAS EIR, the Hay Road Landfill has a permitted daily capacity of 2,400 tons and receives 226,777 cubic yards and 136,066 tons of solid waste per year. The Hay Road Landfill has a maximum capacity of 37 million cubic yards. In 2010, the landfill was assessed to be approximately 18 percent full and is projected to have adequate capacity until 2069.

The General Plan and ECAS EIR determined that development associated with implementation of the General Plan would increase solid waste generation by 0.03 percent of the permitted daily capacity of the Hay Road Landfill facility. As such, the Hay Road Landfill would have adequate capacity to accommodate the solid waste disposal needs of new development under the General Plan. Given that the proposed project would be consistent with the General Plan and zoning for the project site, impacts related to utilities and service systems associated with implementation of the proposed project have already been analyzed in the General Plan and ECAS EIR. The General Plan and ECAS EIR determined that a less-than-significant impact would occur. Therefore, the proposed project would not 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 goals, and a **less-than-significant** impact would occur.

e. Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?

The City of Vacaville's Land Use and Development Code implements the requirements of SB 1016, which establishes a per capita disposal measurement system for solid waste based on a jurisdiction's reported total disposal of solid waste divided by a jurisdiction's population. The California Integrated Waste Management Act (CIWMA) sets target disposal rates for each jurisdiction. The City's per capita disposal rate in 2010 was 4.9 pounds per resident per year, which is well below the City's CIWMB target rate of 6.5. In addition, Goals and Policies set forth in the General Plan have been designed to reduce per capita solid waste and increase recycling and the ECAS includes measures to similarly reduce per capita solid waste.

Because the proposed project would be consistent with the General Plan land use designation and zoning for the site, impacts related to implementation of the proposed project have already been analyzed in the General Plan and ECAS EIR. Therefore, the proposed project would comply with applicable federal, state, and local management and reduction statutes related to solid waste, and a **less-than-significant** impact would occur.

Impact Conclusion

The Project will have a less-than-significant impact on Utilities and Service Systems.

Mitigation Measures

No mitigation required.

XX. WILDFIRE

If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:	Potentially Significant Impact	Less-Than-Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a. Substantially impair an adopted emergency response plan or emergency evacuation plan?	☐	☐	✖	☐
b. 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?	☐	☐	✖	☐
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?	☐	☐	✖	☐
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?	☐	☐	✖	☐

Affected Environment

The proposed project is to construct a 98,000 sq. ft. self-storage facility on a vacant 6-acre parcel of land located at 5920 Cherry Glen Road, north of I-80 in Vacaville California. The project site is mostly vacant with several dilapidated structures located on the southern and western portions of the site, which would require demolition. The self-storage facility consists of 10 storage buildings with a 1,136 sq. ft. office and a 1,900 sq. ft. live-in manager's unit. The storage facility includes single-story and two-story buildings with standard units and climate control units.According to the CAL FIRE Fire and Resource Assessment Program, the project site is not located within a Very High Fire Hazard Severity Zone and the nearest Very High Fire Hazard Severity Zone to the project site is to the northwest of the project site.[24] The project site is located at the southern edge of the City of Vacaville, is surrounded on three sides by existing development, and is not located in or near a State Responsibility Area.

Discussion

a. Substantially impair an adopted emergency response plan or emergency evacuation plan?

According to the CAL FIRE Fire and Resource Assessment Program, the project site is not located within a Very High Fire Hazard Severity Zone and the nearest Very High Fire Hazard Severity Zone to the project site is to the northwest of the project site.[25] The project site is located at the southern edge of the City of Vacaville, is surrounded on three sides by existing development, and is not located in or near a State Responsibility Area. Therefore,

[24] California Department of Forestry and Fire Protection. *Solano County, Draft Fire Hazard Severity Zones in LRA*. October 7, 2007.

[25] California Department of Forestry and Fire Protection. *Solano County, Draft Fire Hazard Severity Zones in LRA*. October 7, 2007.

the proposed project would not be subject to risks related to wildfires, and a **less-than-significant** impact would occur.

b. 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?

As mentioned previously, the topography of the project site is relatively flat with zero to two percent slopes and is not surrounded by areas with substantial elevation changes. In addition, development of the project site with the proposed self-storage facility would not increase the existing risk of wildland fire hazards because site clearing activities and overlaying with impervious surfaces would remove much of the on-site vegetation which could be a potential fuel source for wildland fires. As such, the proposed project would not, 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. Therefore, the impact would be **less-than-significant.**

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?

The proposed project is located on Cherry Glen Road, northeast of the intersection of Lincoln Highway and I-80. Power lines exist along the project site's frontage with Cherry Glen Road and the proposed project would include the installation of an 188,000-gallon water storage tank which would provide fire flow water for the project site. The proposed water storage tank would be sufficient to provide fire flow water should such water be needed on-site. As such, the proposed project would not require the installation or maintenance of associated infrastructure that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment, and a **less-than-significant** impact would occur.

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?

As stated above, the project site is relatively flat, with zero to two percent slopes, and the surrounding topography does not contain any steep slopes which result in flooding associated with post-fire slope instability. Thus, proposed project would not be at risk from post fire induced landslide. The proposed project would not 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. As such, a ***less-than-significant*** *impact would occur*

Impact Conclusion

The Project will create a less-than-significant impact from Wildfires.

Mitigation Measures

No mitigation required.

XXI. MANDATORY FINDINGS OF SIGNIFICANCE

Does the project:	Potentially Significant Impact	Less-Than-Significant with Mitigation Incorporated	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?	☐	☐	✖	☐
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)?	☐	☐	✖	☐
c. Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☐	✖	☐

Discussion

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?

As discussed in Section IV (BIOLOGICAL RESOURCES), while the potential exists for western burrowing owl and nesting raptors and migratory birds protected by the MBTA to occur on-site, Mitigation Measures BIO-1 and BIO-3 would ensure that impacts to special-status species would be less-than-significant. The project site is predominantly undeveloped, has been previously disturbed, and does not contain any known historic or prehistoric resources. Thus, implementation of the proposed project is not anticipated to have the potential to result in impacts related to historic or prehistoric resources. Nevertheless, Mitigation Measures CUL-1 and CUL-2 would ensure that in the event that historic or prehistoric resources are discovered within the project site, such resources are protected in compliance with the requirements of CEQA.

Considering the above, the proposed project would not result in significant impacts associated with the following: 1) degrade the quality of the environment; 2) substantially reduce or impact the habitat of fish or wildlife species; 3) cause fish or wildlife populations to drop below self-sustaining levels; 4) threaten to eliminate a plant or animal community; 5) reduce the number or restrict the range of a rare or endangered plant or animal; or 6)

eliminate important examples of the major periods of California history or prehistory. Therefore, a **less-than-significant** impact would occur.

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)?

The proposed project in conjunction with other development within the City of Vacaville could incrementally contribute to cumulative impacts in the area. However, as demonstrated in this IS/MND, all potential environmental impacts that could occur as a result of project implementation would be reduced to a less-than-significant level through compliance with the mitigation measures included in this IS/MND, as well as applicable General Plan policies, Municipal Code standards, and other applicable local and State regulations. In addition, the project would be consistent with the site's existing land use and zoning designations. The project site is bordered by existing development and is located in an urbanized setting. Accordingly, buildout of the site for warehouse uses was generally considered in the cumulative analysis of buildout of the General Plan within the General Plan and ECAS EIR.

As noted in Section 21083.3 of the CEQA Guidelines, where a project is consistent with zoning and General Plan designations for the site, and an EIR has been certified with respect to that general plan, the analysis of potential environmental impacts resulting from the individual project should focus on those effects that are peculiar to the proposed project. As demonstrated throughout this IS/MND, the proposed project would not result in any significant environmental impacts peculiar to the project, and, thus, the proposed project would not contribute any new or additional impacts not previously analyzed in the General Plan and ECAS EIR. Therefore, when viewed in conjunction with other closely related past, present, or reasonably foreseeable future projects, development of the proposed project would not result in a cumulatively considerable contribution to cumulative impacts in the City of Livermore, and the project's incremental contribution to cumulative impacts would be **less than significant**.

c. Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?

As described in this IS/MND, the proposed project would comply with all applicable General Plan policies, Municipal Code standards, other applicable local and State regulations, and mitigation measures included herein. In addition, as discussed in Section III (AIR QUALITY), Section IX (HAZARDS AND HAZARDOUS MATERIALS, and Section XIII (NOISE), of this IS/MND, the proposed project would not cause substantial effects to human beings, including effects related to exposure to air pollutants, hazardous materials and noise. Therefore, the proposed project's impact would be **less than significant**.

SOURCES

All technical reports and modeling results prepared for the project analysis are available upon request at the City of Vacaville City Hall, located at 650 Merchant Street, Vacaville, CA 95688. The following documents are referenced information sources utilized by this analysis:

1. Barnett Environmental. *Wetlands & Biological Assessment of the Lagoon Valley Self Storage Project.* June 12, 2018.
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3. California Department of Conservation. *Solano County Important Farmland Map 2016*. August 2017. Available at: https://www.conservation.ca.gov/dlrp/fmmp/Pages/Solano.aspx.
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16. Institute of Transportation Engineers. *Trip Generation Handbook – 9th Edition*. September 2012.
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18. Northwest Information Center. *Records Search for the Praxis Properties Storage Facility Project.* June 6, 2018.
19. C.A. Energy Commission. 2017. Total System Electric Generation. Internet URL: https://www.energy.ca.gov/almanac/electricity_data/total_system_power.html
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21. C.A. Energy Commission. 2017. Integrated Energy Policy Report. Internet URL: https://www.energy.ca.gov/2017_energypolicy/

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23. Solano County Water Agency. *Solano Habitat Conservation Plan.* October 2012.

24. Trinity Consultants. *California Emissions Estimator Model User's Guide Version 2016.3.2.* October 2017.

25. Yolo-Solano Air Quality Management District. *Handbook for Assessing and Mitigating Air Quality Impacts*. July 11, 2007. Available at: http://www.ysaqmd.org/documents/CEQAHandbook2007.pdf. Accessed January 2019.

APPENDIX A

PROJECT PLANS

LAGOON VALLEY STORAGE

SELF STORAGE

CHERRY GLEN RD.
VACAVILLE, CA 95688

SITE AREA

TOTAL SITE AREA: 262,917 SF = 6 ACRES

PROPOSED FACILITY AND DRIVE AILES: 180,153 SF = 4.1 ACRES
UNDEVELOPED PROPOSED SITE: 82,764 SF = 1.9 ACRES

ESTIMATED TREE CALCULATIONS

TOTAL TREES REMAINING: 37, 77%
TOTAL TREES DEMOLISHED: 11, 23 %
TOTAL TREES EXISTING ON SITE: 46, 100%

TOTAL DIAMETER REMAIN: 850 INCHES
TOTAL DIAMETER DEMOLISHED: 307 INCHES
TOTAL DIAMETER EXISTING ON SITE: 1,157 INCHES

*SEE LANDSCAPE PLANS FOR (N) PROPOSED TREES AND GREENERY.
*SEE A1 FOR EXISTING SITE PLAN AND TREE SUMMARY.
*SEE ARBORIST REPORT.

PROJECT INFORMATION CONT.

PROJECT SUMMARY:
NEW STORAGE FACILITY THAT IS +/- 97,580 SF, 18 RENTABLE PARKING SPACES, WITH AN OFFICE AND LIVE IN MANAGERS UNIT. 10,305 SF ON THE SECOND LEVEL OF BUILDING C AND B IS CLIMATE CONTROLLED BETWEEN 68-75 DEGREES ALL YEAR ROUND.

SITE AREA:	6.0 ACRES, 261,360 SF
OCCUPANCY:	S (STORAGE), B (OFFICE), R-1 (MGR RESIDENCE)
CONSTRUCTION TYPE:	TYPE II-B, V-B
FIRE SPRINKLER:	YES - OFFICE, BUILDING B
NUMBER OF STORIES:	TWO (2)
BLDG. HEIGHT:	24'-1.5"

F.A.R.: 96,558/261,360 = 0.37, 37%

LINEAR FEET OF STREET FRONTAGE: 225 LINEAR FT. W/ (N) LANDSCAPE AND (E) TREES.
LINEAR FEET OF INTERSTATE FRONTAGE: 380 LINEAR FT.

PROJECT DIRECTORY

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ROCKLIN, CA 95765
PHONE: (916) 626-3311
CONTACT: Ron Smith
EMAIL: ronsmithllc@gmail.com

ARCHITECT:
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PHONE: (888) 352-2721
CONTACT: Tim Alatorre
EMAIL: tim@domum.design

CIVIL ENGINEER:
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LANDSCAPE ARCHITECT:
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PROJECT INFORMATION

THE PROPOSED USE AND STRUCTURE FOR WHICH THE EXCEPTION TO THE FAR STANDARDS IS APPROVED SHALL HAVE A LOWER EMPLOYEE DENSITY TO HAVE NO MORE THAN 3 EMPLOYEE AND 1 RESIDENT ON SITE THAN USES GENERALLY PERMITTED WITHIN THE APPLIABLE ZONING DISTRICT. PUBLIC FACILITIES AND SERVICES ARE AVAILABLE TO SERVE THE PROPOSED USE AND STRUCTURE DURING THE OPPORATIONAL HOURS BETWEEN 8AM-6PM DAILY. THE SCALE OF THE PROPOSED BUILDING IS COMPATIBLE WITH SURROUNDING DEVELOPMENTS BY COLOR PALETTE, MATERIALS SUCH AS STUCCO AND ARCHITECTURAL ELEMENTS ON ALL STREET OR NEIGHBORING ELEVATIONS.

THERE WILL BE 3 EMPLOYEES AND 1 RESIDENT, THE OFFICE WILL BE OPEN BETWEEN THE HOURS OF 8AM TO 6PM, MONDAY THROUGH SATURDAY. THE GATE WILL BE ABLE TO ACCESS BETWEEN 6AM TO 9PM FOR STORAGE HOLDERS WITH KEYPAD ACCESS. THE TYPICAL CUSTOMERS WILL BE LOCAL RESIDENTS OR BUSINESS OWNERS, THEY WILL HAVE ACCESS THROUGH A SECURED (CARD/KEYPAD) ENTRY SYSTEM. THE STORAGE UNITS BEING RENTED COME IN THE SIZES OF 5X5, 5X10, 10X10, 10X15, 10X20, AND 10X30. OTHER PRODUCTS BEING SOLD, NOT BE LIMITED TO: STORAGE BOXES, TAPE, BUBBLE WRAP, TISSUE, AND/OR LOCKS. THE PROJECT WILL HAVE MINIMAL ENVIRONMENTAL IMPACT, WITH THE MANAGER'S UNIT BEING THE ONLY POTENTIAL SOURCE OF WASTE UPON COMPLETION.

THE PROJECT DURATION IS ESTIMATED AT 12 MONTHS, WITH 250 WORK DAYS NEEDED TO COMPLETE THE PROJECT. EACH PHASE OF THE PROJECT ARE AS FOLLOWS (QTY OF DAYS, MAY FLUCTUATE DURING CONSTRUCTION):

- SITE PREPARATION: 14 DAYS
- GRADING: 25 DAYS
- BUILDING CONSTRUCTION: 100 DAYS
- PAVING: 5 DAYS
- ARCHITECTURAL COATING: 20 DAYS
- LANDSCAPING: 25 DAYS

THE DEVELOPMENT WILL HAVE MINIMAL NOISE IMPACT ON THE COMMUNITY. THE FACILITY WILL BE ACCESSED INTERMITTENTLY DURING BUSINESS HOURS AND TYPICALLY BY ONLY ONE OR TWO CUSTOMERS AT A TIME. NOISE WILL BE LIMITED TO THE SOUNDS OF PEOPLE SPEAKING, A CAR, ROLL UP DOORS OPENING AND CLOSING. DURING CONSTRUCTION, THE NOISE IMPACT ON THE SURROUNDING AREA WILL BE KEPT TO A MINIMAL. AS LOW QUANTITY OF CONSTRUCTION VEHICLES ARE BEING PROPOSED TO USE DURING CONSTRUCTION.

THE TYPES OF CONSTRUCTION VEHICLES REQUIRED ARE AS FOLLOWS (QTY):

- DOZERS: 1
- EXCAVATORS: 1
- GRADERS: 1
- PAVERS: 1
- ROLLERS: 1

THE SITE WILL HAVE "BALANCE" FILL WITH NO IMPORT/EXPORT SOIL ACTIVITIES. THERE WILL BE SOIL IMPORT, HAUL TRUCK CAPACITY IS 12CY/TRUCK, NO EXPORT. NO TRIP GENERATION DAYS PROPOSED DURING OPERATIONS. THERE IS NO PROPOSED PROJECT OPERATIONS INCLUDING ANY STATIONARY SOURCES. WATER TRUCKS AND EROSION CONTROL FABRIC WILL BE USED TO REDUCE WIND EROSION ON LANDSCAPE MATERIALS. THE PROJECT WILL USE LOW VOC PAINT FOR INTERIOR AND EXTERIOR SURFACES. THERE IS A LOW FUTURE LANDSCAPE IMPROVEMENTS INVOLVING THE ETWA AND MAWA.

SEE PROJECT DESCRIPTION ATTACHED.

INDEX OF DRAWINGS

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A3	OVERALL PARTITION PLANS
A4	MANAGERS PARTITION PLAN
A5	EXTERIOR ELEVATIONS
A6	EXTERIOR ELEVATIONS
A7	MANAGERS UNIT EXTERIOR ELEVATIONS
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C1.0	PRELIMINARY SITE PLAN
C2.0	PRELIMINARY GRADING, DRAINAGE, & POST CONSTRUCTION BMP PLAN
C3.0	CONCEPTUAL UTILITY PLAN
C4.0	TYPICAL SECTIONS & DETAILS
LANDSCAPE	
L-1.1	PLANTING PLAN
L-1.2	PLANT SCHEDULE

BUILDING AREAS

PROPOSED BUILDING AREA

BUSINESS		
OFFICE		1,136 SF
	BUSINESS TOTAL	1,136 SF
RESIDENCE		
GARAGE		700 SF
MANAGERS UNIT	TOTAL CONDITIONED SPACE	1,200 SF
	RESIDENCE TOTAL	1,900 SF
STORAGE		
BUILDING A		10,200 SF
BUILDING B		5,369 SF
BUILDING B CLIMATE	CONDITIONED SPACE	5,305 SF
BUILDING C		5,064 SF
BUILDING C CLIMATE	CONDITIONED SPACE	5,000 SF
BUILDING D		7,710 SF
BUILDING E		7,430 SF
BUILDING F		8,010 SF
BUILDING G		13,080 SF
BUILDING H		15,680 SF
BUILDING I		6,600 SF
BUILDING J		5,100 SF
	STORAGE TOTAL	94,548 SF
	GRAND TOTAL	97,583 SF

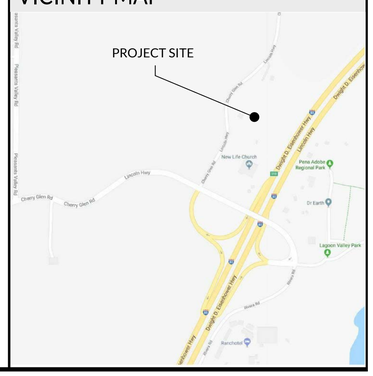
TOTAL CONDITIONED SPACE: 12,641 SF

UNIT MIX

UNIT MIX

NAME	UNIT AREA	AREA	UNIT COUNT	% OF UNITS	CLIMATE CONTROL
5 x 5	25 SF	425 SF	17	3	
5 x 10	50 SF	599 SF	12	2	
10 x 10	100 SF	7,348 SF	73	14	
10 x 10	100 SF	3,253 SF	33	6	X
10 x 15	150 SF	12,911 SF	86	17	
10 x 15	150 SF	4,910 SF	33	6	X
10 x 20	200 SF	31,777 SF	159	31	
10 x 30	300 SF	30,830 SF	103	20	
GRAND TOTAL		92,054 SF	516	100	

VICINITY MAP



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APN: 0127-040-140

LAGOON VALLEY STORAGE
SELF STORAGE

Issue / Revision Schedule:

No.	Date	Description
	7/27/18	PLANNING

Proj. No: 2018.405
Drawn By: JAF
Reviewed TEA

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COVER SHEET

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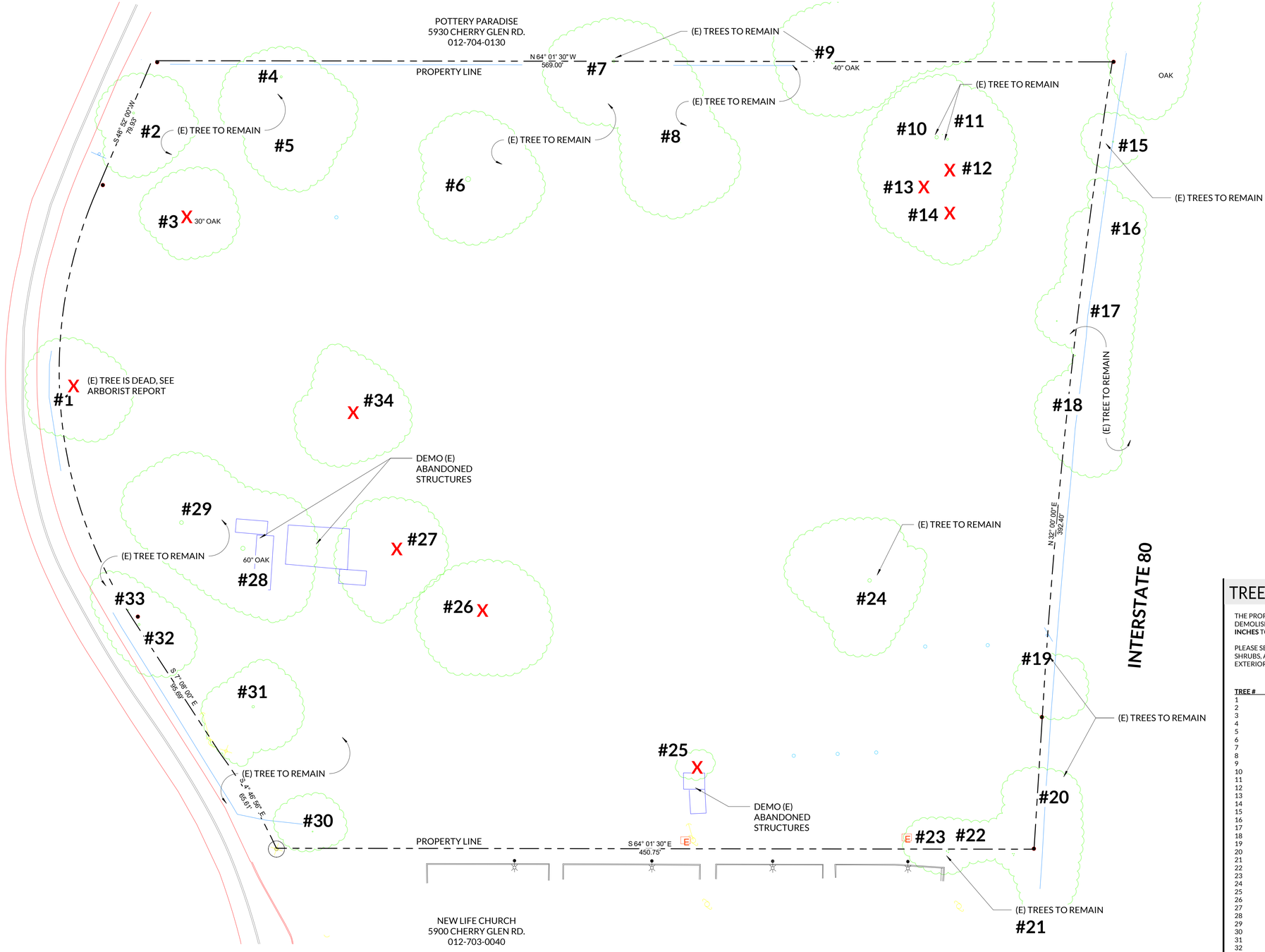

1 EXISTING SITE PLAN AND TREE DEMO PLAN

SCALE: 1" = 30'-0"

TREE CALCULATIONS

THE PROPOSED PLAN IS SAVING 36/47 **(76.5%)** TOTAL TREES ONLY DEMOLISHING 10/47 **(21.3%)** TREES. THE PROPOSED PLAN IS SAVING **904 INCHES** TOTAL DIAMETER OF TREES, BY ONLY DEMOLISHING 253 INCHES.

PLEASE SEE PROPOSED LANDSCAPE PLANS FOR NEW TREES, BUSHES, SHRUBS, AND GRASS LAYOUT FOR THE EXTERIOR CHERRY GLENN RD. AND EXTERIOR SOUTH ELEVATION FACING ADJACENT NEW LIFE CHURCH.

TREE #	DIAMETER	DEMO	REMAIN
1	54	X	
2	30/32		X
3	34	X	
4	32/22		X
5	31		X
6	58		X
7	37		X
8	49		X
9	41		X
10	38		X
11	7		X
12	33	X	
13	35	X	
14	29	X	
15	20		X
16	7/4		X
17	16		X
18	11/11		X
19	30		X
20	12/12/10/16		X
21	22		X
22	9/10/12		X
23	11/11/14		X
24	44		X
25	6/7/7	X	
26	42	X	
27	42	X	
28	51		X
29	41		X
30	19		X
31	34		X
32	34		X
33	12		X
34	18	X	

TOTAL TREES REMAINING: 37, 77%
TOTAL TREES DEMOLISHED: 11, 23 %
TOTAL TREES EXISTING ON SITE: 46, 100%

TOTAL DIAMETER REMAIN: 850 INCHES
TOTAL DIAMETER DEMOLISHED: 307 INCHES
TOTAL DIAMETER EXISTING ON SITE: 1,157 INCHES

*SEE LANDSCAPE PLANS FOR (N) PROPOSED TREES AND GREENERY.
*SEE ARBORIST REPORT.

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LAGOON VALLEY STORAGE
SELF STORAGE

Proj. No: 2018.405
Drawn By: JAF
Reviewed TEA

Issue / Revision Schedule:
No. Date Description
7/27/18 PLANNING

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EXISTING SITE PLAN

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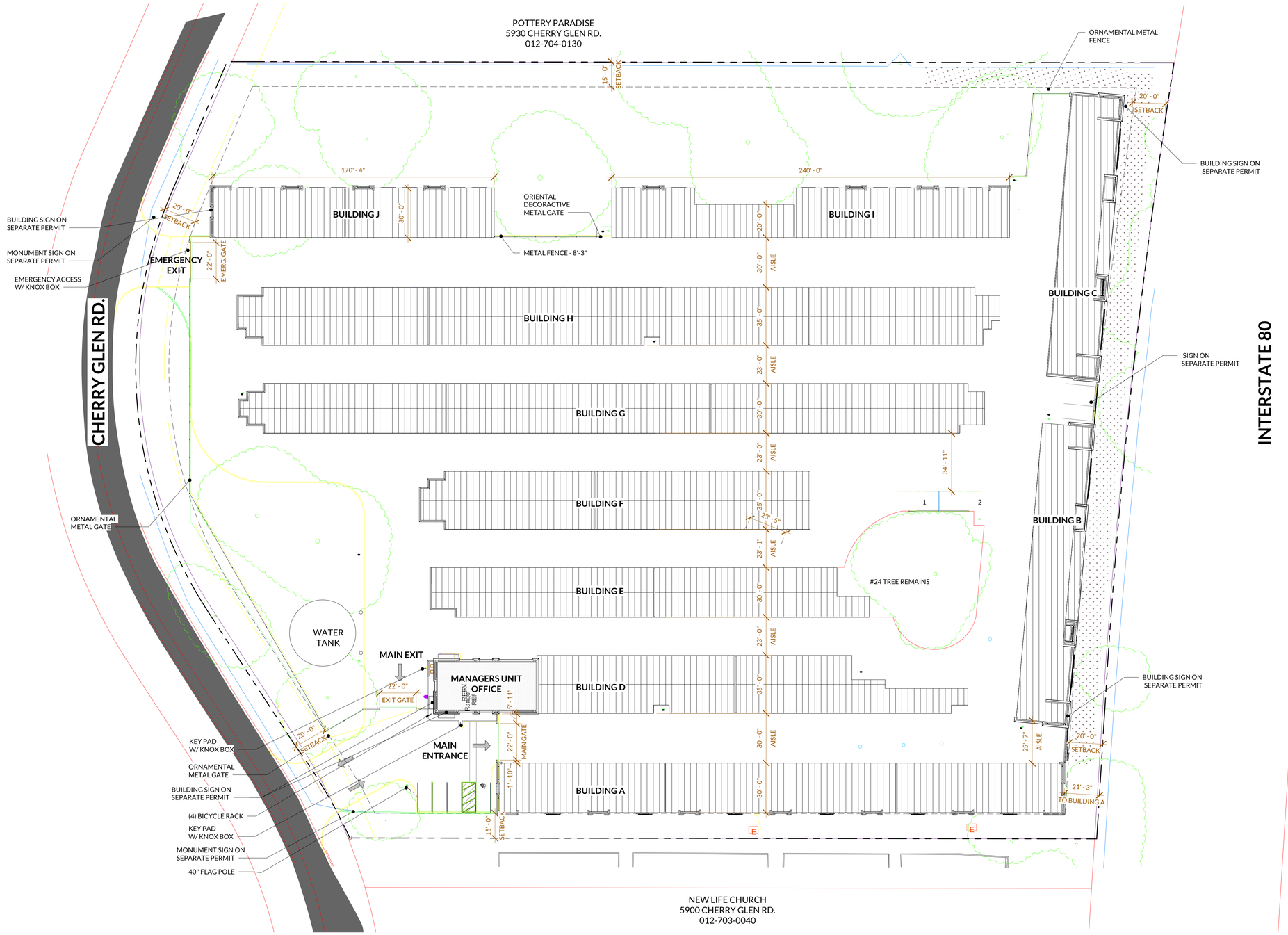

1 PROPOSED ARCHITECTURAL SITE AND ROOF PLAN

SCALE: 1" = 30'-0"

SEE LANDSCAPE FOR PROPOSED PLANTING, GROUND COVER, ETC.

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LAGOON VALLEY STORAGE SELF STORAGE

Proj. No: 2018.405
Drawn By: JAF
Reviewed TEA

Issue / Revision Schedule:

No.	Date	Description
	7/27/18	PLANNING

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ARCHITECTURAL SITE PLAN

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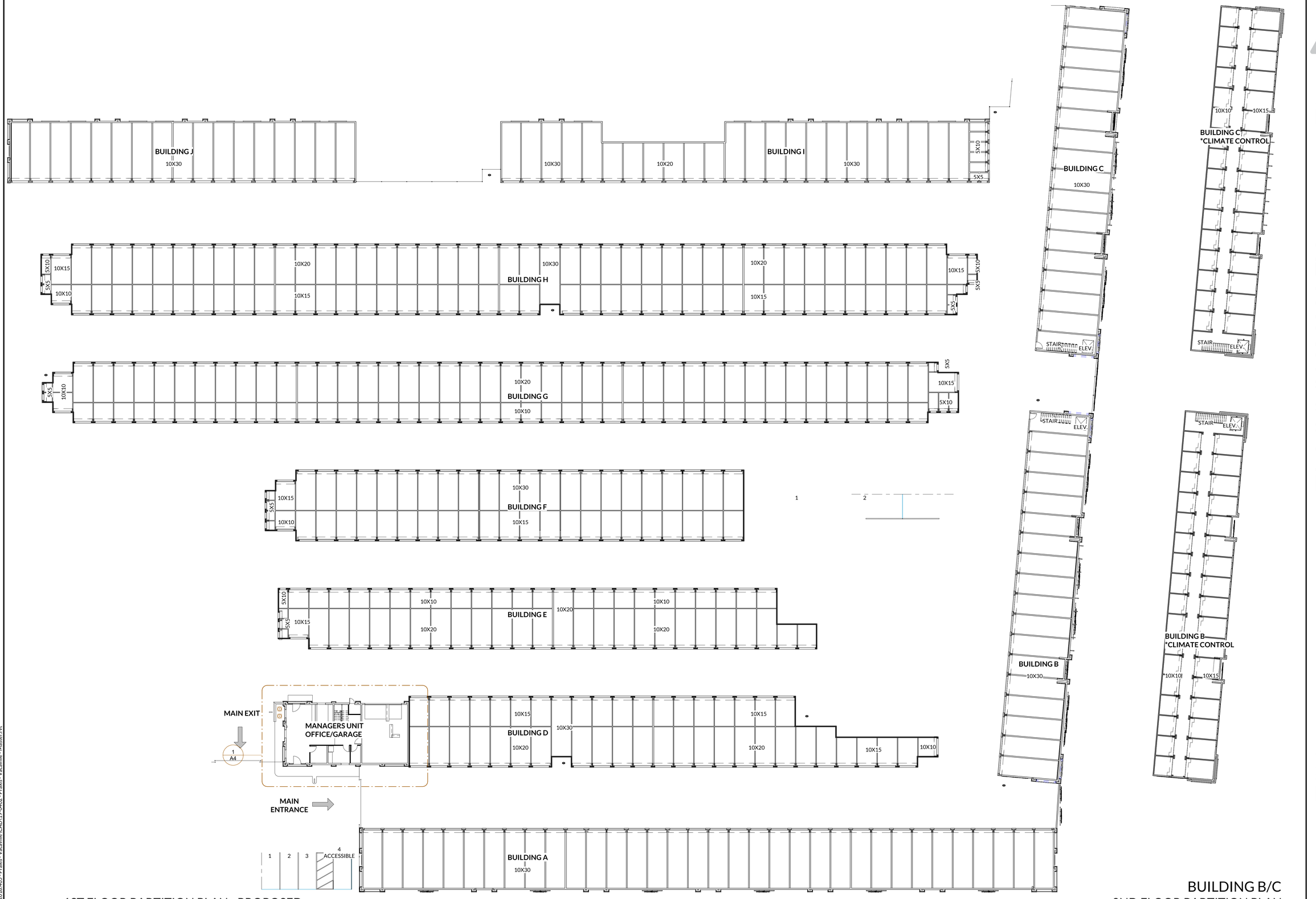

1 1ST FLOOR PARTITION PLAN - PROPOSED
SCALE: 1" = 20'-0"

2 2ND FLOOR PARTITION PLAN
SCALE: 1" = 20'-0"

BUILDING B/C

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APN: 0127-040-140

LAGOON VALLEY SELF STORAGE

Proj. No: 2018.405
Drawn By: JAF
Reviewed TEA

Issue / Revision Schedule:

No.	Date	Description
	7/27/18	PLANNING

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OVERALL PARTITION PLANS

A3

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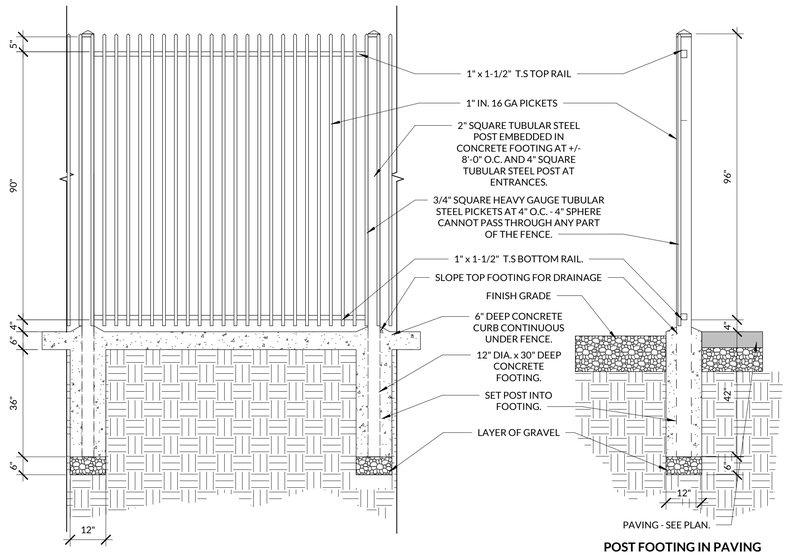


POST FOOTING W/ CONTINUOUS CURB

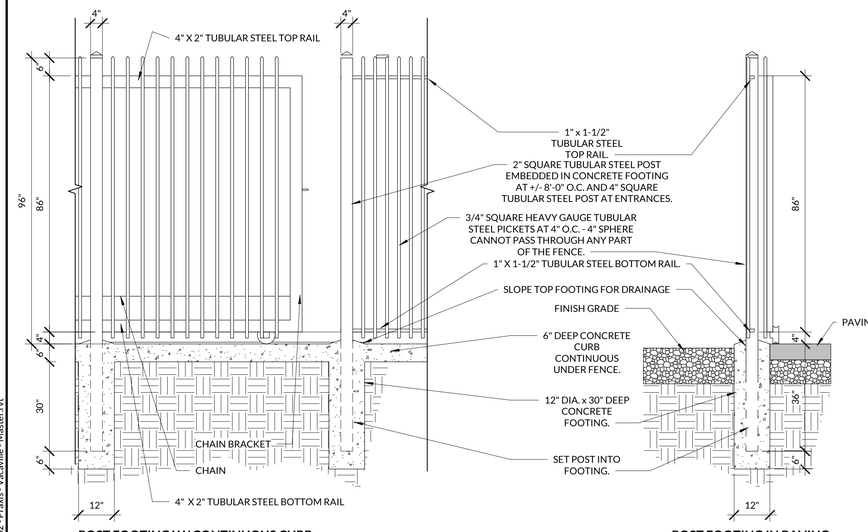
POST FOOTING IN PAVING

NOTES:

1. ALL TUBULAR STEEL FENCING TO BE PAINTED WITH RUST- RESISTANT SEMI-GLOSS PAINT. COLOR AND FINISH TO BE APPROVED BY OWNER PRIOR TO INSTALLATION.
2. FENCE IS TO BE INDEPENDENT WITH NO BOLTS OR ATTACHMENT TO BUILDINGS UNLESS SPECIFICALLY SHOWN ON DETAILS AND APPROVED BY OWNER.
3. FENCE TO MEET ALL LOCAL AND STATE REQUIREMENTS.

3 FENCING DETAIL - ORNAMENTAL

SCALE: 1/2" = 1'-0"



POST FOOTING W/ CONTINUOUS CURB

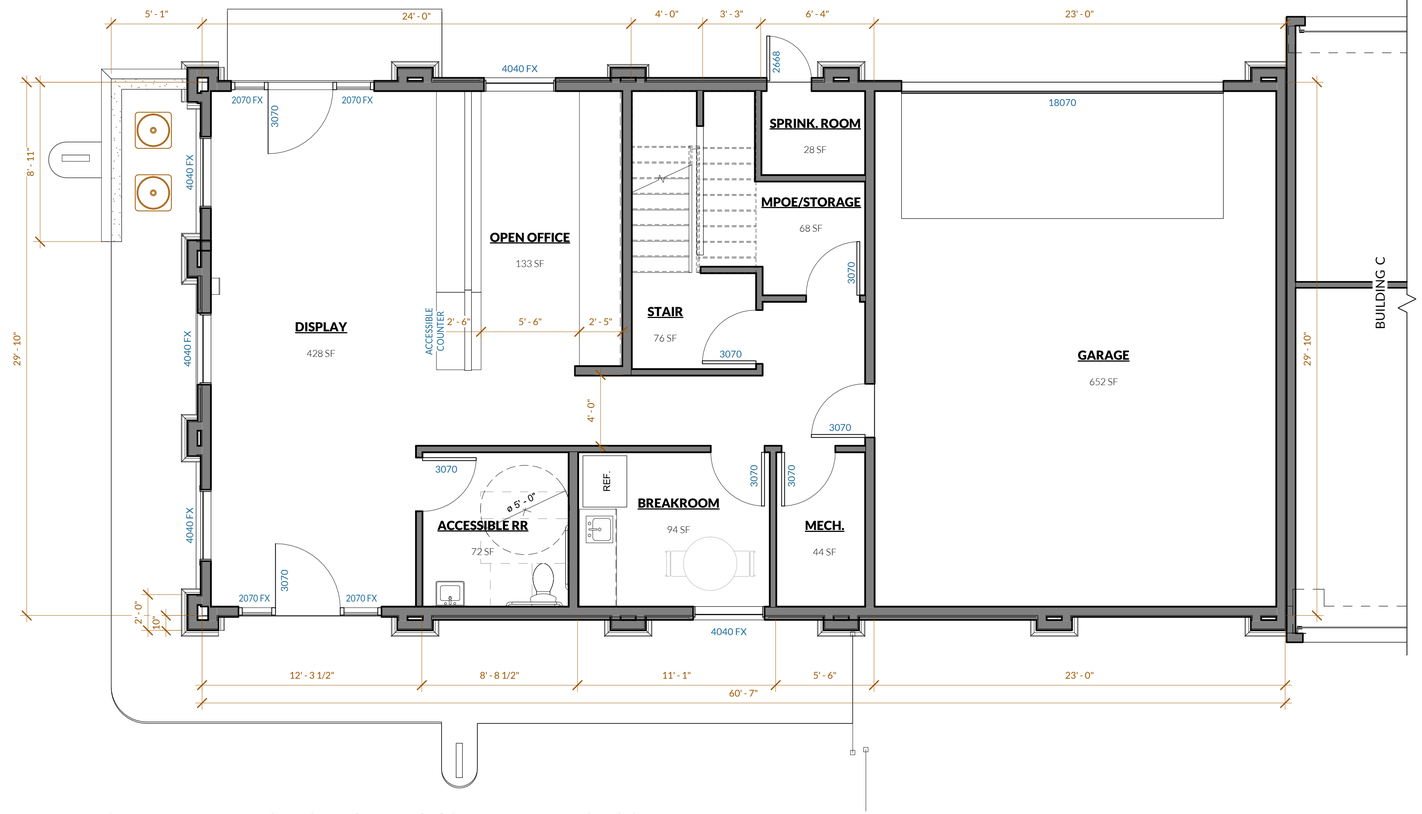
POST FOOTING IN PAVING

NOTES:

1. ALL TUBULAR STEEL FENCING TO BE PAINTED WITH RUST- RESISTANT SEMI-GLOSS PAINT. COLOR AND FINISH TO BE APPROVED BY OWNER PRIOR TO INSTALLATION.
2. ALL WELDS TO BE GROUND SMOOTH.
3. FENCE IS TO BE INDEPENDENT WITH NO BOLTS OR ATTACHMENT TO BUILDINGS UNLESS SPECIFICALLY SHOWN ON DETAILS AND APPROVED BY OWNER.
4. FENCE TO MEET ALL LOCAL AND STATE REQUIREMENTS.

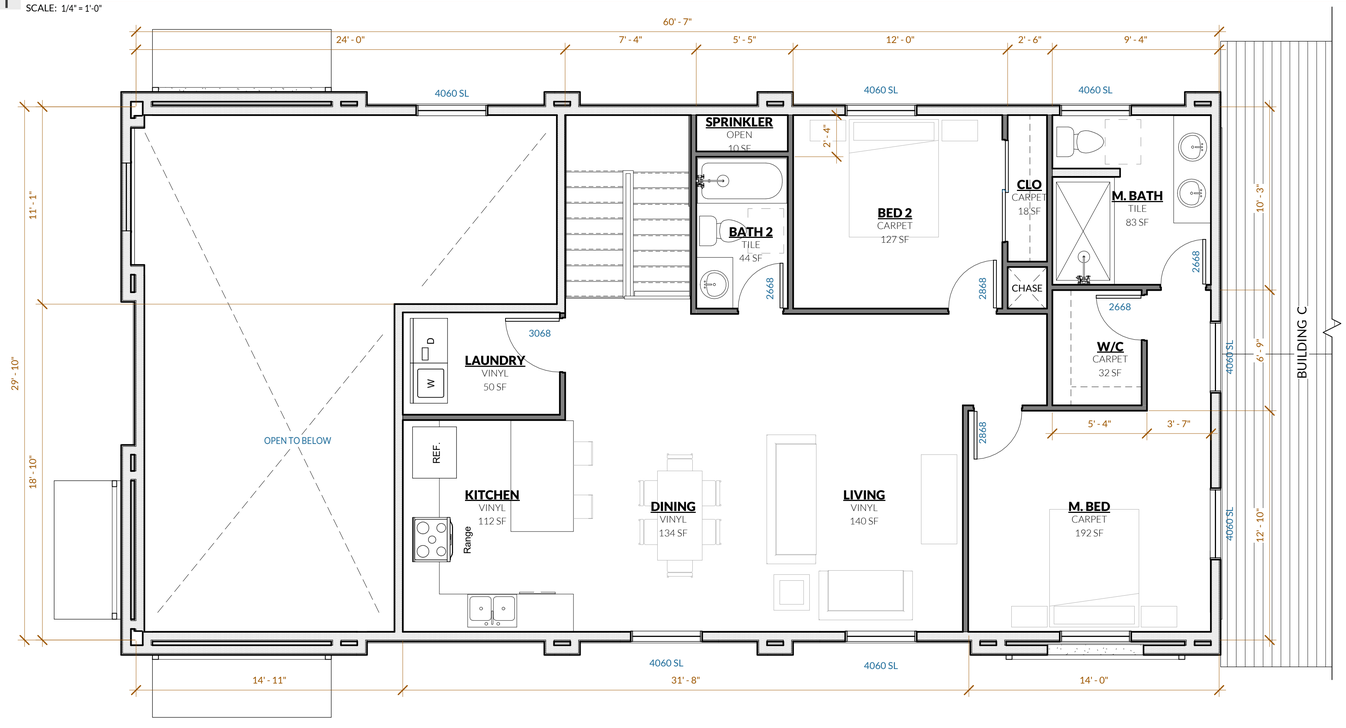
4 FENCING DETAIL - ORNAMENTAL ROLLING GATE

SCALE: 1/2" = 1'-0"



1 1ST LEVEL MANAGERS UNIT PARITION PLAN - PROPOSED

SCALE: 1/4" = 1'-0"



2 2ND LEVEL MANAGERS UNIT PARTITION PLAN - PROPOSED

SCALE: 1/4" = 1'-0"

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CHERRY GLEN RD.
VACAVILLE, CA 95688
APN: 0127-040-140

LAGOON VALLEY STORAGE
SELF STORAGE

Proj. No: 2018.405
Drawn By: JAF
Reviewed TEA

Issue / Revision Schedule:

No.	Date	Description

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MANAGERS PARTITION PLAN

A4

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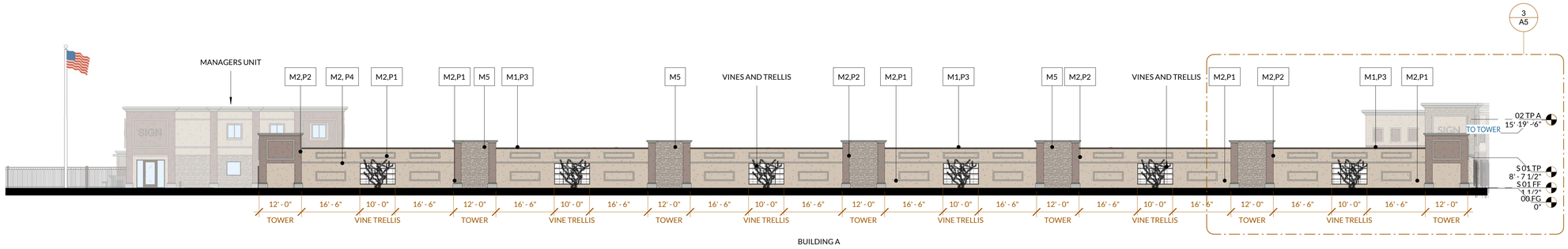
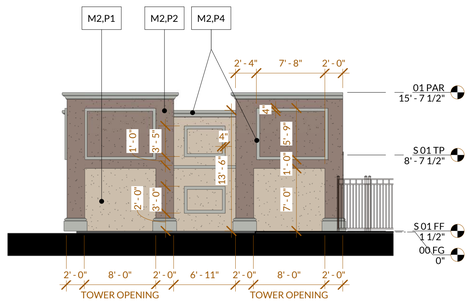


BUILDING A

1 NEW LIFE CHURCH - SOUTH ELEVATION

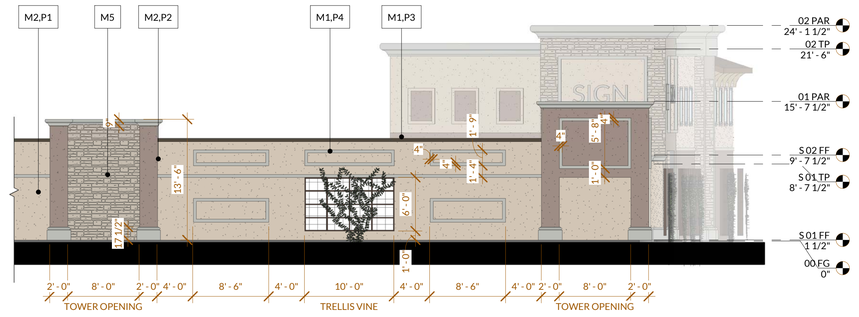
SCALE: 1/16" = 1'-0"



BUILDING I

4 CHERRY GLEN RD. - WEST ELEVATION - ENLARGED

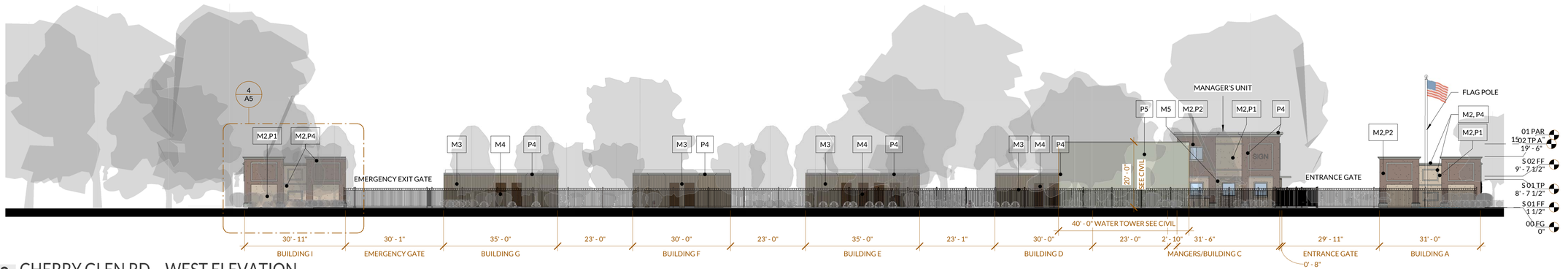
SCALE: 1/8" = 1'-0"



BUILDING A

3 NEW LIFE CHURCH - SOUTH ELEVATION - ENLARGED

SCALE: 1/8" = 1'-0"



2 CHERRY GLEN RD. - WEST ELEVATION

SCALE: 1/16" = 1'-0"

COLORS & MATERIALS

M1 METAL ROOFING
-DISCOUNT METAL PANELS

M2 OMEGA
STUCCO
P1, P2, P4 TO BE MIXED

M3 OLD COUNTRY MILLWORK INC.
CORRUGATED WALLS
CLAY
-DISCOUNT METAL PANELS

M4 JANUS INTERNATIONAL
CONTINENTAL BROWN

M5 EL DORADO STONE
STACKED STONE
DRY CREEK

M6 EL DORADO STONE
STACKED STONE
SANTA FE

P1 DEC752 BIRCHWOOD
DUNN EDWARDS PAINT

P2 DET694 CARMEL MISSION
DUNN EDWARDS PAINT

P3 DISCOUNT METAL PANELS
MEDIUM BRONZE

P4 DET603 CHURCH MOUSE
DUNN EDWARDS PAINT

P5 DUNN EDWARDS
GLASS TILE - DE6262

DISNEYLAND
"GO AWAY GREEN"

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LAGOON VALLEY STORAGE
SELF STORAGE

Proj. No: 2018.405
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Reviewed TEA

Issue / Revision Schedule:

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	7/27/18	PLANNING

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EXTERIOR ELEVATIONS

A5

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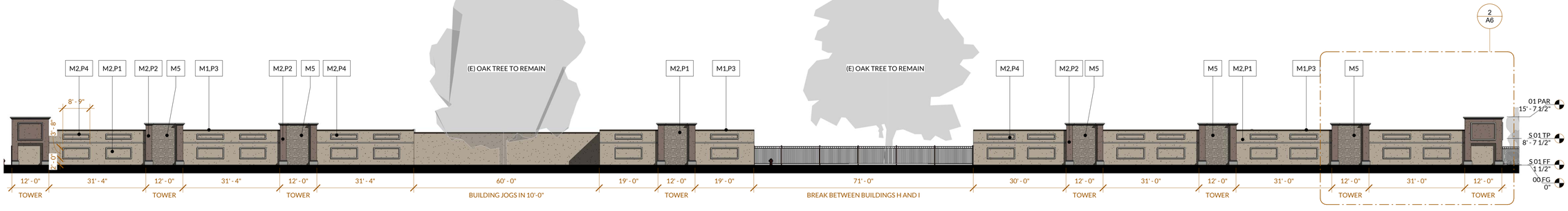
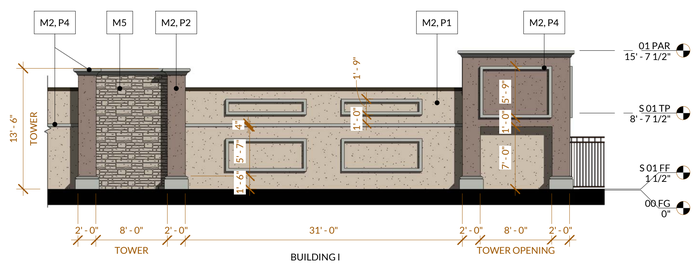


BUILDING H

BUILDING I



BUILDING I

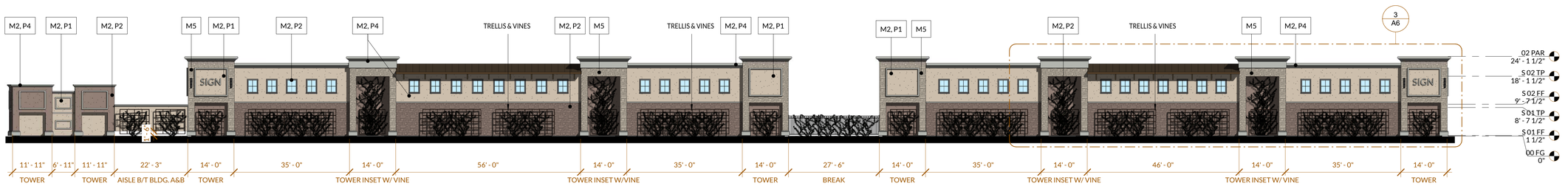
2 POTTERY PARADISE - NORTH ELEVATION - ENLARGED

SCALE: 1/8" = 1'-0"

BUILDING C

3 INTERSTATE 80 - EAST ELEVATION - ENLARGED

SCALE: 1/8" = 1'-0"



BUILDING A

BUILDING B

BUILDING C

4 INTERSTATE 80 - EAST ELEVATION.

SCALE: 1/16" = 1'-0"

COLORS & MATERIALS

M1 METAL ROOFING
-DISCOUNT METAL PANELS

M2 OMEGA
STUCCO
P1, P2, P4 TO BE MIXED

M3 OLD COUNTRY MILLWORK INC.
CORRUGATED WALLS
CLAY
-DISCOUNT METAL PANELS

M4 JANUS INTERNATIONAL
CONTINENTAL BROWN

M5 EL DORADO STONE
STACKED STONE
DRY CREEK

M6 EL DORADO STONE
STACKED STONE
SANTA FE

P1 DEC752 BIRCHWOOD
DUNN EDWARDS PAINT

P2 DET694 CARMEL MISSION
DUNN EDWARDS PAINT

P3 DISCOUNT METAL PANELS
MEDIUM BRONZE

P4 DET603 CHURCH MOUSE
DUNN EDWARDS PAINT

P5 DUNN EDWARDS
GLASS TILE - DE6262

DISNEYLAND
"GO AWAY GREEN"

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LAGOON VALLEY STORAGE
SELF STORAGE

Proj. No: 2018.405
Drawn By: JAF
Reviewed TEA

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EXTERIOR ELEVATIONS

A6

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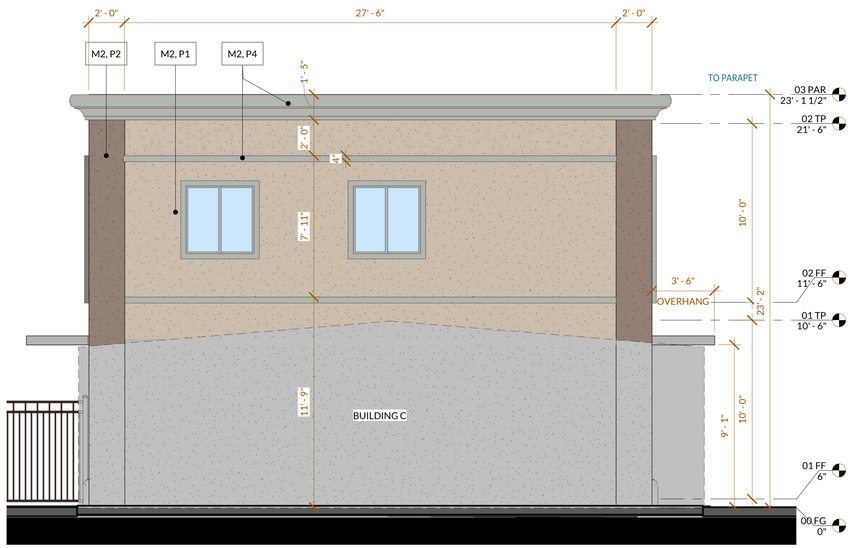


2 EAST ELEVATION - MANANGERS UNIT

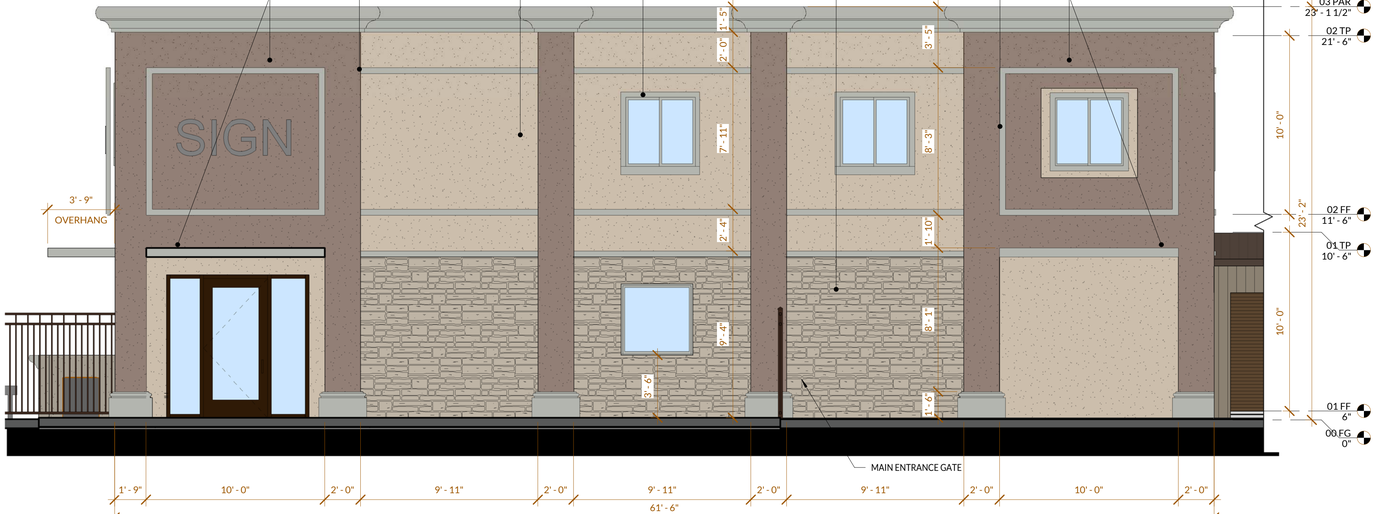
SCALE: 1/4" = 1'-0"

1 NORTH ELEVATION - MANAGERS UNIT

SCALE: 1/4" = 1'-0"

4 WEST ELEVATION - MANAGERS UNIT

SCALE: 1/4" = 1'-0"



3 SOUTH ELEVATION - MANAGERS UNIT

SCALE: 1/4" = 1'-0"

COLORS & MATERIALS

M1	METAL ROOFING -DISCOUNT METAL PANELS	M4	JANUS INTERNATIONAL CONTINENTAL BROWN	P1	DEC752 BIRCHWOOD DUNN EDWARDS PAINT	P4	DET603 CHURCH MOUSE DUNN EDWARDS PAINT
M2	OMEGA STUCCO P1, P2, P4 TO BE MIXED	M5	EL DORADO STONE STACKED STONE DRY CREEK	P2	DET694 CARMEL MISSION DUNN EDWARDS PAINT	P5	DUNN EDWARDS GLASS TILE - DE6262 DISNEYLAND "GO AWAY GREEN"
M3	OLD COUNTRY MILLWORK INC. CORRUGATED WALLS CLAY -DISCOUNT METAL PANELS	M6	EL DORADO STONE STACKED STONE SANTA FE	P3	DISCOUNT METAL PANELS MEDIUM BRONZE		

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LAGOON VALLEY STORAGE SELF STORAGE

Proj. No: 2018.405
Drawn By: JAF
Reviewed TEA

Issue / Revision Schedule:

No.	Date	Description
	7/27/18	PLANNING

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MANAGERS UNIT EXTERIOR ELEVATIONS

A7

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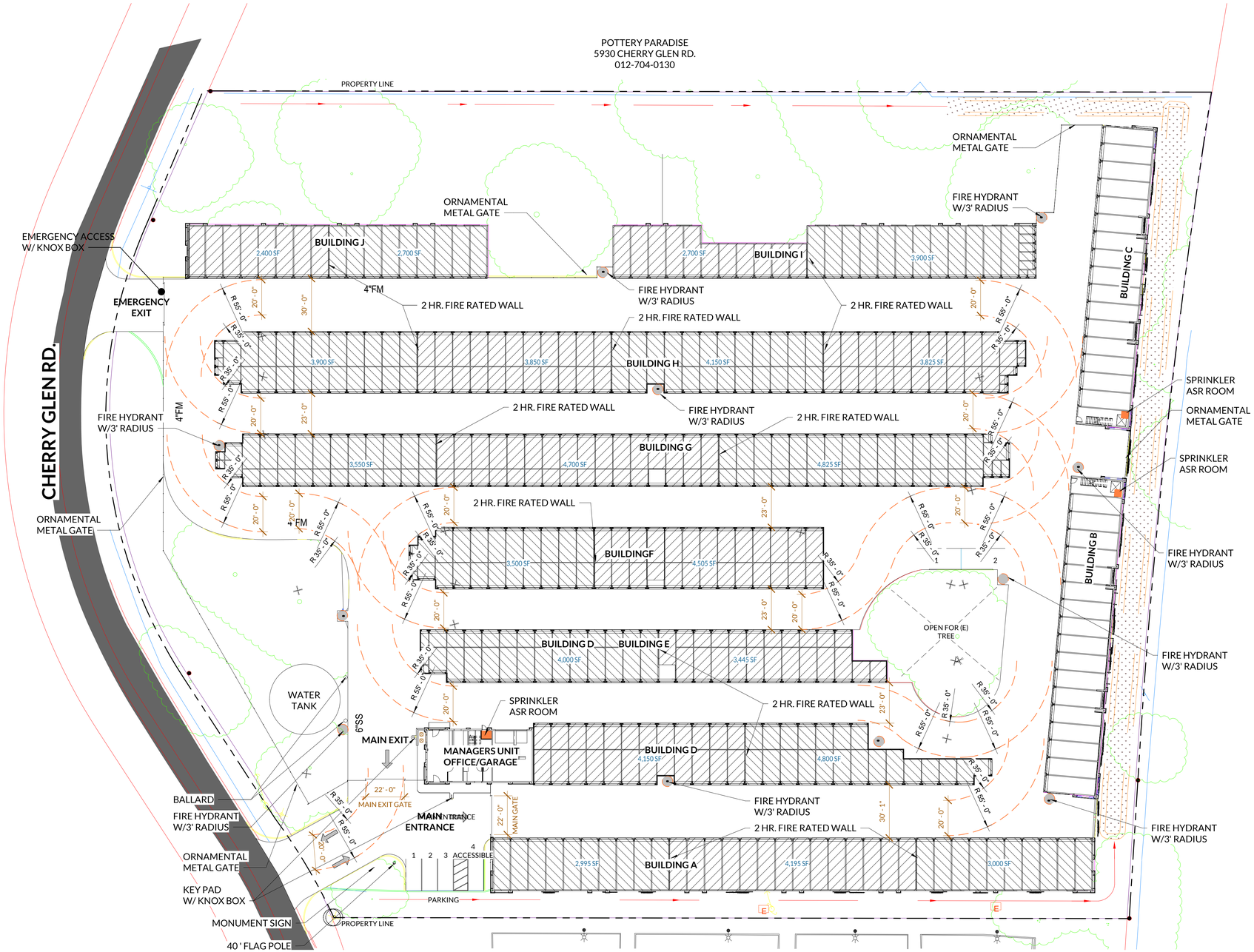

1 PARTITION PLAN - FIRE EXHIBIT

SCALE: 1" = 30'-0"

LEGEND

	FIRE TRUCK RADIUS
	SPRINKLER ASR ROOMS 5x5
	FIRE HYDRANT
	3' RADIUS SURROUND FIRE HYDRANT

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LAGOON VALLEY STORAGE SELF STORAGE

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	7/27/18	PLANNING

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FIRE EXHIBIT

A8

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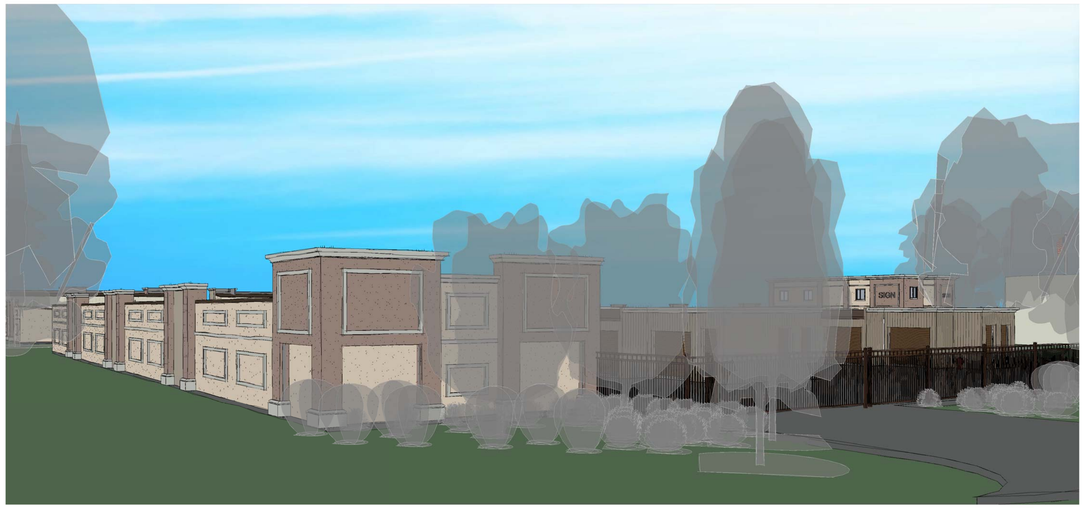

2 CHERRY GLENN EMERGENCY EXIT - BUILDING I
SCALE:

1 CHERRY GLENN MAIN ENTRANCE - MANAGERS UNIT & BUILDING A
SCALE:

4 INTERSTATE 80 EAST BOUND PERSPECTIVE - BUILDING A & BUILDING B
SCALE:

3 INTERESTATE 80 WEST BOUND PERSPECTIVE - BUILDING B
SCALE:

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LAGOON VALLEY STORAGE
SELF STORAGE

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Reviewed TEA

Issue / Revision Schedule:
No. Date Description

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PERSPECTIVE

A9

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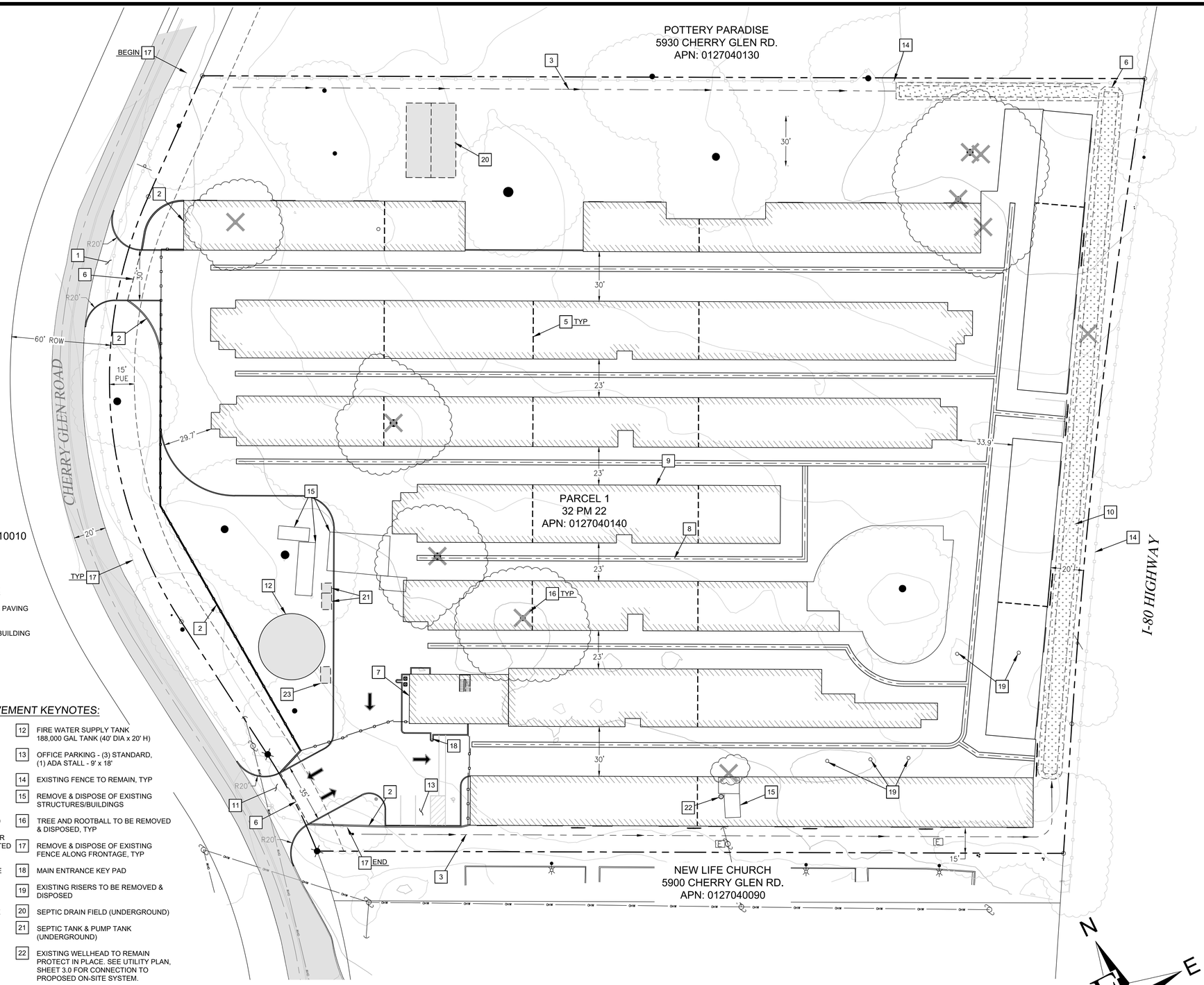

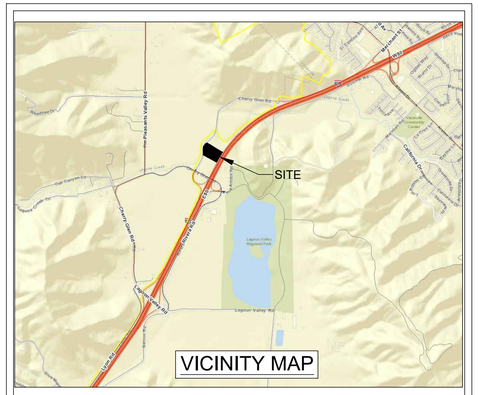

LEGEND

FEATURE	EXISTING	PROPOSED
EXISTING CENTERLINE		
EXISTING PROPERTY LINE		
PROPOSED LOT LINE		
EXISTING OFFSITE LOT LINE		
TREE TO BE REMOVED		
TREE TO REMAIN		

PROJECT INFORMATION

OWNER:	THE NOLA FAMILY TRUST & KEY ASSOCIATES
ENGINEER:	FRAYJI DESIGN GROUP, INC. 1540 EUREKA ROAD, SUITE 100 ROSEVILLE, CA 95661 (916) 782-3000 CONTACT: JASON REED
ARCHITECT:	DOMUM 6532 LONETREE BLVD SUITE 102 ROCKLIN, CA 95765 CONTACT: JENNA FUJITSUBO 888-352-2721
ASSESSOR'S PARCEL NO.:	172-040-014-000
TOTAL ACREAGE:	6.1± AC
EXISTING ZONE:	CG(SS1)-GENERAL COMMERCIAL
GENERAL PLAN:	CH-COMMERCIAL HIGHWAY
OFFICE SPACE (PROPOSED):	± 1,790 SF

ONSITE PARKING REQUIRED:
OFFICE SPACE 1,060 SF @ 1/400 SF =3 STALLS

ON-SITE PARKING PROVIDED:

REGULAR STALLS	=3
HANDICAP STALLS	=1
VEHICLE PARKING STALL TOTAL	=4
SHORT TERM BIKE PARKING TOTAL	=2

SERVICE PROVIDERS

SANITARY SEWER:	CITY OF VACAVILLE-EASTERLY WASTEWATER TREATMENT PLANT
DOMESTIC WATER:	CITY OF VACAVILLE-PUBLIC WORK DEPT.
STORM DRAIN:	DEPARTMENT OF PUBLIC WORKS-CITY OF ROCKLIN
ELECTRICITY:	PACIFIC GAS & ELECTRIC CO.
GAS:	PACIFIC GAS & ELECTRIC CO.
SOLID WASTE:	RECOLOGY HAY ROAD
TELEPHONE:	AT&T

HATCHING LEGEND:

- EXISTING AC PAVING
- PROPOSED BUILDING
- CONCRETE
- BIO-SWALE

PROPOSED PLAN IMPROVEMENT KEYNOTES:

1. EMERGENCY EXIT ONLY
2. RETAINING WALL FOR 100 YR FLOOD CONTROL, FENCE EXTENDS ABOVE TOP OF WALL
3. DRAINAGE SWALE, SEE C2.0
4. 100 YR FLOOD CONTROL RIDGE
5. BUILDING FOUNDATION STEP/VERTICAL SHIFT, SEE C2.0
6. BIO-SWALE OUTLET/100 YR OVER LAND RELEASE (OLR), CONNECTED TO EXISTING OLR RELEASE.
7. STORAGE FACILITY OFFICE, SEE ARCHITECTURAL PLANS
8. V-GUTTER, TYP.
9. STORAGE BUILDINGS, TYP., SEE ARCHITECTURAL PLANS
10. BIO-SWALE, SEE DETAIL C4.0
11. MAIN ENTRANCE/EXIT
12. FIRE WATER SUPPLY TANK 188,000 GAL TANK (40' DIA x 20' H)
13. OFFICE PARKING - (3) STANDARD, (1) ADA STALL - 9' x 18'
14. EXISTING FENCE TO REMAIN, TYP
15. REMOVE & DISPOSE OF EXISTING STRUCTURES/BUILDINGS
16. TREE AND ROOTBALL TO BE REMOVED & DISPOSED, TYP
17. REMOVE & DISPOSE OF EXISTING FENCE ALONG FRONTAGE, TYP
18. MAIN ENTRANCE KEY PAD
19. EXISTING RISERS TO BE REMOVED & DISPOSED
20. SEPTIC DRAIN FIELD (UNDERGROUND)
21. SEPTIC TANK & PUMP TANK (UNDERGROUND)
22. EXISTING WELLHEAD TO REMAIN PROTECT IN PLACE. SEE UTILITY PLAN, SHEET 3.0 FOR CONNECTION TO PROPOSED ON-SITE SYSTEM.
23. FIRE PUMP FROM TANK TO PRESSURIZE SITE FIRE WATER LOOP.

FRAYJI DESIGN GROUP, INC.
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Roseville, CA 95661 (916) 782-3955 Fax
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REGISTERED PROFESSIONAL ENGINEER
JASON B. REED
No. C66631
CIVIL ENGINEER
STATE OF CALIFORNIA

Preliminary Site Plan

Lagoon Valley Storage

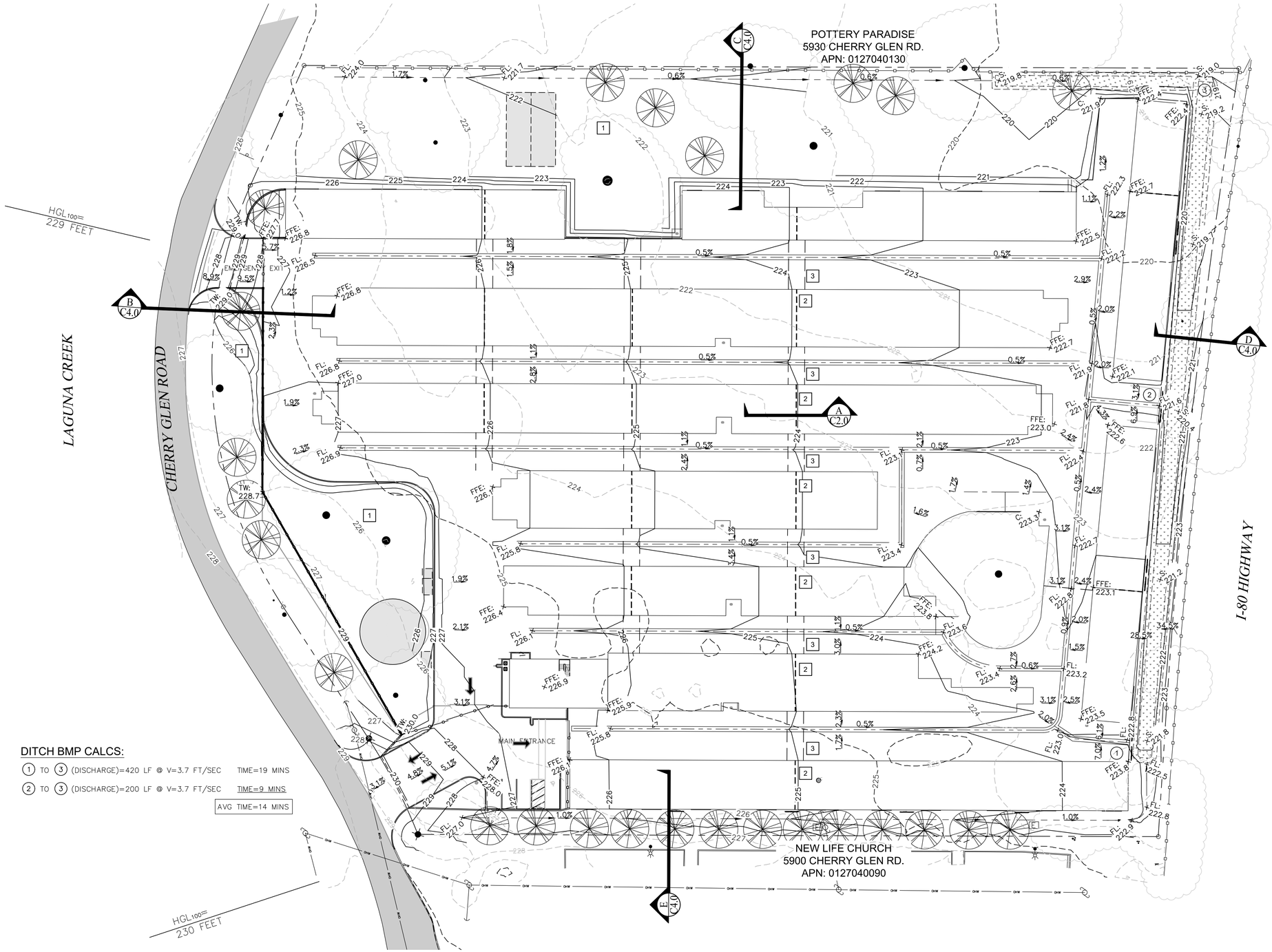
City of Vacaville, California April 11, 2019

N E S W

0 30' 60' 90'
SCALE 1"=30'

NOTES:

1. CHICAGO TITLE COMPANY PRELIMINARY TITLE REPORT FSOL-ST01701371PJ DATED NOVEMEBER 3, 2017 WAS USED IN VERIFYING CURRENT OWNERSHIP, LEGAL DESCRIPTION, AND EXISTING EASEMENTS OF RECORD.
2. NO RECIPROCAL ACCESS EXISTS TO OFF-SITE PARCELS.
3. REFER TO ARCHITECTURAL PLANS FOR BUILDING DIMENSIONS AND BUILDING SQUARE FOOTAGE.



LEGEND

FEATURE	EXISTING	PROPOSED	FUTURE
EXISTING CENTERLINE			
EXISTING PROPERTY LINE			
PROPOSED LOT LINE			
EXISTING OFFSITE LOT LINE			
TREE TO BE REMOVED			
TREE TO REMAIN			
CONTOURS	276	274.00	
RIDGE/GRADE BREAK			

× C:227.00 - PROPOSED ELEVATION (DESCRIPTIONS AS LISTED BELOW)

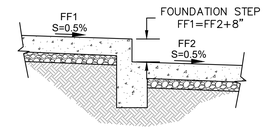
- C: CONCRETE ELEVATION
- FFE: FINISHED FLOOR ELEVATION
- FL: FLOW LINE ELEVATION
- P: ASPHALT PAVEMENT ELEVATION
- R: RIM ELEVATION
- S: SPOT (GROUND) ELEVATION
- TC: TOP OF CURB ELEVATION
- GB: GRADE BREAK ELEVATION
- FT: FLOW THRU ELEVATION
- TW: TOP OF WALL
- BW: BACK OF WALL
- TB: TOP OF BERM

× C:(227.00) - EXISTING ELEVATION (DESCRIPTIONS AS LISTED ABOVE)

PRELIMINARY EARTHWORK:

CUT:	4,040 yds
FILL:	4,290 yds
IMPORT:	250 yds

ALL YARDS ARE BANK. FINAL EARTHWORK TO BE CALCULATED DURING IMPROVEMENT PLANS.



A Typical Building Step Section
SCALE : N.T.S.

DITCH BMP CALCS:

(1) TO (3) (DISCHARGE)=420 LF @ V=3.7 FT/SEC TIME=19 MINS

(2) TO (3) (DISCHARGE)=200 LF @ V=3.7 FT/SEC TIME=9 MINS

AVG TIME=14 MINS

NOTES:

1. ALL EXISTING UTILITY LOCATIONS SHOWN ARE APPROXIMATE.
2. THE PROPOSED UTILITIES AND INFRASTRUCTURE SHOWN ARE CONCEPTUAL AND ARE SUBJECT TO REVISION.
3. PROPOSED GRADES ARE CONCEPTUAL AND ARE SUBJECT TO REVISION AT FINAL DESIGN.
4. PROPOSED STORM DRAIN DESIGN MAY VARY WITH THE FINAL DESIGN.
5. METHOD OF PROVIDING WATER QUALITY TREATMENT MAY BE MODIFIED DURING IMPROVEMENT PLAN DESIGN FOR ALTERNATE LOCATION METHODS.
6. FFE VARIES DUE TO 0.5% SLOPE ALONG BUILDINGS ORIENTED WEST TO EAST.

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REGISTERED PROFESSIONAL ENGINEER
JASON B. REED
No. C66631
CIVIL ENGINEER
STATE OF CALIFORNIA

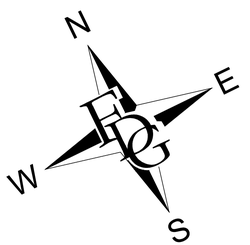
Preliminary Grading, Drainage & Post Construction BMP Plan

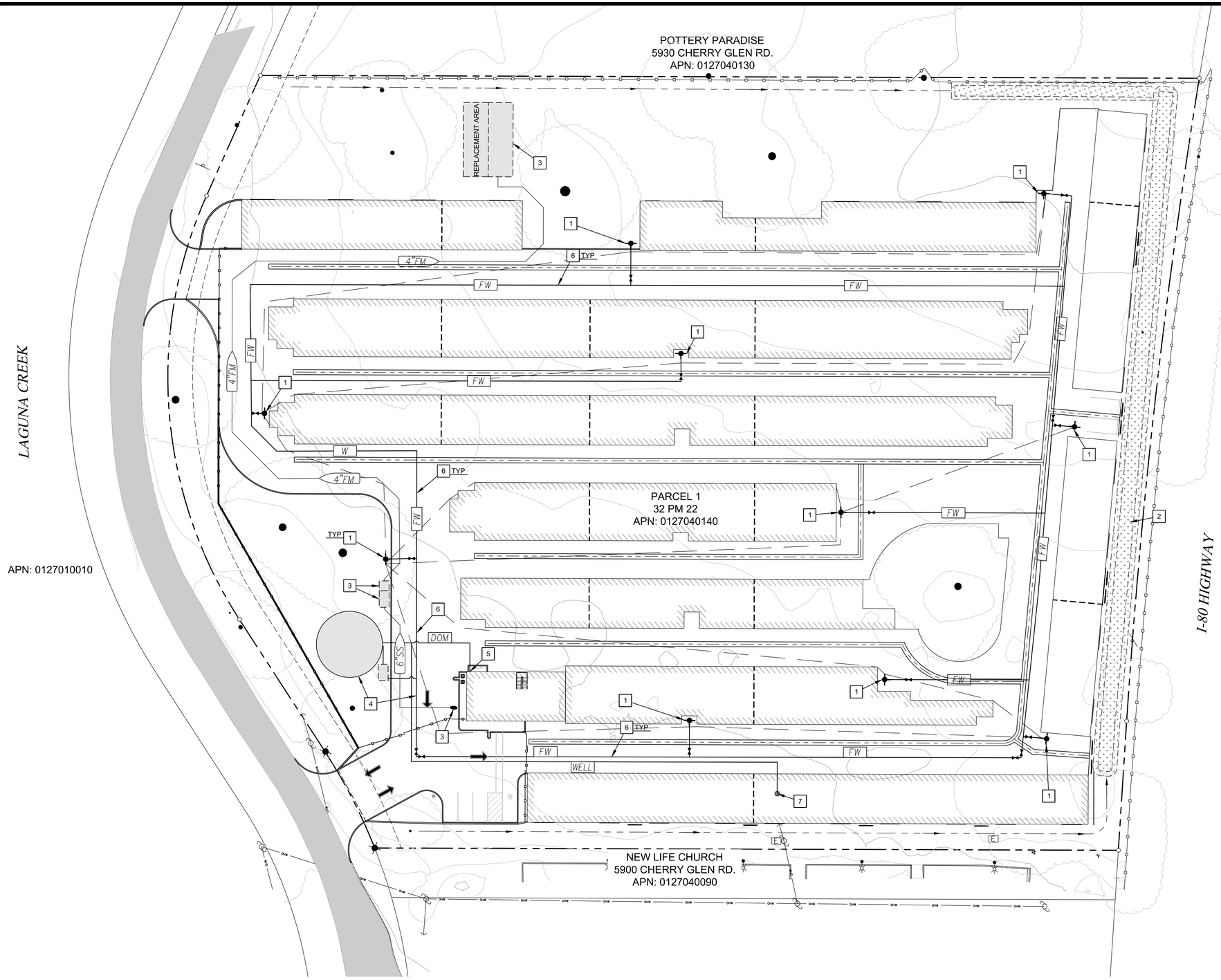
Lagoon Valley Storage

City of Vacaville, California April 11, 2019

PROPOSED PLAN IMPROVEMENT KEYNOTES:

1. LANDSCAPE DRAINAGE WILL BE PROVIDED DURING LANDSCAPE DESIGN PHASE.
2. BUILDING STEP, SEE DETAIL THIS SHEET.
3. CONCRETE PAVING WARP, TYPICAL.





LEGEND

FEATURE	EXISTING	PROPOSED
EXISTING CENTERLINE		
EXISTING PROPERTY LINE		
PROPOSED LOT LINE		
EXISTING OFFSITE LOT LINE		
PROPOSED SANITARY SEWER PIPE AND DIRECTION		SS
PROPOSED STORM DRAIN PIPE AND DIRECTION		SD
PROPOSED WATER PIPE		DOM — DOMESTIC LINE; FIRE — FIRE WATER LINE; WELL — FEED FROM WELL
TREE TO BE REMOVED		
TREE TO REMAIN		

PROPOSED UTILITY KEYNOTES:

1. FIRE HYDRANT, TYP.
2. BIO-SWALE, SEE SHEET 2.0.
3. SANITARY SEWER FROM BUILDING TO BE TIED TO PROPOSED SEPTIC TANK & DRAIN FIELD, GRINDER PUMP & FORCE MAIN. REFER TO SIZING CALCULATIONS.
4. ON-SITE WATER SYSTEM TO PROPOSED WATER STORAGE TANK & 1,500 GPM FIRE PUMP. WATER TANK (188,000 GAL, 40' DIA x 20' H)
5. DOMESTIC WATER POINT OF CONNECTION TO BUILDING.
6. 8" FIRE WATER DISTRIBUTION LINE, TYP. WITH 6" HYDRANTS.
7. EXISTING WELL TO SUPPLY WATER SYSTEM - DIRECT FEED TO TANK (WITH BACKFLOW AT TANK) AND TO OFFICE AS DOMESTIC SERVICE (TO AVOID STAGNANT WATER IN TANK)

NOTES:

1. ALL UTILITY LOCATIONS SHOWN ARE APPROXIMATE.
2. THE PROPOSED UTILITIES SHOWN ARE CONCEPTUAL AND ARE SUBJECT TO REVISION.
3. STORAGE BUILDINGS ARE NOT PROPOSED TO BE SPRINKLED, ONLY OFFICE/MANAGER UNIT IS PROPOSED TO BE SPRINKLED.

N E S W

0 30' 60' 90'

SCALE 1"=30'

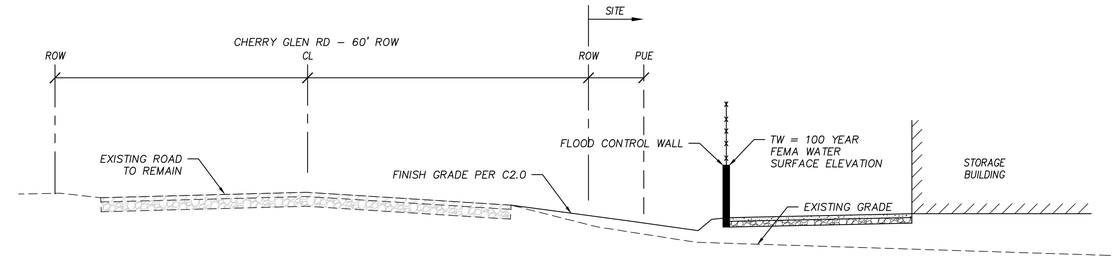
FRAYJI DESIGN GROUP, INC.
1540 Eureka Road Ste. 100 (916) 782-3000 Phone
Roseville, CA 95661 (916) 782-3955 Fax
CIVIL ENGINEERING • PLANNING • SURVEYING

REGISTERED PROFESSIONAL ENGINEER
JASON B. REED
No. C66631
CIVIL ENGINEER
STATE OF CALIFORNIA

Conceptual Utility Plan

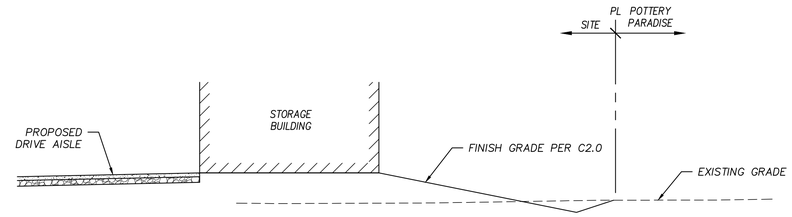
Lagoon Valley Storage

City of Vacaville, California April 11, 2019



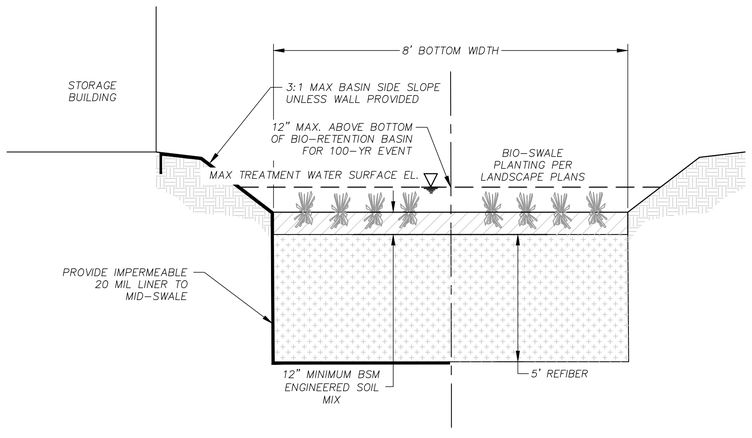
B Section

SCALE : N.T.S.



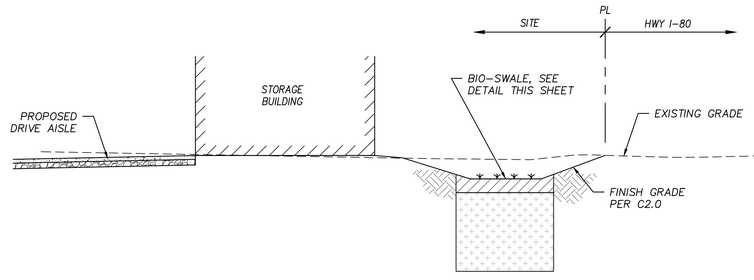
C Section

SCALE : N.T.S.



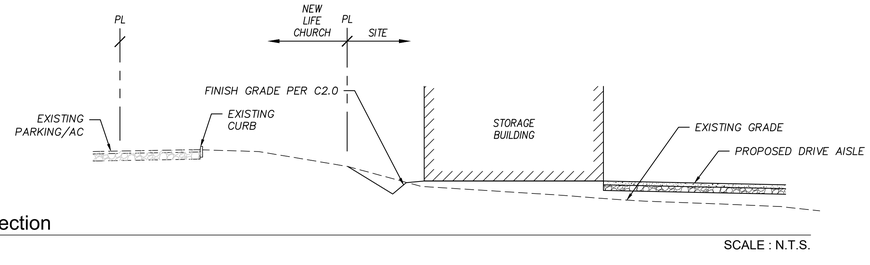
BIO-SWALE SECTION DETAIL

NOT TO SCALE



D Section

SCALE : N.T.S.



E Section

SCALE : N.T.S.

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JASON B. REED
No. C66631
CIVIL ENGINEER
STATE OF CALIFORNIA

Typical Sections & Details

Lagoon Valley Storage

City of Vacaville, California April 11, 2019

PLANT SCHEDULE

TREES	CODE
	CED DEO
	CER OCC
	PIS KEI
	PRU THN
	QUE WIS

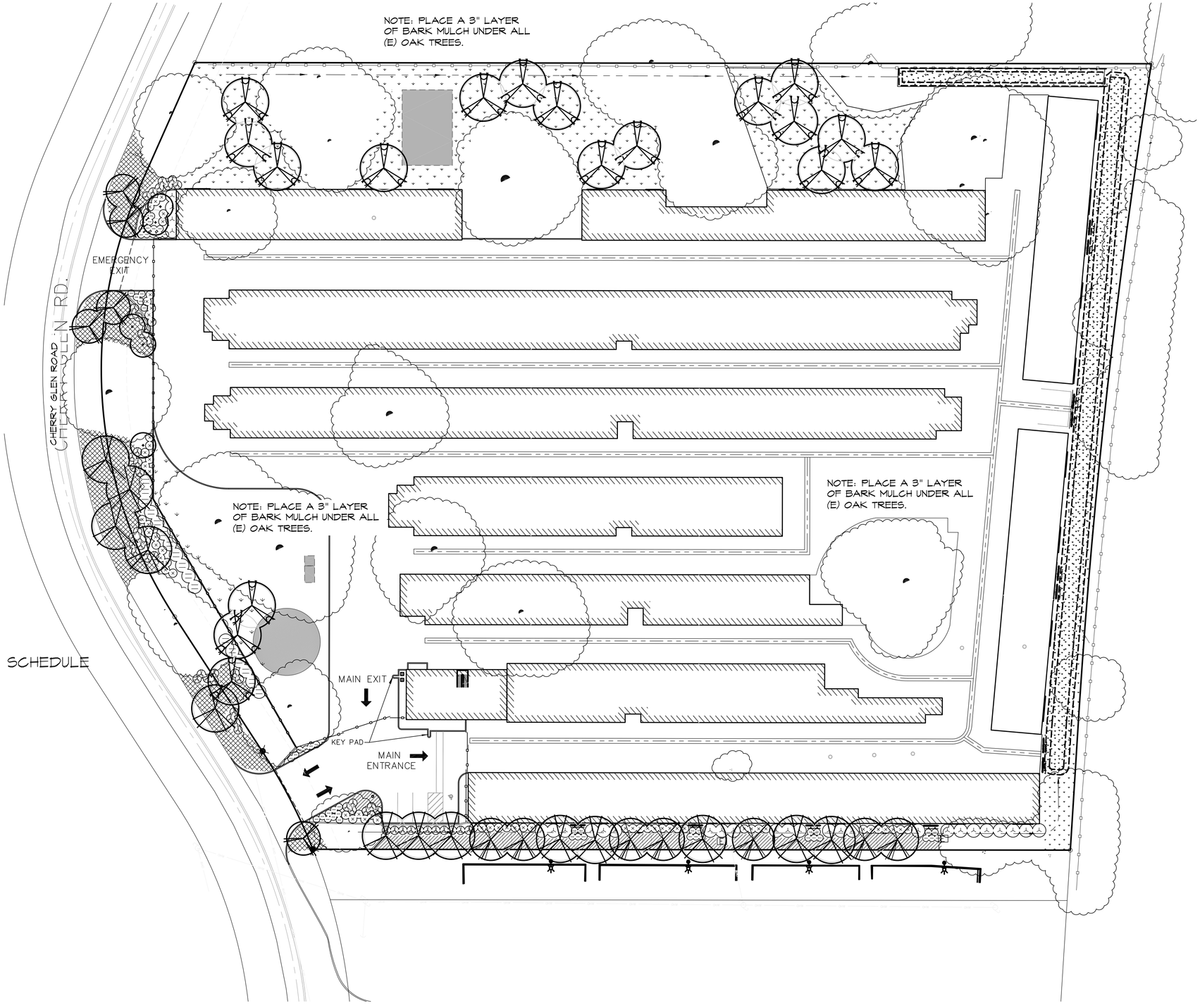
SHRUBS	CODE
	GRE NOE
	MUH REG
	MUH RIG
	PRU BRI
	XYL COM

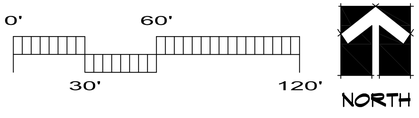
VINE/ESPALIER	CODE
	MAC UNG

GROUND COVERS	CODE
	ACA DES
	ARC UVA

SOD/SEED	CODE
	TUR FES

SEE SHEET L1.2 FOR FULL PLANT SCHEDULE





YAMASAKI
LANDSCAPE ARCHITECTURE

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VACAVILLE SELF STORAGE
LANDSCAPE DEVELOPMENT PLANS
CHERRY GLEN RD
VACAVILLE, CALIFORNIA 95688

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Sheet Title
PLANTING PLAN

Seal

LICENSED LANDSCAPE ARCHITECT
JEFFREY M. AMBROSIA 4057
Signature
12/20
Renewal Date
Date
STATE OF CALIFORNIA

No.	Date	Revision
△	7/27/18	Planning Submittal
△	1/31/19	Planning Resubmittal
△	3/28/19	Planning Resubmittal
△		
△		

Project Mgr.:	JMA	Sheet No.:
Drawn By:	JMA	L1.1
Scale:	1"= 30' -0"	
Date:	23 JUL 18	
File Name:	071118	of 3 sheets

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PLANT SCHEDULE

TREES	CODE	QTY	BOTANICAL NAME / COMMON NAME	SIZE
	CED DEO	7	Cedrus deodara / Deodar Cedar	15 gal
	CER OCC	5	Cercis occidentalis / Western Redbud	15 gal
	PIS KEI	13	Pistacia chinensis 'Keith Davey' / Keith Davey Chinese Pistache	24"box
	PRU THN	5	Prunus cerasifera 'Thundercloud' / Thundercloud Plum	15 gal
	QUE WIS	18	Quercus wislizenii / Interior Live Oak	15 gal

SHRUBS	CODE	QTY	BOTANICAL NAME / COMMON NAME	SIZE
	GRE NOE	60	Grevillea x 'Noellii' / Grevillea	5 gal
	MUH REG	54	Muhlenbergia capillaris 'Regal Mist' TM / Muhly	1 gal
	MUH RIG	58	Muhlenbergia rigens / Deer Grass	1 gal
	PRU BRI	28	Prunus caroliniana 'Bright 'N Tight' TM / Bright 'N Tight Carolina Laurel	5 gal
	XYL COM	17	Xylosma congestum / Compact Xylosma	5 gal

VINE/ESPALIER	CODE	QTY	BOTANICAL NAME / COMMON NAME	SIZE
	MAC UNG	24	Macfadyena unguis-cati / Yellow Trumpet Vine	5 gal

GROUND COVERS	CODE	QTY	BOTANICAL NAME / COMMON NAME	SIZE	SPACING
	ACA DES	236	Acacia redolens 'Desert Carpet' TM / Bank Catclaw	1 gal	60" o.c.
	ARC UVA	308	Arctostaphylos uva-ursi / Kinnikinnick	1 gal	36" o.c.

SOD/SEED	CODE	QTY	BOTANICAL NAME / COMMON NAME	SIZE	SPACING
	TUR FES	22,455 sf	Hydroseed Drought Tolerant Fescue Blend	seed	

10 lbs. FESTUCA OCCIDENTALIS
10 lbs. FESTUCA IDAHOENSIS
15 lbs. FESTUCA RUBRA MOLATE
1 lb. PHACELIA CAMPANULARIA - CALIFORNIA BLUE BELLS
2 lbs. LAYIA PLATYGLOSSA - TIDY TIPS
1 lbs. LASTHENIA GLABRATA - GOLDFEILDS
1 lb. GILIA TRICOLOR - BIRDS EYES
2 lbs. ESCHOLZIA CALIFORNICA - CALIFONIA POPPY
2 lbs. COLLINSIA HETEROPHYLLA - CHINESE HOUSES
1 lb. CLARKIA AMOENA - FAREWELL-TO-SPRING
2 lbs. LUPINUS NANUS - SKY LUPINE
3 lbs. LUPINUS BICOLOR - LUPINE

SEED = 50 lbs/acre
COMMERCIAL FERTILIZER (16-20-0) = 200 lbs/acre
WOOD FIBER MULCH = 2000 lbs/acre
FISCHSTIK TACIFIER = 100 lbs/acre

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PLANT SCHEDULE

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LICENSED LANDSCAPE ARCHITECT
JEFFREY M. AMBROSIA 4057
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Renewal Date
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4		
5		

Project Mgr.: JMA
Drawn By: JMA
Scale:
Date: 23 JUL 18
File Name: 071118

Sheet No.: ***L1.2***

of 3 *sheets*

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APPENDIX B

AIR QUALITY AND GREENHOUSE GAS EMISSIONS MODELING RESULTS

Lagoon Valley Self Storage

Yolo/Solano AQMD Air District, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Refrigerated Warehouse-No Rail	12.64	1000sqft	0.79	12,641.00	0
Parking Lot	0.11	Acre	0.11	4,791.60	0
Single Family Housing	1.00	Dwelling Unit	0.32	1,120.00	1
Unrefrigerated Warehouse-No Rail	83.92	1000sqft	5.21	83,917.00	0

1.2 Other Project Characteristics

Urbanization	Rural	**Wind Speed (m/s)**	6.8	**Precipitation Freq (Days)**	55
Climate Zone	4			**Operational Year**	2021
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	281.31	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Lagoon Valley Self Storage - Yolo/Solano AQMD Air District, Annual

Project Characteristics - Based on PG&E RPS Calculator

Land Use - Applicant Provided Information

Construction Phase - Applicant Provided Information

Off-road Equipment -

Off-road Equipment - Applicant Provided Information

Off-road Equipment - Applicant Provided Information

Off-road Equipment - Applicant Provided Information

Off-road Equipment -

Trips and VMT - Applicant Provided Information

Grading - Applicant Provided Information

Vehicle Trips - ITE Trip Generation Manual

Road Dust - Area roads paved

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	10.00	7.00
tblConstructionPhase	NumDays	20.00	36.00
tblConstructionPhase	NumDays	20.00	16.00
tblConstructionPhase	NumDays	230.00	91.00
tblConstructionPhase	NumDays	20.00	91.00
tblConstructionPhase	PhaseEndDate	5/14/2019	5/9/2019
tblConstructionPhase	PhaseEndDate	6/11/2019	6/28/2019
tblConstructionPhase	PhaseEndDate	5/26/2020	7/22/2019
tblConstructionPhase	PhaseEndDate	4/28/2020	11/26/2019
tblConstructionPhase	PhaseEndDate	6/23/2020	12/10/2019
tblConstructionPhase	PhaseStartDate	5/15/2019	5/10/2019
tblConstructionPhase	PhaseStartDate	4/29/2020	7/1/2019
tblConstructionPhase	PhaseStartDate	6/12/2019	7/23/2019

tblConstructionPhase	PhaseStartDate	5/27/2020	8/6/2019
tblGrading	AcresOfGrading	18.00	5.00
tblGrading	MaterialImported	0.00	4,885.00
tblLandUse	LandUseSquareFeet	1,800.00	1,120.00
tblLandUse	LotAcreage	0.29	0.79
tblLandUse	LotAcreage	1.93	5.21
tblLandUse	Population	3.00	1.00
tblOffRoadEquipment	LoadFactor	0.37	0.37
tblOffRoadEquipment	OffRoadEquipmentType		Tractors/Loaders/Backhoes
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblProjectCharacteristics	CO2IntensityFactor	641.35	281.31
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblRoadDust	RoadPercentPave	94	100
tblTripsAndVMT	HaulingTripNumber	611.00	814.00
tblTripsAndVMT	WorkerTripNumber	10.00	8.00
tblVehicleTrips	ST_TR	1.68	2.50
tblVehicleTrips	ST_TR	1.68	2.50
tblVehicleTrips	SU_TR	1.68	2.50
tblVehicleTrips	SU_TR	1.68	2.50
tblVehicleTrips	WD_TR	1.68	2.50
tblVehicleTrips	WD_TR	1.68	2.50

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	0.8593	1.7353	1.1773	2.6900e-003	4.3782	0.0831	4.4613	0.5212	0.0781	0.5993	0.0000	241.5565	241.5565	0.0427	0.0000	242.6231
Maximum	**0.8593**	**1.7353**	**1.1773**	**2.6900e-003**	**4.3782**	**0.0831**	**4.4613**	**0.5212**	**0.0781**	**0.5993**	**0.0000**	**241.5565**	**241.5565**	**0.0427**	**0.0000**	**242.6231**

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	0.8593	1.7353	1.1773	2.6900e-003	0.2163	0.0831	0.2993	0.1059	0.0781	0.1840	0.0000	241.5563	241.5563	0.0427	0.0000	242.6229
Maximum	**0.8593**	**1.7353**	**1.1773**	**2.6900e-003**	**0.2163**	**0.0831**	**0.2993**	**0.1059**	**0.0781**	**0.1840**	**0.0000**	**241.5563**	**241.5563**	**0.0427**	**0.0000**	**242.6229**

	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**	**95.06**	**0.00**	**93.29**	**79.68**	**0.00**	**69.30**	**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	5-1-2019	7-31-2019	0.9383	0.9383
2	8-1-2019	9-30-2019	0.7805	0.7805
		Highest	0.9383	0.9383

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	0.4599	2.9000e-004	0.0243	4.0000e-005		2.3700e-003	2.3700e-003		2.3700e-003	2.3700e-003	0.2496	0.0139	0.2635	6.0000e-004	1.0000e-005	0.2818
Energy	1.9900e-003	0.0180	0.0145	1.1000e-004		1.3700e-003	1.3700e-003		1.3700e-003	1.3700e-003	0.0000	74.4184	74.4184	6.0200e-003	1.5300e-003	75.0244
Mobile	0.1047	0.7830	1.3029	5.5300e-003	0.4013	4.8700e-003	0.4061	0.1080	4.5800e-003	0.1126	0.0000	509.9697	509.9697	0.0230	0.0000	510.5450
Waste						0.0000	0.0000		0.0000	0.0000	18.5026	0.0000	18.5026	1.0935	0.0000	45.8395
Water						0.0000	0.0000		0.0000	0.0000	7.1048	15.4806	22.5854	0.7313	0.0176	46.1016
Total	**0.5666**	**0.8012**	**1.3417**	**5.6800e-003**	**0.4013**	**8.6100e-003**	**0.4099**	**0.1080**	**8.3200e-003**	**0.1163**	**25.8571**	**599.8826**	**625.7396**	**1.8544**	**0.0191**	**677.7923**

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	0.4599	2.9000e-004	0.0243	4.0000e-005		2.3700e-003	2.3700e-003		2.3700e-003	2.3700e-003	0.2496	0.0139	0.2635	6.0000e-004	1.0000e-005	0.2818
Energy	1.9900e-003	0.0180	0.0145	1.1000e-004		1.3700e-003	1.3700e-003		1.3700e-003	1.3700e-003	0.0000	74.4184	74.4184	6.0200e-003	1.5300e-003	75.0244
Mobile	0.1047	0.7830	1.3029	5.5300e-003	0.4013	4.8700e-003	0.4061	0.1080	4.5800e-003	0.1126	0.0000	509.9697	509.9697	0.0230	0.0000	510.5450
Waste						0.0000	0.0000		0.0000	0.0000	18.5026	0.0000	18.5026	1.0935	0.0000	45.8395
Water						0.0000	0.0000		0.0000	0.0000	7.1048	15.4806	22.5854	0.7313	0.0176	46.1016
Total	**0.5666**	**0.8012**	**1.3417**	**5.6800e-003**	**0.4013**	**8.6100e-003**	**0.4099**	**0.1080**	**8.3200e-003**	**0.1163**	**25.8571**	**599.8826**	**625.7396**	**1.8544**	**0.0191**	**677.7923**

	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**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

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	5/1/2019	5/9/2019	5	7	
2	Grading	Grading	5/10/2019	6/28/2019	5	36	
3	Building Construction	Building Construction	7/23/2019	11/26/2019	5	91	
4	Paving	Paving	7/1/2019	7/22/2019	5	16	
5	Architectural Coating	Architectural Coating	8/6/2019	12/10/2019	5	91	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 5

Acres of Paving: 0.11

Residential Indoor: 2,268; Residential Outdoor: 756; Non-Residential Indoor: 144,837; Non-Residential Outdoor: 48,279; Striped Parking Area: 287 (Architectural Coating – sqft)

OffRoad Equipment

Lagoon Valley Self Storage - Yolo/Solano AQMD Air District, Annual

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	1	8.00	80	0.38
Grading	Excavators	1	8.00	158	0.38
Building Construction	Welders	1	8.00	46	0.45
Building Construction	Forklifts	2	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	7.00	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	15.00	9.00	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	8.00	0.00	814.00	15.00	9.00	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	15.00	9.00	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	6	43.00	17.00	0.00	15.00	9.00	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	9.00	0.00	0.00	15.00	9.00	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

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					0.0632	0.0000	0.0632	0.0348	0.0000	0.0348	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0152	0.1595	0.0772	1.3000e-004		8.3700e-003	8.3700e-003		7.7000e-003	7.7000e-003	0.0000	11.9590	11.9590	3.7800e-003	0.0000	12.0536
Total	**0.0152**	**0.1595**	**0.0772**	**1.3000e-004**	**0.0632**	**8.3700e-003**	**0.0716**	**0.0348**	**7.7000e-003**	**0.0425**	**0.0000**	**11.9590**	**11.9590**	**3.7800e-003**	**0.0000**	**12.0536**

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	3.2000e-004	2.4000e-004	2.3600e-003	1.0000e-005	0.0715	0.0000	0.0715	7.2500e-003	0.0000	7.2500e-003	0.0000	0.6479	0.6479	2.0000e-005	0.0000	0.6483
Total	**3.2000e-004**	**2.4000e-004**	**2.3600e-003**	**1.0000e-005**	**0.0715**	**0.0000**	**0.0715**	**7.2500e-003**	**0.0000**	**7.2500e-003**	**0.0000**	**0.6479**	**0.6479**	**2.0000e-005**	**0.0000**	**0.6483**

3.2 Site Preparation - 2019

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					0.0632	0.0000	0.0632	0.0348	0.0000	0.0348	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0152	0.1595	0.0772	1.3000e-004		8.3700e-003	8.3700e-003		7.7000e-003	7.7000e-003	0.0000	11.9590	11.9590	3.7800e-003	0.0000	12.0536
Total	**0.0152**	**0.1595**	**0.0772**	**1.3000e-004**	**0.0632**	**8.3700e-003**	**0.0716**	**0.0348**	**7.7000e-003**	**0.0425**	**0.0000**	**11.9590**	**11.9590**	**3.7800e-003**	**0.0000**	**12.0536**

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	3.2000e-004	2.4000e-004	2.3600e-003	1.0000e-005	6.6000e-004	0.0000	6.6000e-004	1.8000e-004	0.0000	1.8000e-004	0.0000	0.6479	0.6479	2.0000e-005	0.0000	0.6483
Total	**3.2000e-004**	**2.4000e-004**	**2.3600e-003**	**1.0000e-005**	**6.6000e-004**	**0.0000**	**6.6000e-004**	**1.8000e-004**	**0.0000**	**1.8000e-004**	**0.0000**	**0.6479**	**0.6479**	**2.0000e-005**	**0.0000**	**0.6483**

3.3 Grading - 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					0.1123	0.0000	0.1123	0.0601	0.0000	0.0601	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0381	0.4261	0.2104	4.2000e-004		0.0195	0.0195		0.0180	0.0180	0.0000	37.9122	37.9122	0.0120	0.0000	38.2121
Total	**0.0381**	**0.4261**	**0.2104**	**4.2000e-004**	**0.1123**	**0.0195**	**0.1318**	**0.0601**	**0.0180**	**0.0780**	**0.0000**	**37.9122**	**37.9122**	**0.0120**	**0.0000**	**38.2121**

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	3.5700e-003	0.1187	0.0191	3.4000e-004	0.6171	4.9000e-004	0.6176	0.0627	4.7000e-004	0.0632	0.0000	32.0131	32.0131	1.4100e-003	0.0000	32.0484
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	7.4000e-004	5.5000e-004	5.3900e-003	2.0000e-005	0.1635	1.0000e-005	0.1635	0.0166	1.0000e-005	0.0166	0.0000	1.4808	1.4808	4.0000e-005	0.0000	1.4818
Total	**4.3100e-003**	**0.1193**	**0.0245**	**3.6000e-004**	**0.7806**	**5.0000e-004**	**0.7811**	**0.0793**	**4.8000e-004**	**0.0798**	**0.0000**	**33.4940**	**33.4940**	**1.4500e-003**	**0.0000**	**33.5302**

3.3 Grading - 2019

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					0.1123	0.0000	0.1123	0.0601	0.0000	0.0601	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0381	0.4261	0.2104	4.2000e-004		0.0195	0.0195		0.0180	0.0180	0.0000	37.9121	37.9121	0.0120	0.0000	38.2120
Total	**0.0381**	**0.4261**	**0.2104**	**4.2000e-004**	**0.1123**	**0.0195**	**0.1318**	**0.0601**	**0.0180**	**0.0780**	**0.0000**	**37.9121**	**37.9121**	**0.0120**	**0.0000**	**38.2120**

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	3.5700e-003	0.1187	0.0191	3.4000e-004	6.6000e-003	4.9000e-004	7.0900e-003	1.8200e-003	4.7000e-004	2.2900e-003	0.0000	32.0131	32.0131	1.4100e-003	0.0000	32.0484
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	7.4000e-004	5.5000e-004	5.3900e-003	2.0000e-005	1.5100e-003	1.0000e-005	1.5200e-003	4.0000e-004	1.0000e-005	4.1000e-004	0.0000	1.4808	1.4808	4.0000e-005	0.0000	1.4818
Total	**4.3100e-003**	**0.1193**	**0.0245**	**3.6000e-004**	**8.1100e-003**	**5.0000e-004**	**8.6100e-003**	**2.2200e-003**	**4.8000e-004**	**2.7000e-003**	**0.0000**	**33.4940**	**33.4940**	**1.4500e-003**	**0.0000**	**33.5302**

3.4 Building Construction - 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					
Off-Road	0.0816	0.7080	0.5433	9.1000e-004		0.0412	0.0412		0.0391	0.0391	0.0000	78.5112	78.5112	0.0171	0.0000	78.9376
Total	**0.0816**	**0.7080**	**0.5433**	**9.1000e-004**		**0.0412**	**0.0412**		**0.0391**	**0.0391**	**0.0000**	**78.5112**	**78.5112**	**0.0171**	**0.0000**	**78.9376**

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	3.7900e-003	0.1065	0.0223	2.6000e-004	0.5281	7.0000e-004	0.5288	0.0539	6.7000e-004	0.0545	0.0000	25.1316	25.1316	1.4100e-003	0.0000	25.1667
Worker	0.0101	7.4400e-003	0.0732	2.2000e-004	2.2214	1.5000e-004	2.2215	0.2251	1.4000e-004	0.2252	0.0000	20.1198	20.1198	5.4000e-004	0.0000	20.1334
Total	**0.0138**	**0.1140**	**0.0955**	**4.8000e-004**	**2.7495**	**8.5000e-004**	**2.7503**	**0.2789**	**8.1000e-004**	**0.2797**	**0.0000**	**45.2514**	**45.2514**	**1.9500e-003**	**0.0000**	**45.3000**

3.4 Building Construction - 2019

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	0.0816	0.7080	0.5433	9.1000e-004		0.0412	0.0412		0.0391	0.0391	0.0000	78.5111	78.5111	0.0171	0.0000	78.9375
Total	**0.0816**	**0.7080**	**0.5433**	**9.1000e-004**		**0.0412**	**0.0412**		**0.0391**	**0.0391**	**0.0000**	**78.5111**	**78.5111**	**0.0171**	**0.0000**	**78.9375**

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	3.7900e-003	0.1065	0.0223	2.6000e-004	6.0100e-003	7.0000e-004	6.7100e-003	1.7500e-003	6.7000e-004	2.4200e-003	0.0000	25.1316	25.1316	1.4100e-003	0.0000	25.1667
Worker	0.0101	7.4400e-003	0.0732	2.2000e-004	0.0205	1.5000e-004	0.0206	5.4600e-003	1.4000e-004	5.6000e-003	0.0000	20.1198	20.1198	5.4000e-004	0.0000	20.1334
Total	**0.0138**	**0.1140**	**0.0955**	**4.8000e-004**	**0.0265**	**8.5000e-004**	**0.0273**	**7.2100e-003**	**8.1000e-004**	**8.0200e-003**	**0.0000**	**45.2514**	**45.2514**	**1.9500e-003**	**0.0000**	**45.3000**

3.5 Paving - 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					
Off-Road	0.0117	0.1227	0.1204	1.9000e-004		6.6600e-003	6.6600e-003		6.1300e-003	6.1300e-003	0.0000	16.7184	16.7184	5.2900e-003	0.0000	16.8507
Paving	1.4000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0118**	**0.1227**	**0.1204**	**1.9000e-004**		**6.6600e-003**	**6.6600e-003**		**6.1300e-003**	**6.1300e-003**	**0.0000**	**16.7184**	**16.7184**	**5.2900e-003**	**0.0000**	**16.8507**

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	6.2000e-004	4.6000e-004	4.4900e-003	1.0000e-005	0.1363	1.0000e-005	0.1363	0.0138	1.0000e-005	0.0138	0.0000	1.2340	1.2340	3.0000e-005	0.0000	1.2349
Total	**6.2000e-004**	**4.6000e-004**	**4.4900e-003**	**1.0000e-005**	**0.1363**	**1.0000e-005**	**0.1363**	**0.0138**	**1.0000e-005**	**0.0138**	**0.0000**	**1.2340**	**1.2340**	**3.0000e-005**	**0.0000**	**1.2349**

3.5 Paving - 2019

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	0.0117	0.1227	0.1204	1.9000e-004		6.6600e-003	6.6600e-003		6.1300e-003	6.1300e-003	0.0000	16.7184	16.7184	5.2900e-003	0.0000	16.8506
Paving	1.4000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0118**	**0.1227**	**0.1204**	**1.9000e-004**		**6.6600e-003**	**6.6600e-003**		**6.1300e-003**	**6.1300e-003**	**0.0000**	**16.7184**	**16.7184**	**5.2900e-003**	**0.0000**	**16.8506**

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	6.2000e-004	4.6000e-004	4.4900e-003	1.0000e-005	1.2600e-003	1.0000e-005	1.2600e-003	3.4000e-004	1.0000e-005	3.4000e-004	0.0000	1.2340	1.2340	3.0000e-005	0.0000	1.2349
Total	**6.2000e-004**	**4.6000e-004**	**4.4900e-003**	**1.0000e-005**	**1.2600e-003**	**1.0000e-005**	**1.2600e-003**	**3.4000e-004**	**1.0000e-005**	**3.4000e-004**	**0.0000**	**1.2340**	**1.2340**	**3.0000e-005**	**0.0000**	**1.2349**

3.6 Architectural Coating - 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					
Archit. Coating	0.6793					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0121	0.0835	0.0838	1.4000e-004		5.8600e-003	5.8600e-003		5.8600e-003	5.8600e-003	0.0000	11.6173	11.6173	9.8000e-004	0.0000	11.6418
Total	**0.6915**	**0.0835**	**0.0838**	**1.4000e-004**		**5.8600e-003**	**5.8600e-003**		**5.8600e-003**	**5.8600e-003**	**0.0000**	**11.6173**	**11.6173**	**9.8000e-004**	**0.0000**	**11.6418**

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	2.1000e-003	1.5600e-003	0.0153	5.0000e-005	0.4649	3.0000e-005	0.4650	0.0471	3.0000e-005	0.0471	0.0000	4.2111	4.2111	1.1000e-004	0.0000	4.2140
Total	**2.1000e-003**	**1.5600e-003**	**0.0153**	**5.0000e-005**	**0.4649**	**3.0000e-005**	**0.4650**	**0.0471**	**3.0000e-005**	**0.0471**	**0.0000**	**4.2111**	**4.2111**	**1.1000e-004**	**0.0000**	**4.2140**

3.6 Architectural Coating - 2019

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	0.6793					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0121	0.0835	0.0838	1.4000e-004		5.8600e-003	5.8600e-003		5.8600e-003	5.8600e-003	0.0000	11.6173	11.6173	9.8000e-004	0.0000	11.6418
Total	**0.6915**	**0.0835**	**0.0838**	**1.4000e-004**		**5.8600e-003**	**5.8600e-003**		**5.8600e-003**	**5.8600e-003**	**0.0000**	**11.6173**	**11.6173**	**9.8000e-004**	**0.0000**	**11.6418**

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	2.1000e-003	1.5600e-003	0.0153	5.0000e-005	4.2800e-003	3.0000e-005	4.3100e-003	1.1400e-003	3.0000e-005	1.1700e-003	0.0000	4.2111	4.2111	1.1000e-004	0.0000	4.2140
Total	**2.1000e-003**	**1.5600e-003**	**0.0153**	**5.0000e-005**	**4.2800e-003**	**3.0000e-005**	**4.3100e-003**	**1.1400e-003**	**3.0000e-005**	**1.1700e-003**	**0.0000**	**4.2111**	**4.2111**	**1.1000e-004**	**0.0000**	**4.2140**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	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	0.1047	0.7830	1.3029	5.5300e-003	0.4013	4.8700e-003	0.4061	0.1080	4.5800e-003	0.1126	0.0000	509.9697	509.9697	0.0230	0.0000	510.5450
Unmitigated	0.1047	0.7830	1.3029	5.5300e-003	0.4013	4.8700e-003	0.4061	0.1080	4.5800e-003	0.1126	0.0000	509.9697	509.9697	0.0230	0.0000	510.5450

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Parking Lot	0.00	0.00	0.00		
Refrigerated Warehouse-No Rail	31.60	31.60	31.60	134,549	134,549
Single Family Housing	9.52	9.91	8.62	35,504	35,504
Unrefrigerated Warehouse-No Rail	209.79	209.79	209.79	893,201	893,201
Total	250.92	251.31	250.02	1,063,254	1,063,254

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
Parking Lot	15.00	8.00	9.00	0.00	0.00	0.00	0	0	0
Refrigerated Warehouse-No Rail	15.00	8.00	9.00	59.00	0.00	41.00	92	5	3
Single Family Housing	15.00	8.00	9.00	46.00	13.00	41.00	86	11	3
Unrefrigerated Warehouse-No Rail	15.00	8.00	9.00	59.00	0.00	41.00	92	5	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Parking Lot	0.520277	0.038864	0.193543	0.118146	0.022917	0.005635	0.034518	0.053912	0.001336	0.002070	0.007104	0.000691	0.000987
Refrigerated Warehouse-No Rail	0.520277	0.038864	0.193543	0.118146	0.022917	0.005635	0.034518	0.053912	0.001336	0.002070	0.007104	0.000691	0.000987
Single Family Housing	0.520277	0.038864	0.193543	0.118146	0.022917	0.005635	0.034518	0.053912	0.001336	0.002070	0.007104	0.000691	0.000987
Unrefrigerated Warehouse-No Rail	0.520277	0.038864	0.193543	0.118146	0.022917	0.005635	0.034518	0.053912	0.001336	0.002070	0.007104	0.000691	0.000987

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	54.7716	54.7716	5.6500e-003	1.1700e-003	55.2609
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	54.7716	54.7716	5.6500e-003	1.1700e-003	55.2609
NaturalGas Mitigated	1.9900e-003	0.0180	0.0145	1.1000e-004		1.3700e-003	1.3700e-003		1.3700e-003	1.3700e-003	0.0000	19.6468	19.6468	3.8000e-004	3.6000e-004	19.7635
NaturalGas Unmitigated	1.9900e-003	0.0180	0.0145	1.1000e-004		1.3700e-003	1.3700e-003		1.3700e-003	1.3700e-003	0.0000	19.6468	19.6468	3.8000e-004	3.6000e-004	19.7635

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					
Parking Lot	0	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
Refrigerated Warehouse-No Rail	47909.4	2.6000e-004	2.3500e-003	1.9700e-003	1.0000e-005		1.8000e-004	1.8000e-004		1.8000e-004	1.8000e-004	0.0000	2.5566	2.5566	5.0000e-005	5.0000e-005	2.5718
Single Family Housing	29065.1	1.6000e-004	1.3400e-003	5.7000e-004	1.0000e-005		1.1000e-004	1.1000e-004		1.1000e-004	1.1000e-004	0.0000	1.5510	1.5510	3.0000e-005	3.0000e-005	1.5602
Unrefrigerated Warehouse-No Rail	291192	1.5700e-003	0.0143	0.0120	9.0000e-005		1.0800e-003	1.0800e-003		1.0800e-003	1.0800e-003	0.0000	15.5391	15.5391	3.0000e-004	2.8000e-004	15.6315
Total		**1.9900e-003**	**0.0180**	**0.0145**	**1.1000e-004**		**1.3700e-003**	**1.3700e-003**		**1.3700e-003**	**1.3700e-003**	**0.0000**	**19.6468**	**19.6468**	**3.8000e-004**	**3.6000e-004**	**19.7635**

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					
Parking Lot	0	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
Refrigerated Warehouse-No Rail	47909.4	2.6000e-004	2.3500e-003	1.9700e-003	1.0000e-005		1.8000e-004	1.8000e-004		1.8000e-004	1.8000e-004	0.0000	2.5566	2.5566	5.0000e-005	5.0000e-005	2.5718
Single Family Housing	29065.1	1.6000e-004	1.3400e-003	5.7000e-004	1.0000e-005		1.1000e-004	1.1000e-004		1.1000e-004	1.1000e-004	0.0000	1.5510	1.5510	3.0000e-005	3.0000e-005	1.5602
Unrefrigerated Warehouse-No Rail	291192	1.5700e-003	0.0143	0.0120	9.0000e-005		1.0800e-003	1.0800e-003		1.0800e-003	1.0800e-003	0.0000	15.5391	15.5391	3.0000e-004	2.8000e-004	15.6315
Total		**1.9900e-003**	**0.0180**	**0.0145**	**1.1000e-004**		**1.3700e-003**	**1.3700e-003**		**1.3700e-003**	**1.3700e-003**	**0.0000**	**19.6468**	**19.6468**	**3.8000e-004**	**3.6000e-004**	**19.7635**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Parking Lot	1677.06	0.2140	2.0000e-005	0.0000	0.2159
Refrigerated Warehouse-No Rail	123250	15.7267	1.6200e-003	3.4000e-004	15.8672
Single Family Housing	8090.57	1.0324	1.1000e-004	2.0000e-005	1.0416
Unrefrigerated Warehouse-No Rail	296227	37.7986	3.9000e-003	8.1000e-004	38.1363
Total		**54.7716**	**5.6500e-003**	**1.1700e-003**	**55.2609**

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Parking Lot	1677.06	0.2140	2.0000e-005	0.0000	0.2159
Refrigerated Warehouse-No Rail	123250	15.7267	1.6200e-003	3.4000e-004	15.8672
Single Family Housing	8090.57	1.0324	1.1000e-004	2.0000e-005	1.0416
Unrefrigerated Warehouse-No Rail	296227	37.7986	3.9000e-003	8.1000e-004	38.1363
Total		**54.7716**	**5.6500e-003**	**1.1700e-003**	**55.2609**

6.0 Area Detail

6.1 Mitigation Measures Area

	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	0.4599	2.9000e-004	0.0243	4.0000e-005		2.3700e-003	2.3700e-003		2.3700e-003	2.3700e-003	0.2496	0.0139	0.2635	6.0000e-004	1.0000e-005	0.2818
Unmitigated	0.4599	2.9000e-004	0.0243	4.0000e-005		2.3700e-003	2.3700e-003		2.3700e-003	2.3700e-003	0.2496	0.0139	0.2635	6.0000e-004	1.0000e-005	0.2818

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	0.0679					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.3818					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	9.8600e-003	2.0000e-004	0.0159	3.0000e-005		2.3300e-003	2.3300e-003		2.3300e-003	2.3300e-003	0.2496	0.0000	0.2496	5.9000e-004	1.0000e-005	0.2676
Landscaping	3.1000e-004	9.0000e-005	8.3300e-003	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005	0.0000	0.0139	0.0139	2.0000e-005	0.0000	0.0143
Total	**0.4599**	**2.9000e-004**	**0.0243**	**3.0000e-005**		**2.3700e-003**	**2.3700e-003**		**2.3700e-003**	**2.3700e-003**	**0.2496**	**0.0139**	**0.2635**	**6.1000e-004**	**1.0000e-005**	**0.2818**

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	0.0679					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.3818					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	9.8600e-003	2.0000e-004	0.0159	3.0000e-005		2.3300e-003	2.3300e-003		2.3300e-003	2.3300e-003	0.2496	0.0000	0.2496	5.9000e-004	1.0000e-005	0.2676
Landscaping	3.1000e-004	9.0000e-005	8.3300e-003	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005	0.0000	0.0139	0.0139	2.0000e-005	0.0000	0.0143
Total	**0.4599**	**2.9000e-004**	**0.0243**	**3.0000e-005**		**2.3700e-003**	**2.3700e-003**		**2.3700e-003**	**2.3700e-003**	**0.2496**	**0.0139**	**0.2635**	**6.1000e-004**	**1.0000e-005**	**0.2818**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	22.5854	0.7313	0.0176	46.1016
Unmitigated	22.5854	0.7313	0.0176	46.1016

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Refrigerated Warehouse-No Rail	2.923 / 0	2.9455	0.0955	2.2900e-003	6.0149
Single Family Housing	0.065154 / 0.0410754	0.0840	2.1300e-003	5.0000e-005	0.1526
Unrefrigerated Warehouse-No Rail	19.4065 / 0	19.5559	0.6337	0.0152	39.9342
Total		**22.5854**	**0.7313**	**0.0176**	**46.1016**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Refrigerated Warehouse-No Rail	2.923 / 0	2.9455	0.0955	2.2900e-003	6.0149
Single Family Housing	0.065154 / 0.0410754	0.0840	2.1300e-003	5.0000e-005	0.1526
Unrefrigerated Warehouse-No Rail	19.4065 / 0	19.5559	0.6337	0.0152	39.9342
Total		**22.5854**	**0.7313**	**0.0176**	**46.1016**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	18.5026	1.0935	0.0000	45.8395
Unmitigated	18.5026	1.0935	0.0000	45.8395

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Refrigerated Warehouse-No Rail	11.88	2.4115	0.1425	0.0000	5.9745
Single Family Housing	0.39	0.0792	4.6800e-003	0.0000	0.1961
Unrefrigerated Warehouse-No Rail	78.88	16.0119	0.9463	0.0000	39.6689
Total		**18.5026**	**1.0935**	**0.0000**	**45.8395**

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Refrigerated Warehouse-No Rail	11.88	2.4115	0.1425	0.0000	5.9745
Single Family Housing	0.39	0.0792	4.6800e-003	0.0000	0.1961
Unrefrigerated Warehouse-No Rail	78.88	16.0119	0.9463	0.0000	39.6689
Total		**18.5026**	**1.0935**	**0.0000**	**45.8395**

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

Lagoon Valley Self Storage

Yolo/Solano AQMD Air District, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Refrigerated Warehouse-No Rail	12.64	1000sqft	0.79	12,641.00	0
Parking Lot	0.11	Acre	0.11	4,791.60	0
Single Family Housing	1.00	Dwelling Unit	0.32	1,120.00	1
Unrefrigerated Warehouse-No Rail	83.92	1000sqft	5.21	83,917.00	0

1.2 Other Project Characteristics

Urbanization	Rural	**Wind Speed (m/s)**	6.8	**Precipitation Freq (Days)**	55
Climate Zone	4			**Operational Year**	2021
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	281.31	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Lagoon Valley Self Storage - Yolo/Solano AQMD Air District, Summer

Project Characteristics - Based on PG&E RPS Calculator

Land Use - Applicant Provided Information

Construction Phase - Applicant Provided Information

Off-road Equipment -

Off-road Equipment - Applicant Provided Information

Off-road Equipment - Applicant Provided Information

Off-road Equipment - Applicant Provided Information

Off-road Equipment -

Trips and VMT - Applicant Provided Information

Grading - Applicant Provided Information

Vehicle Trips - ITE Trip Generation Manual

Road Dust - Area roads paved

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	10.00	7.00
tblConstructionPhase	NumDays	20.00	36.00
tblConstructionPhase	NumDays	20.00	16.00
tblConstructionPhase	NumDays	230.00	91.00
tblConstructionPhase	NumDays	20.00	91.00
tblConstructionPhase	PhaseEndDate	5/14/2019	5/9/2019
tblConstructionPhase	PhaseEndDate	6/11/2019	6/28/2019
tblConstructionPhase	PhaseEndDate	5/26/2020	7/22/2019
tblConstructionPhase	PhaseEndDate	4/28/2020	11/26/2019
tblConstructionPhase	PhaseEndDate	6/23/2020	12/10/2019
tblConstructionPhase	PhaseStartDate	5/15/2019	5/10/2019
tblConstructionPhase	PhaseStartDate	4/29/2020	7/1/2019
tblConstructionPhase	PhaseStartDate	6/12/2019	7/23/2019

tblConstructionPhase	PhaseStartDate	5/27/2020	8/6/2019
tblGrading	AcresOfGrading	18.00	5.00
tblGrading	MaterialImported	0.00	4,885.00
tblLandUse	LandUseSquareFeet	1,800.00	1,120.00
tblLandUse	LotAcreage	0.29	0.79
tblLandUse	LotAcreage	1.93	5.21
tblLandUse	Population	3.00	1.00
tblOffRoadEquipment	LoadFactor	0.37	0.37
tblOffRoadEquipment	OffRoadEquipmentType		Tractors/Loaders/Backhoes
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblProjectCharacteristics	CO2IntensityFactor	641.35	281.31
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblRoadDust	RoadPercentPave	94	100
tblTripsAndVMT	HaulingTripNumber	611.00	814.00
tblTripsAndVMT	WorkerTripNumber	10.00	8.00
tblVehicleTrips	ST_TR	1.68	2.50
tblVehicleTrips	ST_TR	1.68	2.50
tblVehicleTrips	SU_TR	1.68	2.50
tblVehicleTrips	SU_TR	1.68	2.50
tblVehicleTrips	WD_TR	1.68	2.50
tblVehicleTrips	WD_TR	1.68	2.50

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

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	lb/day										lb/day					
2019	17.3665	45.6340	22.8504	0.0433	83.0824	2.3917	84.1365	12.3616	2.2004	14.5620	0.0000	4,400.0922	4,400.0922	1.1978	0.0000	4,420.5750
Maximum	**17.3665**	**45.6340**	**22.8504**	**0.0433**	**83.0824**	**2.3917**	**84.1365**	**12.3616**	**2.2004**	**14.5620**	**0.0000**	**4,400.0922**	**4,400.0922**	**1.1978**	**0.0000**	**4,420.5750**

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	lb/day										lb/day					
2019	17.3665	45.6340	22.8504	0.0433	18.2609	2.3917	20.6526	9.9825	2.2004	12.1829	0.0000	4,400.0922	4,400.0922	1.1978	0.0000	4,420.5750
Maximum	**17.3665**	**45.6340**	**22.8504**	**0.0433**	**18.2609**	**2.3917**	**20.6526**	**9.9825**	**2.2004**	**12.1829**	**0.0000**	**4,400.0922**	**4,400.0922**	**1.1978**	**0.0000**	**4,420.5750**

	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**	**78.02**	**0.00**	**75.45**	**19.25**	**0.00**	**16.34**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

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	lb/day										lb/day					
Area	2.7082	5.8800e-003	0.4808	8.5000e-004		0.0573	0.0573		0.0573	0.0573	6.7116	0.1697	6.8813	0.0160	2.9000e-004	7.3679
Energy	0.0109	0.0984	0.0796	5.9000e-004		7.5200e-003	7.5200e-003		7.5200e-003	7.5200e-003		118.6677	118.6677	2.2700e-003	2.1800e-003	119.3729
Mobile	0.6705	4.1519	7.9660	0.0324	2.2811	0.0267	2.3078	0.6123	0.0251	0.6374		3,294.4314	3,294.4314	0.1413		3,297.9632
Total	**3.3895**	**4.2562**	**8.5264**	**0.0339**	**2.2811**	**0.0915**	**2.3727**	**0.6123**	**0.0900**	**0.7023**	**6.7116**	**3,413.2687**	**3,419.9803**	**0.1595**	**2.4700e-003**	**3,424.7040**

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	lb/day										lb/day					
Area	2.7082	5.8800e-003	0.4808	8.5000e-004		0.0573	0.0573		0.0573	0.0573	6.7116	0.1697	6.8813	0.0160	2.9000e-004	7.3679
Energy	0.0109	0.0984	0.0796	5.9000e-004		7.5200e-003	7.5200e-003		7.5200e-003	7.5200e-003		118.6677	118.6677	2.2700e-003	2.1800e-003	119.3729
Mobile	0.6705	4.1519	7.9660	0.0324	2.2811	0.0267	2.3078	0.6123	0.0251	0.6374		3,294.4314	3,294.4314	0.1413		3,297.9632
Total	**3.3895**	**4.2562**	**8.5264**	**0.0339**	**2.2811**	**0.0915**	**2.3727**	**0.6123**	**0.0900**	**0.7023**	**6.7116**	**3,413.2687**	**3,419.9803**	**0.1595**	**2.4700e-003**	**3,424.7040**

	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**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

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	5/1/2019	5/9/2019	5	7	
2	Grading	Grading	5/10/2019	6/28/2019	5	36	
3	Building Construction	Building Construction	7/23/2019	11/26/2019	5	91	
4	Paving	Paving	7/1/2019	7/22/2019	5	16	
5	Architectural Coating	Architectural Coating	8/6/2019	12/10/2019	5	91	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 5

Acres of Paving: 0.11

Residential Indoor: 2,268; Residential Outdoor: 756; Non-Residential Indoor: 144,837; Non-Residential Outdoor: 48,279; Striped Parking Area: 287 (Architectural Coating – sqft)

OffRoad Equipment

Lagoon Valley Self Storage - Yolo/Solano AQMD Air District, Summer

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	1	8.00	80	0.38
Grading	Excavators	1	8.00	158	0.38
Building Construction	Welders	1	8.00	46	0.45
Building Construction	Forklifts	2	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	7.00	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	15.00	9.00	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	8.00	0.00	814.00	15.00	9.00	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	15.00	9.00	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	6	43.00	17.00	0.00	15.00	9.00	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	9.00	0.00	0.00	15.00	9.00	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

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	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	4.3350	45.5727	22.0630	0.0380		2.3904	2.3904		2.1991	2.1991		3,766.4529	3,766.4529	1.1917		3,796.2445
Total	**4.3350**	**45.5727**	**22.0630**	**0.0380**	**18.0663**	**2.3904**	**20.4566**	**9.9307**	**2.1991**	**12.1298**		**3,766.4529**	**3,766.4529**	**1.1917**		**3,796.2445**

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	lb/day										lb/day					
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
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
Worker	0.1018	0.0613	0.7874	2.2500e-003	24.0358	1.3800e-003	24.0372	2.4309	1.2700e-003	2.4321		224.1295	224.1295	6.1200e-003		224.2826
Total	**0.1018**	**0.0613**	**0.7874**	**2.2500e-003**	**24.0358**	**1.3800e-003**	**24.0372**	**2.4309**	**1.2700e-003**	**2.4321**		**224.1295**	**224.1295**	**6.1200e-003**		**224.2826**

3.2 Site Preparation - 2019

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	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	4.3350	45.5727	22.0630	0.0380		2.3904	2.3904		2.1991	2.1991	0.0000	3,766.4529	3,766.4529	1.1917		3,796.2445
Total	**4.3350**	**45.5727**	**22.0630**	**0.0380**	**18.0663**	**2.3904**	**20.4566**	**9.9307**	**2.1991**	**12.1298**	**0.0000**	**3,766.4529**	**3,766.4529**	**1.1917**		**3,796.2445**

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	lb/day										lb/day					
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
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
Worker	0.1018	0.0613	0.7874	2.2500e-003	0.1946	1.3800e-003	0.1960	0.0518	1.2700e-003	0.0531		224.1295	224.1295	6.1200e-003		224.2826
Total	**0.1018**	**0.0613**	**0.7874**	**2.2500e-003**	**0.1946**	**1.3800e-003**	**0.1960**	**0.0518**	**1.2700e-003**	**0.0531**		**224.1295**	**224.1295**	**6.1200e-003**		**224.2826**

3.3 Grading - 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	lb/day										lb/day					
Fugitive Dust					6.2359	0.0000	6.2359	3.3362	0.0000	3.3362			0.0000			0.0000
Off-Road	2.1149	23.6733	11.6880	0.0234		1.0853	1.0853		0.9985	0.9985		2,321.7231	2,321.7231	0.7346		2,340.0873
Total	**2.1149**	**23.6733**	**11.6880**	**0.0234**	**6.2359**	**1.0853**	**7.3212**	**3.3362**	**0.9985**	**4.3347**		**2,321.7231**	**2,321.7231**	**0.7346**		**2,340.0873**

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	lb/day										lb/day					
Hauling	0.1953	6.4004	1.0084	0.0189	40.3087	0.0271	40.3358	4.0885	0.0259	4.1145		1,978.7560	1,978.7560	0.0820		1,980.8065
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
Worker	0.0452	0.0272	0.3499	1.0000e-003	10.6826	6.1000e-004	10.6832	1.0804	5.6000e-004	1.0810		99.6131	99.6131	2.7200e-003		99.6811
Total	**0.2405**	**6.4276**	**1.3584**	**0.0199**	**50.9913**	**0.0277**	**51.0190**	**5.1689**	**0.0265**	**5.1954**		**2,078.3691**	**2,078.3691**	**0.0847**		**2,080.4877**

3.3 Grading - 2019

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	lb/day										lb/day					
Fugitive Dust					6.2359	0.0000	6.2359	3.3362	0.0000	3.3362			0.0000			0.0000
Off-Road	2.1149	23.6733	11.6880	0.0234		1.0853	1.0853		0.9985	0.9985	0.0000	2,321.7231	2,321.7231	0.7346		2,340.0873
Total	**2.1149**	**23.6733**	**11.6880**	**0.0234**	**6.2359**	**1.0853**	**7.3212**	**3.3362**	**0.9985**	**4.3347**	**0.0000**	**2,321.7231**	**2,321.7231**	**0.7346**		**2,340.0873**

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	lb/day										lb/day					
Hauling	0.1953	6.4004	1.0084	0.0189	0.3772	0.0271	0.4043	0.1039	0.0259	0.1298		1,978.7560	1,978.7560	0.0820		1,980.8065
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
Worker	0.0452	0.0272	0.3499	1.0000e-003	0.0865	6.1000e-004	0.0871	0.0230	5.6000e-004	0.0236		99.6131	99.6131	2.7200e-003		99.6811
Total	**0.2405**	**6.4276**	**1.3584**	**0.0199**	**0.4637**	**0.0277**	**0.4914**	**0.1269**	**0.0265**	**0.1534**		**2,078.3691**	**2,078.3691**	**0.0847**		**2,080.4877**

3.4 Building Construction - 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	lb/day										lb/day					
Off-Road	1.7938	15.5601	11.9399	0.0200		0.9062	0.9062		0.8597	0.8597		1,902.0615	1,902.0615	0.4132		1,912.3909
Total	**1.7938**	**15.5601**	**11.9399**	**0.0200**		**0.9062**	**0.9062**		**0.8597**	**0.8597**		**1,902.0615**	**1,902.0615**	**0.4132**		**1,912.3909**

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	lb/day										lb/day					
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
Vendor	0.0821	2.2899	0.4579	5.8900e-003	13.6457	0.0152	13.6609	1.3874	0.0145	1.4020		615.9361	615.9361	0.0324		616.7451
Worker	0.2431	0.1464	1.8809	5.3700e-003	57.4188	3.2900e-003	57.4221	5.8071	3.0300e-003	5.8101		535.4204	535.4204	0.0146		535.7861
Total	**0.3252**	**2.4363**	**2.3387**	**0.0113**	**71.0645**	**0.0185**	**71.0830**	**7.1945**	**0.0175**	**7.2121**		**1,151.3565**	**1,151.3565**	**0.0470**		**1,152.5312**

3.4 Building Construction - 2019

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	lb/day										lb/day					
Off-Road	1.7938	15.5601	11.9399	0.0200		0.9062	0.9062		0.8597	0.8597	0.0000	1,902.0615	1,902.0615	0.4132		1,912.3909
Total	**1.7938**	**15.5601**	**11.9399**	**0.0200**		**0.9062**	**0.9062**		**0.8597**	**0.8597**	**0.0000**	**1,902.0615**	**1,902.0615**	**0.4132**		**1,912.3909**

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	lb/day										lb/day					
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
Vendor	0.0821	2.2899	0.4579	5.8900e-003	0.1357	0.0152	0.1509	0.0393	0.0145	0.0538		615.9361	615.9361	0.0324		616.7451
Worker	0.2431	0.1464	1.8809	5.3700e-003	0.4649	3.2900e-003	0.4682	0.1238	3.0300e-003	0.1268		535.4204	535.4204	0.0146		535.7861
Total	**0.3252**	**2.4363**	**2.3387**	**0.0113**	**0.6006**	**0.0185**	**0.6190**	**0.1631**	**0.0175**	**0.1806**		**1,151.3565**	**1,151.3565**	**0.0470**		**1,152.5312**

3.5 Paving - 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	lb/day										lb/day					
Off-Road	1.4598	15.3311	15.0509	0.0233		0.8327	0.8327		0.7661	0.7661		2,303.6138	2,303.6138	0.7288		2,321.8348
Paving	0.0180					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.4778**	**15.3311**	**15.0509**	**0.0233**		**0.8327**	**0.8327**		**0.7661**	**0.7661**		**2,303.6138**	**2,303.6138**	**0.7288**		**2,321.8348**

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	lb/day										lb/day					
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
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
Worker	0.0848	0.0511	0.6561	1.8700e-003	20.0298	1.1500e-003	20.0310	2.0257	1.0600e-003	2.0268		186.7746	186.7746	5.1000e-003		186.9021
Total	**0.0848**	**0.0511**	**0.6561**	**1.8700e-003**	**20.0298**	**1.1500e-003**	**20.0310**	**2.0257**	**1.0600e-003**	**2.0268**		**186.7746**	**186.7746**	**5.1000e-003**		**186.9021**

3.5 Paving - 2019

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	lb/day										lb/day					
Off-Road	1.4598	15.3311	15.0509	0.0233		0.8327	0.8327		0.7661	0.7661	0.0000	2,303.6138	2,303.6138	0.7288		2,321.8348
Paving	0.0180					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.4778**	**15.3311**	**15.0509**	**0.0233**		**0.8327**	**0.8327**		**0.7661**	**0.7661**	**0.0000**	**2,303.6138**	**2,303.6138**	**0.7288**		**2,321.8348**

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	lb/day										lb/day					
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
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
Worker	0.0848	0.0511	0.6561	1.8700e-003	0.1622	1.1500e-003	0.1633	0.0432	1.0600e-003	0.0442		186.7746	186.7746	5.1000e-003		186.9021
Total	**0.0848**	**0.0511**	**0.6561**	**1.8700e-003**	**0.1622**	**1.1500e-003**	**0.1633**	**0.0432**	**1.0600e-003**	**0.0442**		**186.7746**	**186.7746**	**5.1000e-003**		**186.9021**

3.6 Architectural Coating - 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	lb/day										lb/day					
Archit. Coating	14.9302					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2664	1.8354	1.8413	2.9700e-003		0.1288	0.1288		0.1288	0.1288		281.4481	281.4481	0.0238		282.0423
Total	**15.1967**	**1.8354**	**1.8413**	**2.9700e-003**		**0.1288**	**0.1288**		**0.1288**	**0.1288**		**281.4481**	**281.4481**	**0.0238**		**282.0423**

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	lb/day										lb/day					
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
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
Worker	0.0509	0.0306	0.3937	1.1200e-003	12.0179	6.9000e-004	12.0186	1.2154	6.3000e-004	1.2161		112.0647	112.0647	3.0600e-003		112.1413
Total	**0.0509**	**0.0306**	**0.3937**	**1.1200e-003**	**12.0179**	**6.9000e-004**	**12.0186**	**1.2154**	**6.3000e-004**	**1.2161**		**112.0647**	**112.0647**	**3.0600e-003**		**112.1413**

3.6 Architectural Coating - 2019

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	lb/day										lb/day					
Archit. Coating	14.9302					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2664	1.8354	1.8413	2.9700e-003		0.1288	0.1288		0.1288	0.1288	0.0000	281.4481	281.4481	0.0238		282.0423
Total	**15.1967**	**1.8354**	**1.8413**	**2.9700e-003**		**0.1288**	**0.1288**		**0.1288**	**0.1288**	**0.0000**	**281.4481**	**281.4481**	**0.0238**		**282.0423**

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	lb/day										lb/day					
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
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
Worker	0.0509	0.0306	0.3937	1.1200e-003	0.0973	6.9000e-004	0.0980	0.0259	6.3000e-004	0.0265		112.0647	112.0647	3.0600e-003		112.1413
Total	**0.0509**	**0.0306**	**0.3937**	**1.1200e-003**	**0.0973**	**6.9000e-004**	**0.0980**	**0.0259**	**6.3000e-004**	**0.0265**		**112.0647**	**112.0647**	**3.0600e-003**		**112.1413**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	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	lb/day										lb/day					
Mitigated	0.6705	4.1519	7.9660	0.0324	2.2811	0.0267	2.3078	0.6123	0.0251	0.6374		3,294.4314	3,294.4314	0.1413		3,297.9632
Unmitigated	0.6705	4.1519	7.9660	0.0324	2.2811	0.0267	2.3078	0.6123	0.0251	0.6374		3,294.4314	3,294.4314	0.1413		3,297.9632

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Parking Lot	0.00	0.00	0.00		
Refrigerated Warehouse-No Rail	31.60	31.60	31.60	134,549	134,549
Single Family Housing	9.52	9.91	8.62	35,504	35,504
Unrefrigerated Warehouse-No Rail	209.79	209.79	209.79	893,201	893,201
Total	250.92	251.31	250.02	1,063,254	1,063,254

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
Parking Lot	15.00	8.00	9.00	0.00	0.00	0.00	0	0	0
Refrigerated Warehouse-No Rail	15.00	8.00	9.00	59.00	0.00	41.00	92	5	3
Single Family Housing	15.00	8.00	9.00	46.00	13.00	41.00	86	11	3
Unrefrigerated Warehouse-No Rail	15.00	8.00	9.00	59.00	0.00	41.00	92	5	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Parking Lot	0.520277	0.038864	0.193543	0.118146	0.022917	0.005635	0.034518	0.053912	0.001336	0.002070	0.007104	0.000691	0.000987
Refrigerated Warehouse-No Rail	0.520277	0.038864	0.193543	0.118146	0.022917	0.005635	0.034518	0.053912	0.001336	0.002070	0.007104	0.000691	0.000987
Single Family Housing	0.520277	0.038864	0.193543	0.118146	0.022917	0.005635	0.034518	0.053912	0.001336	0.002070	0.007104	0.000691	0.000987
Unrefrigerated Warehouse-No Rail	0.520277	0.038864	0.193543	0.118146	0.022917	0.005635	0.034518	0.053912	0.001336	0.002070	0.007104	0.000691	0.000987

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	lb/day										lb/day					
NaturalGas Mitigated	0.0109	0.0984	0.0796	5.9000e-004		7.5200e-003	7.5200e-003		7.5200e-003	7.5200e-003		118.6677	118.6677	2.2700e-003	2.1800e-003	119.3729
NaturalGas Unmitigated	0.0109	0.0984	0.0796	5.9000e-004		7.5200e-003	7.5200e-003		7.5200e-003	7.5200e-003		118.6677	118.6677	2.2700e-003	2.1800e-003	119.3729

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	lb/day										lb/day					
Parking Lot	0	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
Refrigerated Warehouse-No Rail	131.259	1.4200e-003	0.0129	0.0108	8.0000e-005		9.8000e-004	9.8000e-004		9.8000e-004	9.8000e-004		15.4422	15.4422	3.0000e-004	2.8000e-004	15.5340
Single Family Housing	79.6304	8.6000e-004	7.3400e-003	3.1200e-003	5.0000e-005		5.9000e-004	5.9000e-004		5.9000e-004	5.9000e-004		9.3683	9.3683	1.8000e-004	1.7000e-004	9.4240
Unrefrigerated Warehouse-No Rail	797.786	8.6000e-003	0.0782	0.0657	4.7000e-004		5.9400e-003	5.9400e-003		5.9400e-003	5.9400e-003		93.8572	93.8572	1.8000e-003	1.7200e-003	94.4150
Total		**0.0109**	**0.0984**	**0.0796**	**6.0000e-004**		**7.5100e-003**	**7.5100e-003**		**7.5100e-003**	**7.5100e-003**		**118.6677**	**118.6677**	**2.2800e-003**	**2.1700e-003**	**119.3729**

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	lb/day										lb/day					
Parking Lot	0	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
Refrigerated Warehouse-No Rail	0.131259	1.4200e-003	0.0129	0.0108	8.0000e-005		9.8000e-004	9.8000e-004		9.8000e-004	9.8000e-004		15.4422	15.4422	3.0000e-004	2.8000e-004	15.5340
Single Family Housing	0.0796304	8.6000e-004	7.3400e-003	3.1200e-003	5.0000e-005		5.9000e-004	5.9000e-004		5.9000e-004	5.9000e-004		9.3683	9.3683	1.8000e-004	1.7000e-004	9.4240
Unrefrigerated Warehouse-No Rail	0.797786	8.6000e-003	0.0782	0.0657	4.7000e-004		5.9400e-003	5.9400e-003		5.9400e-003	5.9400e-003		93.8572	93.8572	1.8000e-003	1.7200e-003	94.4150
Total		**0.0109**	**0.0984**	**0.0796**	**6.0000e-004**		**7.5100e-003**	**7.5100e-003**		**7.5100e-003**	**7.5100e-003**		**118.6677**	**118.6677**	**2.2800e-003**	**2.1700e-003**	**119.3729**

6.0 Area Detail

6.1 Mitigation Measures Area

	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	lb/day										lb/day					
Mitigated	2.7082	5.8800e-003	0.4808	8.5000e-004		0.0573	0.0573		0.0573	0.0573	6.7116	0.1697	6.8813	0.0160	2.9000e-004	7.3679
Unmitigated	2.7082	5.8800e-003	0.4808	8.5000e-004		0.0573	0.0573		0.0573	0.0573	6.7116	0.1697	6.8813	0.0160	2.9000e-004	7.3679

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	lb/day										lb/day					
Architectural Coating	0.3722					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.0920					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.2405	4.8400e-003	0.3882	8.5000e-004		0.0568	0.0568		0.0568	0.0568	6.7116	0.0000	6.7116	0.0158	2.9000e-004	7.1932
Landscaping	3.4300e-003	1.0500e-003	0.0926	1.0000e-005		4.9000e-004	4.9000e-004		4.9000e-004	4.9000e-004		0.1697	0.1697	2.0000e-004		0.1747
Total	**2.7082**	**5.8900e-003**	**0.4808**	**8.6000e-004**		**0.0573**	**0.0573**		**0.0573**	**0.0573**	**6.7116**	**0.1697**	**6.8813**	**0.0160**	**2.9000e-004**	**7.3679**

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	lb/day										lb/day					
Architectural Coating	0.3722					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.0920					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.2405	4.8400e-003	0.3882	8.5000e-004		0.0568	0.0568		0.0568	0.0568	6.7116	0.0000	6.7116	0.0158	2.9000e-004	7.1932
Landscaping	3.4300e-003	1.0500e-003	0.0926	1.0000e-005		4.9000e-004	4.9000e-004		4.9000e-004	4.9000e-004		0.1697	0.1697	2.0000e-004		0.1747
Total	**2.7082**	**5.8900e-003**	**0.4808**	**8.6000e-004**		**0.0573**	**0.0573**		**0.0573**	**0.0573**	**6.7116**	**0.1697**	**6.8813**	**0.0160**	**2.9000e-004**	**7.3679**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

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

Lagoon Valley Self Storage

Yolo/Solano AQMD Air District, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Refrigerated Warehouse-No Rail	12.64	1000sqft	0.79	12,641.00	0
Parking Lot	0.11	Acre	0.11	4,791.60	0
Single Family Housing	1.00	Dwelling Unit	0.32	1,120.00	1
Unrefrigerated Warehouse-No Rail	83.92	1000sqft	5.21	83,917.00	0

1.2 Other Project Characteristics

Urbanization	Rural	**Wind Speed (m/s)**	6.8	**Precipitation Freq (Days)**	55
Climate Zone	4			**Operational Year**	2021
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	281.31	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Lagoon Valley Self Storage - Yolo/Solano AQMD Air District, Winter

Project Characteristics - Based on PG&E RPS Calculator

Land Use - Applicant Provided Information

Construction Phase - Applicant Provided Information

Off-road Equipment -

Off-road Equipment - Applicant Provided Information

Off-road Equipment - Applicant Provided Information

Off-road Equipment - Applicant Provided Information

Off-road Equipment -

Trips and VMT - Applicant Provided Information

Grading - Applicant Provided Information

Vehicle Trips - ITE Trip Generation Manual

Road Dust - Area roads paved

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	10.00	7.00
tblConstructionPhase	NumDays	20.00	36.00
tblConstructionPhase	NumDays	20.00	16.00
tblConstructionPhase	NumDays	230.00	91.00
tblConstructionPhase	NumDays	20.00	91.00
tblConstructionPhase	PhaseEndDate	5/14/2019	5/9/2019
tblConstructionPhase	PhaseEndDate	6/11/2019	6/28/2019
tblConstructionPhase	PhaseEndDate	5/26/2020	7/22/2019
tblConstructionPhase	PhaseEndDate	4/28/2020	11/26/2019
tblConstructionPhase	PhaseEndDate	6/23/2020	12/10/2019
tblConstructionPhase	PhaseStartDate	5/15/2019	5/10/2019
tblConstructionPhase	PhaseStartDate	4/29/2020	7/1/2019
tblConstructionPhase	PhaseStartDate	6/12/2019	7/23/2019

tblConstructionPhase	PhaseStartDate	5/27/2020	8/6/2019
tblGrading	AcresOfGrading	18.00	5.00
tblGrading	MaterialImported	0.00	4,885.00
tblLandUse	LandUseSquareFeet	1,800.00	1,120.00
tblLandUse	LotAcreage	0.29	0.79
tblLandUse	LotAcreage	1.93	5.21
tblLandUse	Population	3.00	1.00
tblOffRoadEquipment	LoadFactor	0.37	0.37
tblOffRoadEquipment	OffRoadEquipmentType		Tractors/Loaders/Backhoes
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblProjectCharacteristics	CO2IntensityFactor	641.35	281.31
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblRoadDust	RoadPercentPave	94	100
tblTripsAndVMT	HaulingTripNumber	611.00	814.00
tblTripsAndVMT	WorkerTripNumber	10.00	8.00
tblVehicleTrips	ST_TR	1.68	2.50
tblVehicleTrips	ST_TR	1.68	2.50
tblVehicleTrips	SU_TR	1.68	2.50
tblVehicleTrips	SU_TR	1.68	2.50
tblVehicleTrips	WD_TR	1.68	2.50
tblVehicleTrips	WD_TR	1.68	2.50

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

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	lb/day										lb/day					
2019	17.3695	45.6500	22.7448	0.0428	83.0824	2.3917	84.1368	12.3616	2.2004	14.5620	0.0000	4,345.3408	4,345.3408	1.1971	0.0000	4,366.0732
Maximum	**17.3695**	**45.6500**	**22.7448**	**0.0428**	**83.0824**	**2.3917**	**84.1368**	**12.3616**	**2.2004**	**14.5620**	**0.0000**	**4,345.3408**	**4,345.3408**	**1.1971**	**0.0000**	**4,366.0732**

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	lb/day										lb/day					
2019	17.3695	45.6500	22.7448	0.0428	18.2609	2.3917	20.6526	9.9825	2.2004	12.1829	0.0000	4,345.3408	4,345.3408	1.1971	0.0000	4,366.0732
Maximum	**17.3695**	**45.6500**	**22.7448**	**0.0428**	**18.2609**	**2.3917**	**20.6526**	**9.9825**	**2.2004**	**12.1829**	**0.0000**	**4,345.3408**	**4,345.3408**	**1.1971**	**0.0000**	**4,366.0732**

	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**	**78.02**	**0.00**	**75.45**	**19.25**	**0.00**	**16.34**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

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	lb/day										lb/day					
Area	2.7082	5.8800e-003	0.4808	8.5000e-004		0.0573	0.0573		0.0573	0.0573	6.7116	0.1697	6.8813	0.0160	2.9000e-004	7.3679
Energy	0.0109	0.0984	0.0796	5.9000e-004		7.5200e-003	7.5200e-003		7.5200e-003	7.5200e-003		118.6677	118.6677	2.2700e-003	2.1800e-003	119.3729
Mobile	0.5640	4.3989	7.4494	0.0298	2.2811	0.0270	2.3082	0.6123	0.0255	0.6378		3,034.6139	3,034.6139	0.1438		3,038.2089
Total	**3.2831**	**4.5032**	**8.0099**	**0.0313**	**2.2811**	**0.0919**	**2.3730**	**0.6123**	**0.0903**	**0.7026**	**6.7116**	**3,153.4513**	**3,160.1628**	**0.1620**	**2.4700e-003**	**3,164.9497**

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	lb/day										lb/day					
Area	2.7082	5.8800e-003	0.4808	8.5000e-004		0.0573	0.0573		0.0573	0.0573	6.7116	0.1697	6.8813	0.0160	2.9000e-004	7.3679
Energy	0.0109	0.0984	0.0796	5.9000e-004		7.5200e-003	7.5200e-003		7.5200e-003	7.5200e-003		118.6677	118.6677	2.2700e-003	2.1800e-003	119.3729
Mobile	0.5640	4.3989	7.4494	0.0298	2.2811	0.0270	2.3082	0.6123	0.0255	0.6378		3,034.6139	3,034.6139	0.1438		3,038.2089
Total	**3.2831**	**4.5032**	**8.0099**	**0.0313**	**2.2811**	**0.0919**	**2.3730**	**0.6123**	**0.0903**	**0.7026**	**6.7116**	**3,153.4513**	**3,160.1628**	**0.1620**	**2.4700e-003**	**3,164.9497**

	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**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

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	5/1/2019	5/9/2019	5	7	
2	Grading	Grading	5/10/2019	6/28/2019	5	36	
3	Building Construction	Building Construction	7/23/2019	11/26/2019	5	91	
4	Paving	Paving	7/1/2019	7/22/2019	5	16	
5	Architectural Coating	Architectural Coating	8/6/2019	12/10/2019	5	91	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 5

Acres of Paving: 0.11

Residential Indoor: 2,268; Residential Outdoor: 756; Non-Residential Indoor: 144,837; Non-Residential Outdoor: 48,279; Striped Parking Area: 287 (Architectural Coating – sqft)

OffRoad Equipment

Lagoon Valley Self Storage - Yolo/Solano AQMD Air District, Winter

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	1	8.00	80	0.38
Grading	Excavators	1	8.00	158	0.38
Building Construction	Welders	1	8.00	46	0.45
Building Construction	Forklifts	2	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	7.00	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	15.00	9.00	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	8.00	0.00	814.00	15.00	9.00	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	15.00	9.00	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	6	43.00	17.00	0.00	15.00	9.00	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	9.00	0.00	0.00	15.00	9.00	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

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	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	4.3350	45.5727	22.0630	0.0380		2.3904	2.3904		2.1991	2.1991		3,766.4529	3,766.4529	1.1917		3,796.2445
Total	**4.3350**	**45.5727**	**22.0630**	**0.0380**	**18.0663**	**2.3904**	**20.4566**	**9.9307**	**2.1991**	**12.1298**		**3,766.4529**	**3,766.4529**	**1.1917**		**3,796.2445**

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	lb/day										lb/day					
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
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
Worker	0.1015	0.0773	0.6818	2.0000e-003	24.0358	1.3800e-003	24.0372	2.4309	1.2700e-003	2.4321		198.9032	198.9032	5.4300e-003		199.0389
Total	**0.1015**	**0.0773**	**0.6818**	**2.0000e-003**	**24.0358**	**1.3800e-003**	**24.0372**	**2.4309**	**1.2700e-003**	**2.4321**		**198.9032**	**198.9032**	**5.4300e-003**		**199.0389**

3.2 Site Preparation - 2019

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	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	4.3350	45.5727	22.0630	0.0380		2.3904	2.3904		2.1991	2.1991	0.0000	3,766.4529	3,766.4529	1.1917		3,796.2445
Total	**4.3350**	**45.5727**	**22.0630**	**0.0380**	**18.0663**	**2.3904**	**20.4566**	**9.9307**	**2.1991**	**12.1298**	**0.0000**	**3,766.4529**	**3,766.4529**	**1.1917**		**3,796.2445**

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	lb/day										lb/day					
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
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
Worker	0.1015	0.0773	0.6818	2.0000e-003	0.1946	1.3800e-003	0.1960	0.0518	1.2700e-003	0.0531		198.9032	198.9032	5.4300e-003		199.0389
Total	**0.1015**	**0.0773**	**0.6818**	**2.0000e-003**	**0.1946**	**1.3800e-003**	**0.1960**	**0.0518**	**1.2700e-003**	**0.0531**		**198.9032**	**198.9032**	**5.4300e-003**		**199.0389**

3.3 Grading - 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	lb/day										lb/day					
Fugitive Dust					6.2359	0.0000	6.2359	3.3362	0.0000	3.3362			0.0000			0.0000
Off-Road	2.1149	23.6733	11.6880	0.0234		1.0853	1.0853		0.9985	0.9985		2,321.7231	2,321.7231	0.7346		2,340.0873
Total	**2.1149**	**23.6733**	**11.6880**	**0.0234**	**6.2359**	**1.0853**	**7.3212**	**3.3362**	**0.9985**	**4.3347**		**2,321.7231**	**2,321.7231**	**0.7346**		**2,340.0873**

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	lb/day										lb/day					
Hauling	0.2027	6.6186	1.1441	0.0185	40.3087	0.0278	40.3366	4.0885	0.0266	4.1152		1,935.2163	1,935.2163	0.0923		1,937.5242
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
Worker	0.0451	0.0343	0.3030	8.9000e-004	10.6826	6.1000e-004	10.6832	1.0804	5.6000e-004	1.0810		88.4014	88.4014	2.4100e-003		88.4617
Total	**0.2478**	**6.6530**	**1.4471**	**0.0194**	**50.9913**	**0.0284**	**51.0197**	**5.1689**	**0.0272**	**5.1961**		**2,023.6177**	**2,023.6177**	**0.0947**		**2,025.9859**

3.3 Grading - 2019

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	lb/day										lb/day					
Fugitive Dust					6.2359	0.0000	6.2359	3.3362	0.0000	3.3362			0.0000			0.0000
Off-Road	2.1149	23.6733	11.6880	0.0234		1.0853	1.0853		0.9985	0.9985	0.0000	2,321.7231	2,321.7231	0.7346		2,340.0873
Total	**2.1149**	**23.6733**	**11.6880**	**0.0234**	**6.2359**	**1.0853**	**7.3212**	**3.3362**	**0.9985**	**4.3347**	**0.0000**	**2,321.7231**	**2,321.7231**	**0.7346**		**2,340.0873**

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	lb/day										lb/day					
Hauling	0.2027	6.6186	1.1441	0.0185	0.3772	0.0278	0.4050	0.1039	0.0266	0.1305		1,935.2163	1,935.2163	0.0923		1,937.5242
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
Worker	0.0451	0.0343	0.3030	8.9000e-004	0.0865	6.1000e-004	0.0871	0.0230	5.6000e-004	0.0236		88.4014	88.4014	2.4100e-003		88.4617
Total	**0.2478**	**6.6530**	**1.4471**	**0.0194**	**0.4637**	**0.0284**	**0.4921**	**0.1269**	**0.0272**	**0.1541**		**2,023.6177**	**2,023.6177**	**0.0947**		**2,025.9859**

3.4 Building Construction - 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	lb/day										lb/day					
Off-Road	1.7938	15.5601	11.9399	0.0200		0.9062	0.9062		0.8597	0.8597		1,902.0615	1,902.0615	0.4132		1,912.3909
Total	**1.7938**	**15.5601**	**11.9399**	**0.0200**		**0.9062**	**0.9062**		**0.8597**	**0.8597**		**1,902.0615**	**1,902.0615**	**0.4132**		**1,912.3909**

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	lb/day										lb/day					
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
Vendor	0.0860	2.3415	0.5378	5.7300e-003	13.6457	0.0155	13.6612	1.3874	0.0148	1.4023		599.0752	599.0752	0.0365		599.9867
Worker	0.2424	0.1846	1.6287	4.7700e-003	57.4188	3.2900e-003	57.4221	5.8071	3.0300e-003	5.8101		475.1577	475.1577	0.0130		475.4817
Total	**0.3283**	**2.5261**	**2.1665**	**0.0105**	**71.0645**	**0.0188**	**71.0833**	**7.1945**	**0.0179**	**7.2124**		**1,074.2328**	**1,074.2328**	**0.0494**		**1,075.4684**

3.4 Building Construction - 2019

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	lb/day										lb/day					
Off-Road	1.7938	15.5601	11.9399	0.0200		0.9062	0.9062		0.8597	0.8597	0.0000	1,902.0615	1,902.0615	0.4132		1,912.3909
Total	**1.7938**	**15.5601**	**11.9399**	**0.0200**		**0.9062**	**0.9062**		**0.8597**	**0.8597**	**0.0000**	**1,902.0615**	**1,902.0615**	**0.4132**		**1,912.3909**

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	lb/day										lb/day					
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
Vendor	0.0860	2.3415	0.5378	5.7300e-003	0.1357	0.0155	0.1512	0.0393	0.0148	0.0541		599.0752	599.0752	0.0365		599.9867
Worker	0.2424	0.1846	1.6287	4.7700e-003	0.4649	3.2900e-003	0.4682	0.1238	3.0300e-003	0.1268		475.1577	475.1577	0.0130		475.4817
Total	**0.3283**	**2.5261**	**2.1665**	**0.0105**	**0.6006**	**0.0188**	**0.6194**	**0.1631**	**0.0179**	**0.1810**		**1,074.2328**	**1,074.2328**	**0.0494**		**1,075.4684**

3.5 Paving - 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	lb/day										lb/day					
Off-Road	1.4598	15.3311	15.0509	0.0233		0.8327	0.8327		0.7661	0.7661		2,303.6138	2,303.6138	0.7288		2,321.8348
Paving	0.0180					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.4778**	**15.3311**	**15.0509**	**0.0233**		**0.8327**	**0.8327**		**0.7661**	**0.7661**		**2,303.6138**	**2,303.6138**	**0.7288**		**2,321.8348**

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	lb/day										lb/day					
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
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
Worker	0.0845	0.0644	0.5681	1.6600e-003	20.0298	1.1500e-003	20.0310	2.0257	1.0600e-003	2.0268		165.7527	165.7527	4.5200e-003		165.8657
Total	**0.0845**	**0.0644**	**0.5681**	**1.6600e-003**	**20.0298**	**1.1500e-003**	**20.0310**	**2.0257**	**1.0600e-003**	**2.0268**		**165.7527**	**165.7527**	**4.5200e-003**		**165.8657**

3.5 Paving - 2019

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	lb/day										lb/day					
Off-Road	1.4598	15.3311	15.0509	0.0233		0.8327	0.8327		0.7661	0.7661	0.0000	2,303.6138	2,303.6138	0.7288		2,321.8348
Paving	0.0180					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.4778**	**15.3311**	**15.0509**	**0.0233**		**0.8327**	**0.8327**		**0.7661**	**0.7661**	**0.0000**	**2,303.6138**	**2,303.6138**	**0.7288**		**2,321.8348**

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	lb/day										lb/day					
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
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
Worker	0.0845	0.0644	0.5681	1.6600e-003	0.1622	1.1500e-003	0.1633	0.0432	1.0600e-003	0.0442		165.7527	165.7527	4.5200e-003		165.8657
Total	**0.0845**	**0.0644**	**0.5681**	**1.6600e-003**	**0.1622**	**1.1500e-003**	**0.1633**	**0.0432**	**1.0600e-003**	**0.0442**		**165.7527**	**165.7527**	**4.5200e-003**		**165.8657**

3.6 Architectural Coating - 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	lb/day										lb/day					
Archit. Coating	14.9302					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2664	1.8354	1.8413	2.9700e-003		0.1288	0.1288		0.1288	0.1288		281.4481	281.4481	0.0238		282.0423
Total	**15.1967**	**1.8354**	**1.8413**	**2.9700e-003**		**0.1288**	**0.1288**		**0.1288**	**0.1288**		**281.4481**	**281.4481**	**0.0238**		**282.0423**

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	lb/day										lb/day					
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
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
Worker	0.0507	0.0386	0.3409	1.0000e-003	12.0179	6.9000e-004	12.0186	1.2154	6.3000e-004	1.2161		99.4516	99.4516	2.7100e-003		99.5194
Total	**0.0507**	**0.0386**	**0.3409**	**1.0000e-003**	**12.0179**	**6.9000e-004**	**12.0186**	**1.2154**	**6.3000e-004**	**1.2161**		**99.4516**	**99.4516**	**2.7100e-003**		**99.5194**

3.6 Architectural Coating - 2019

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	lb/day										lb/day					
Archit. Coating	14.9302					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2664	1.8354	1.8413	2.9700e-003		0.1288	0.1288		0.1288	0.1288	0.0000	281.4481	281.4481	0.0238		282.0423
Total	**15.1967**	**1.8354**	**1.8413**	**2.9700e-003**		**0.1288**	**0.1288**		**0.1288**	**0.1288**	**0.0000**	**281.4481**	**281.4481**	**0.0238**		**282.0423**

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	lb/day										lb/day					
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
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
Worker	0.0507	0.0386	0.3409	1.0000e-003	0.0973	6.9000e-004	0.0980	0.0259	6.3000e-004	0.0265		99.4516	99.4516	2.7100e-003		99.5194
Total	**0.0507**	**0.0386**	**0.3409**	**1.0000e-003**	**0.0973**	**6.9000e-004**	**0.0980**	**0.0259**	**6.3000e-004**	**0.0265**		**99.4516**	**99.4516**	**2.7100e-003**		**99.5194**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	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	lb/day										lb/day					
Mitigated	0.5640	4.3989	7.4494	0.0298	2.2811	0.0270	2.3082	0.6123	0.0255	0.6378		3,034.6139	3,034.6139	0.1438		3,038.2089
Unmitigated	0.5640	4.3989	7.4494	0.0298	2.2811	0.0270	2.3082	0.6123	0.0255	0.6378		3,034.6139	3,034.6139	0.1438		3,038.2089

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Parking Lot	0.00	0.00	0.00		
Refrigerated Warehouse-No Rail	31.60	31.60	31.60	134,549	134,549
Single Family Housing	9.52	9.91	8.62	35,504	35,504
Unrefrigerated Warehouse-No Rail	209.79	209.79	209.79	893,201	893,201
Total	250.92	251.31	250.02	1,063,254	1,063,254

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
Parking Lot	15.00	8.00	9.00	0.00	0.00	0.00	0	0	0
Refrigerated Warehouse-No Rail	15.00	8.00	9.00	59.00	0.00	41.00	92	5	3
Single Family Housing	15.00	8.00	9.00	46.00	13.00	41.00	86	11	3
Unrefrigerated Warehouse-No Rail	15.00	8.00	9.00	59.00	0.00	41.00	92	5	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Parking Lot	0.520277	0.038864	0.193543	0.118146	0.022917	0.005635	0.034518	0.053912	0.001336	0.002070	0.007104	0.000691	0.000987
Refrigerated Warehouse-No Rail	0.520277	0.038864	0.193543	0.118146	0.022917	0.005635	0.034518	0.053912	0.001336	0.002070	0.007104	0.000691	0.000987
Single Family Housing	0.520277	0.038864	0.193543	0.118146	0.022917	0.005635	0.034518	0.053912	0.001336	0.002070	0.007104	0.000691	0.000987
Unrefrigerated Warehouse-No Rail	0.520277	0.038864	0.193543	0.118146	0.022917	0.005635	0.034518	0.053912	0.001336	0.002070	0.007104	0.000691	0.000987

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	lb/day										lb/day					
NaturalGas Mitigated	0.0109	0.0984	0.0796	5.9000e-004		7.5200e-003	7.5200e-003		7.5200e-003	7.5200e-003		118.6677	118.6677	2.2700e-003	2.1800e-003	119.3729
NaturalGas Unmitigated	0.0109	0.0984	0.0796	5.9000e-004		7.5200e-003	7.5200e-003		7.5200e-003	7.5200e-003		118.6677	118.6677	2.2700e-003	2.1800e-003	119.3729

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	lb/day										lb/day					
Parking Lot	0	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
Refrigerated Warehouse-No Rail	131.259	1.4200e-003	0.0129	0.0108	8.0000e-005		9.8000e-004	9.8000e-004		9.8000e-004	9.8000e-004		15.4422	15.4422	3.0000e-004	2.8000e-004	15.5340
Single Family Housing	79.6304	8.6000e-004	7.3400e-003	3.1200e-003	5.0000e-005		5.9000e-004	5.9000e-004		5.9000e-004	5.9000e-004		9.3683	9.3683	1.8000e-004	1.7000e-004	9.4240
Unrefrigerated Warehouse-No Rail	797.786	8.6000e-003	0.0782	0.0657	4.7000e-004		5.9400e-003	5.9400e-003		5.9400e-003	5.9400e-003		93.8572	93.8572	1.8000e-003	1.7200e-003	94.4150
Total		**0.0109**	**0.0984**	**0.0796**	**6.0000e-004**		**7.5100e-003**	**7.5100e-003**		**7.5100e-003**	**7.5100e-003**		**118.6677**	**118.6677**	**2.2800e-003**	**2.1700e-003**	**119.3729**

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	lb/day										lb/day					
Parking Lot	0	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
Refrigerated Warehouse-No Rail	0.131259	1.4200e-003	0.0129	0.0108	8.0000e-005		9.8000e-004	9.8000e-004		9.8000e-004	9.8000e-004		15.4422	15.4422	3.0000e-004	2.8000e-004	15.5340
Single Family Housing	0.0796304	8.6000e-004	7.3400e-003	3.1200e-003	5.0000e-005		5.9000e-004	5.9000e-004		5.9000e-004	5.9000e-004		9.3683	9.3683	1.8000e-004	1.7000e-004	9.4240
Unrefrigerated Warehouse-No Rail	0.797786	8.6000e-003	0.0782	0.0657	4.7000e-004		5.9400e-003	5.9400e-003		5.9400e-003	5.9400e-003		93.8572	93.8572	1.8000e-003	1.7200e-003	94.4150
Total		**0.0109**	**0.0984**	**0.0796**	**6.0000e-004**		**7.5100e-003**	**7.5100e-003**		**7.5100e-003**	**7.5100e-003**		**118.6677**	**118.6677**	**2.2800e-003**	**2.1700e-003**	**119.3729**

6.0 Area Detail

6.1 Mitigation Measures Area

	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	lb/day										lb/day					
Mitigated	2.7082	5.8800e-003	0.4808	8.5000e-004		0.0573	0.0573		0.0573	0.0573	6.7116	0.1697	6.8813	0.0160	2.9000e-004	7.3679
Unmitigated	2.7082	5.8800e-003	0.4808	8.5000e-004		0.0573	0.0573		0.0573	0.0573	6.7116	0.1697	6.8813	0.0160	2.9000e-004	7.3679

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	lb/day										lb/day					
Architectural Coating	0.3722					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.0920					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.2405	4.8400e-003	0.3882	8.5000e-004		0.0568	0.0568		0.0568	0.0568	6.7116	0.0000	6.7116	0.0158	2.9000e-004	7.1932
Landscaping	3.4300e-003	1.0500e-003	0.0926	1.0000e-005		4.9000e-004	4.9000e-004		4.9000e-004	4.9000e-004		0.1697	0.1697	2.0000e-004		0.1747
Total	**2.7082**	**5.8900e-003**	**0.4808**	**8.6000e-004**		**0.0573**	**0.0573**		**0.0573**	**0.0573**	**6.7116**	**0.1697**	**6.8813**	**0.0160**	**2.9000e-004**	**7.3679**

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	lb/day										lb/day					
Architectural Coating	0.3722					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.0920					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.2405	4.8400e-003	0.3882	8.5000e-004		0.0568	0.0568		0.0568	0.0568	6.7116	0.0000	6.7116	0.0158	2.9000e-004	7.1932
Landscaping	3.4300e-003	1.0500e-003	0.0926	1.0000e-005		4.9000e-004	4.9000e-004		4.9000e-004	4.9000e-004		0.1697	0.1697	2.0000e-004		0.1747
Total	**2.7082**	**5.8900e-003**	**0.4808**	**8.6000e-004**		**0.0573**	**0.0573**		**0.0573**	**0.0573**	**6.7116**	**0.1697**	**6.8813**	**0.0160**	**2.9000e-004**	**7.3679**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

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

Lagoon Valley Self Storage

Yolo/Solano AQMD Air District, Mitigation Report

Construction Mitigation Summary

Phase	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction												
Architectural Coating	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Building Construction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Grading	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Site Preparation	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

OFFROAD Equipment Mitigation

Equipment Type	Fuel Type	Tier	Number Mitigated	Total Number of Equipment	DPF	Oxidation Catalyst
Air Compressors	Diesel	No Change	0	1	No Change	0.00
Cranes	Diesel	No Change	0	1	No Change	0.00
Excavators	Diesel	No Change	0	1	No Change	0.00
Forklifts	Diesel	No Change	0	2	No Change	0.00
Generator Sets	Diesel	No Change	0	1	No Change	0.00
Graders	Diesel	No Change	0	1	No Change	0.00
Pavers	Diesel	No Change	0	2	No Change	0.00
Paving Equipment	Diesel	No Change	0	2	No Change	0.00
Rollers	Diesel	No Change	0	1	No Change	0.00
Rubber Tired Dozers	Diesel	No Change	0	4	No Change	0.00
Welders	Diesel	No Change	0	1	No Change	0.00
Tractors/Loaders/Backhoes	Diesel	No Change	0	7	No Change	0.00

Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	Unmitigated tons/yr						Unmitigated mt/yr					
Air Compressors	1.21200E-002	8.35100E-002	8.37800E-002	1.40000E-004	5.86000E-003	5.86000E-003	0.00000E+000	1.16173E+001	1.16173E+001	9.80000E-004	0.00000E+000	1.16418E+001
Cranes	2.00700E-002	2.39150E-001	9.12900E-002	2.30000E-004	1.01400E-002	9.33000E-003	0.00000E+000	2.06306E+001	2.06306E+001	6.53000E-003	0.00000E+000	2.07938E+001
Excavators	4.69000E-003	4.82700E-002	5.87400E-002	9.00000E-005	2.33000E-003	2.14000E-003	0.00000E+000	8.34634E+000	8.34634E+000	2.64000E-003	0.00000E+000	8.41235E+000
Forklifts	1.45600E-002	1.29980E-001	1.08670E-001	1.40000E-004	1.00700E-002	9.26000E-003	0.00000E+000	1.24921E+001	1.24921E+001	3.95000E-003	0.00000E+000	1.25909E+001
Generator Sets	2.02000E-002	1.71890E-001	1.69400E-001	3.00000E-004	1.02800E-002	1.02800E-002	0.00000E+000	2.57169E+001	2.57169E+001	1.63000E-003	0.00000E+000	2.57577E+001
Graders	8.76000E-003	1.18430E-001	3.30800E-002	1.20000E-004	3.80000E-003	3.50000E-003	0.00000E+000	1.07386E+001	1.07386E+001	3.40000E-003	0.00000E+000	1.08236E+001
Pavers	4.60000E-003	4.99900E-002	4.64300E-002	8.00000E-005	2.45000E-003	2.25000E-003	0.00000E+000	6.75669E+000	6.75669E+000	2.14000E-003	0.00000E+000	6.81013E+000
Paving Equipment	3.41000E-003	3.61000E-002	4.03800E-002	7.00000E-005	1.79000E-003	1.65000E-003	0.00000E+000	5.85416E+000	5.85416E+000	1.85000E-003	0.00000E+000	5.90047E+000
Rollers	1.81000E-003	1.79300E-002	1.52600E-002	2.00000E-005	1.18000E-003	1.08000E-003	0.00000E+000	1.88465E+000	1.88465E+000	6.00000E-004	0.00000E+000	1.89956E+000
Rubber Tired Dozers	3.23400E-002	3.44120E-001	1.22100E-001	2.40000E-004	1.67800E-002	1.54400E-002	0.00000E+000	2.18584E+001	2.18584E+001	6.92000E-003	0.00000E+000	2.20313E+001
Tractors/Loaders/ Backhoes	1.85700E-002	1.86480E-001	1.83710E-001	2.50000E-004	1.24500E-002	1.14500E-002	0.00000E+000	2.22584E+001	2.22584E+001	7.04000E-003	0.00000E+000	2.24345E+001
Welders	1.75300E-002	7.39000E-002	8.22300E-002	1.20000E-004	4.53000E-003	4.53000E-003	0.00000E+000	8.56404E+000	8.56404E+000	1.43000E-003	0.00000E+000	8.59983E+000

Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	Mitigated tons/yr						Mitigated mt/yr					
Air Compressors	1.21200E-002	8.35100E-002	8.37800E-002	1.40000E-004	5.86000E-003	5.86000E-003	0.00000E+000	1.16173E+001	1.16173E+001	9.80000E-004	0.00000E+000	1.16418E+001
Cranes	2.00700E-002	2.39150E-001	9.12900E-002	2.30000E-004	1.01400E-002	9.33000E-003	0.00000E+000	2.06306E+001	2.06306E+001	6.53000E-003	0.00000E+000	2.07937E+001
Excavators	4.69000E-003	4.82700E-002	5.87400E-002	9.00000E-005	2.33000E-003	2.14000E-003	0.00000E+000	8.34633E+000	8.34633E+000	2.64000E-003	0.00000E+000	8.41234E+000
Forklifts	1.45600E-002	1.29980E-001	1.08670E-001	1.40000E-004	1.00700E-002	9.26000E-003	0.00000E+000	1.24921E+001	1.24921E+001	3.95000E-003	0.00000E+000	1.25909E+001
Generator Sets	2.02000E-002	1.71890E-001	1.69400E-001	3.00000E-004	1.02800E-002	1.02800E-002	0.00000E+000	2.57169E+001	2.57169E+001	1.63000E-003	0.00000E+000	2.57576E+001
Graders	8.76000E-003	1.18430E-001	3.30800E-002	1.20000E-004	3.80000E-003	3.50000E-003	0.00000E+000	1.07386E+001	1.07386E+001	3.40000E-003	0.00000E+000	1.08235E+001
Pavers	4.60000E-003	4.99900E-002	4.64300E-002	8.00000E-005	2.45000E-003	2.25000E-003	0.00000E+000	6.75668E+000	6.75668E+000	2.14000E-003	0.00000E+000	6.81012E+000
Paving Equipment	3.41000E-003	3.61000E-002	4.03800E-002	7.00000E-005	1.79000E-003	1.65000E-003	0.00000E+000	5.85415E+000	5.85415E+000	1.85000E-003	0.00000E+000	5.90046E+000
Rollers	1.81000E-003	1.79300E-002	1.52600E-002	2.00000E-005	1.18000E-003	1.08000E-003	0.00000E+000	1.88465E+000	1.88465E+000	6.00000E-004	0.00000E+000	1.89955E+000
Rubber Tired Dozers	3.23400E-002	3.44120E-001	1.22100E-001	2.40000E-004	1.67800E-002	1.54400E-002	0.00000E+000	2.18583E+001	2.18583E+001	6.92000E-003	0.00000E+000	2.20312E+001
Tractors/Loaders/Backhoes	1.85700E-002	1.86480E-001	1.83710E-001	2.50000E-004	1.24500E-002	1.14500E-002	0.00000E+000	2.22584E+001	2.22584E+001	7.04000E-003	0.00000E+000	2.24345E+001
Welders	1.75200E-002	7.39000E-002	8.22300E-002	1.20000E-004	4.53000E-003	4.53000E-003	0.00000E+000	8.56403E+000	8.56403E+000	1.43000E-003	0.00000E+000	8.59982E+000

Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction												
Air Compressors	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	8.60785E-007	8.60785E-007	0.00000E+000	0.00000E+000	1.71794E-006
Cranes	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	9.69435E-007	9.69435E-007	0.00000E+000	0.00000E+000	9.61827E-007
Excavators	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.19813E-006	1.19813E-006	0.00000E+000	0.00000E+000	1.18873E-006
Forklifts	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.60101E-006	1.60101E-006	0.00000E+000	0.00000E+000	1.58845E-006
Generator Sets	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.16655E-006	1.16655E-006	0.00000E+000	0.00000E+000	1.16470E-006
Graders	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.86244E-006	1.86244E-006	0.00000E+000	0.00000E+000	1.84782E-006
Pavers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.48001E-006	1.48001E-006	0.00000E+000	0.00000E+000	1.46840E-006
Paving Equipment	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.70819E-006	1.70819E-006	0.00000E+000	0.00000E+000	1.69478E-006
Rollers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	5.26438E-006
Rubber Tired Dozers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	9.14982E-007	9.14982E-007	0.00000E+000	0.00000E+000	1.36170E-006
Tractors/Loaders/Backhoes	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	8.98536E-007	8.98536E-007	0.00000E+000	0.00000E+000	1.33723E-006
Welders	5.70451E-004	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.16767E-006	1.16767E-006	0.00000E+000	0.00000E+000	1.16281E-006

Fugitive Dust Mitigation

Yes/No	Mitigation Measure	Mitigation Input		Mitigation Input		Mitigation Input	
No	Soil Stabilizer for unpaved Roads	PM10 Reduction		PM2.5 Reduction			
No	Replace Ground Cover of Area Disturbed	PM10 Reduction		PM2.5 Reduction			
No	Water Exposed Area	PM10 Reduction		PM2.5 Reduction		Frequency (per day)	
No	Unpaved Road Mitigation	Moisture Content %		Vehicle Speed (mph)	0.00		

No	Clean Paved Road	% PM Reduction	0.00				

		Unmitigated		Mitigated		Percent Reduction	
Phase	Source	PM10	PM2.5	PM10	PM2.5	PM10	PM2.5
Architectural Coating	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Architectural Coating	Roads	0.46	0.05	0.00	0.00	0.99	0.98
Building Construction	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Building Construction	Roads	2.75	0.28	0.03	0.01	0.99	0.97
Grading	Fugitive Dust	0.11	0.06	0.11	0.06	0.00	0.00
Grading	Roads	0.78	0.08	0.01	0.00	0.99	0.97
Paving	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Paving	Roads	0.14	0.01	0.00	0.00	0.99	0.98
Site Preparation	Fugitive Dust	0.06	0.03	0.06	0.03	0.00	0.00
Site Preparation	Roads	0.07	0.01	0.00	0.00	0.99	0.98

Operational Percent Reduction Summary

Category	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction												
Architectural Coating	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Consumer Products	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Electricity	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hearth	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Landscaping	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mobile	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Natural Gas	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Water Indoor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Water Outdoor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Operational Mobile Mitigation

Project Setting:

Mitigation	Category	Measure	% Reduction	Input Value 1	Input Value 2	Input Value 3
No	Land Use	Increase Density	0.00			
No	Land Use	Increase Diversity	0.01	0.16		
No	Land Use	Improve Walkability Design	0.00			
No	Land Use	Improve Destination Accessibility	0.00			
No	Land Use	Increase Transit Accessibility	0.25			
No	Land Use	Integrate Below Market Rate Housing	0.00			
	Land Use	Land Use SubTotal	0.00			

No	Neighborhood Enhancements	Improve Pedestrian Network				
No	Neighborhood Enhancements	Provide Traffic Calming Measures				
No	Neighborhood Enhancements	Implement NEV Network	0.00			
	Neighborhood Enhancements	Neighborhood Enhancements Subtotal	0.00			
No	Parking Policy Pricing	Limit Parking Supply	0.00			
No	Parking Policy Pricing	Unbundle Parking Costs	0.00			
No	Parking Policy Pricing	On-street Market Pricing	0.00			
	Parking Policy Pricing	Parking Policy Pricing Subtotal	0.00			
No	Transit Improvements	Provide BRT System	0.00			
No	Transit Improvements	Expand Transit Network	0.00			
No	Transit Improvements	Increase Transit Frequency	0.00			
	Transit Improvements	Transit Improvements Subtotal	0.00			
		Land Use and Site Enhancement Subtotal	0.00			
No	Commute	Implement Trip Reduction Program				
No	Commute	Transit Subsidy				
No	Commute	Implement Employee Parking "Cash Out"				
No	Commute	Workplace Parking Charge				
No	Commute	Encourage Telecommuting and Alternative Work Schedules	0.00			
No	Commute	Market Commute Trip Reduction Option	0.00			
No	Commute	Employee Vanpool/Shuttle	0.00		2.00	
No	Commute	Provide Ride Sharing Program				
	Commute	Commute Subtotal	0.00			

No	School Trip	Implement School Bus Program	0.00			
		Total VMT Reduction	0.00			

Area Mitigation

Measure Implemented	Mitigation Measure	Input Value
No	Only Natural Gas Hearth	
No	No Hearth	
No	Use Low VOC Cleaning Supplies	
No	Use Low VOC Paint (Residential Interior)	100.00
No	Use Low VOC Paint (Residential Exterior)	100.00
No	Use Low VOC Paint (Non-residential Interior)	150.00
No	Use Low VOC Paint (Non-residential Exterior)	150.00
No	Use Low VOC Paint (Parking)	150.00
No	% Electric Lawnmower	
No	% Electric Leafblower	
No	% Electric Chainsaw	

Energy Mitigation Measures

Measure Implemented	Mitigation Measure	Input Value 1	Input Value 2
No	Exceed Title 24		
No	Install High Efficiency Lighting		
No	On-site Renewable		

Appliance Type	Land Use Subtype	% Improvement
ClothWasher		30.00
DishWasher		15.00
Fan		50.00
Refrigerator		15.00

Water Mitigation Measures

Measure Implemented	Mitigation Measure	Input Value 1	Input Value 2
No	Apply Water Conservation on Strategy		
No	Use Reclaimed Water		
No	Use Grey Water		
No	Install low-flow bathroom faucet	32.00	
No	Install low-flow Kitchen faucet	18.00	
No	Install low-flow Toilet	20.00	
No	Install low-flow Shower	20.00	
No	Turf Reduction		
No	Use Water Efficient Irrigation Systems	6.10	
No	Water Efficient Landscape		

Solid Waste Mitigation

Mitigation Measures	Input Value

Institute Recycling and Composting Services Percent Reduction in Waste Disposed	

Lagoon Valley Self Storage

Yolo/Solano AQMD Air District, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Refrigerated Warehouse-No Rail	12.64	1000sqft	0.79	12,641.00	0
Unrefrigerated Warehouse-No Rail	83.92	1000sqft	5.21	83,917.00	0
Parking Lot	0.11	Acre	0.11	4,791.60	0
Single Family Housing	1.00	Dwelling Unit	0.32	1,120.00	1

1.2 Other Project Characteristics

Urbanization	Rural	**Wind Speed (m/s)**	6.8	**Precipitation Freq (Days)**	55
Climate Zone	4			**Operational Year**	2021
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	281.31	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Based on PG&E RPS Calculator

Land Use - Applicant Provided Information

Construction Phase - Applicant Provided Information

Off-road Equipment -

Off-road Equipment - Applicant Provided Information

Off-road Equipment - Applicant Provided Information

Off-road Equipment - Applicant Provided Information

Off-road Equipment -

Trips and VMT - Applicant Provided Information

Grading - Applicant Provided Information

Vehicle Trips - ITE Trip Generation Manual

Road Dust - Area roads paved

Energy Mitigation - Per ECAS RE-5

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	20.00	91.00
tblConstructionPhase	NumDays	230.00	91.00
tblConstructionPhase	NumDays	20.00	36.00
tblConstructionPhase	NumDays	20.00	16.00
tblConstructionPhase	NumDays	10.00	7.00
tblGrading	AcresOfGrading	18.00	5.00
tblGrading	MaterialImported	0.00	4,885.00
tblLandUse	LandUseSquareFeet	12,640.00	12,641.00
tblLandUse	LandUseSquareFeet	83,920.00	83,917.00
tblLandUse	LandUseSquareFeet	1,800.00	1,120.00
tblLandUse	LotAcreage	0.29	0.79
tblLandUse	LotAcreage	1.93	5.21

tblLandUse	Population	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblProjectCharacteristics	CO2IntensityFactor	641.35	281.31
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblRoadDust	RoadPercentPave	94	100
tblTripsAndVMT	HaulingTripNumber	611.00	814.00
tblTripsAndVMT	WorkerTripNumber	10.00	8.00
tblVehicleTrips	ST_TR	1.68	2.50
tblVehicleTrips	ST_TR	1.68	2.50
tblVehicleTrips	SU_TR	1.68	2.50
tblVehicleTrips	SU_TR	1.68	2.50
tblVehicleTrips	WD_TR	1.68	2.50
tblVehicleTrips	WD_TR	1.68	2.50

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	0.8593	1.7353	1.1773	2.6900e-003	4.3782	0.0831	4.4613	0.5212	0.0781	0.5993	0.0000	241.5656	241.5656	0.0427	0.0000	242.6322
Maximum	**0.8593**	**1.7353**	**1.1773**	**2.6900e-003**	**4.3782**	**0.0831**	**4.4613**	**0.5212**	**0.0781**	**0.5993**	**0.0000**	**241.5656**	**241.5656**	**0.0427**	**0.0000**	**242.6322**

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	0.8593	1.7353	1.1773	2.6900e-003	0.2163	0.0831	0.2993	0.1059	0.0781	0.1840	0.0000	241.5654	241.5654	0.0427	0.0000	242.6320
Maximum	**0.8593**	**1.7353**	**1.1773**	**2.6900e-003**	**0.2163**	**0.0831**	**0.2993**	**0.1059**	**0.0781**	**0.1840**	**0.0000**	**241.5654**	**241.5654**	**0.0427**	**0.0000**	**242.6320**

	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**	**95.06**	**0.00**	**93.29**	**79.68**	**0.00**	**69.30**	**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	5-1-2019	7-31-2019	0.9384	0.9384
2	8-1-2019	9-30-2019	0.7805	0.7805
		Highest	0.9384	0.9384

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	0.4599	2.9000e-004	0.0243	4.0000e-005		2.3700e-003	2.3700e-003		2.3700e-003	2.3700e-003	0.2496	0.0139	0.2635	6.0000e-004	1.0000e-005	0.2818
Energy	1.9900e-003	0.0180	0.0145	1.1000e-004		1.3700e-003	1.3700e-003		1.3700e-003	1.3700e-003	0.0000	74.4184	74.4184	6.0200e-003	1.5300e-003	75.0244
Mobile	0.1047	0.7830	1.3029	5.5300e-003	0.4013	4.8700e-003	0.4061	0.1080	4.5800e-003	0.1126	0.0000	509.9799	509.9799	0.0230	0.0000	510.5552
Waste						0.0000	0.0000		0.0000	0.0000	18.5026	0.0000	18.5026	1.0935	0.0000	45.8395
Water						0.0000	0.0000		0.0000	0.0000	7.1048	15.4806	22.5854	0.7313	0.0176	46.1016
Total	**0.5666**	**0.8012**	**1.3417**	**5.6800e-003**	**0.4013**	**8.6100e-003**	**0.4099**	**0.1080**	**8.3200e-003**	**0.1163**	**25.8571**	**599.8928**	**625.7498**	**1.8544**	**0.0191**	**677.8026**

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	0.4599	2.9000e-004	0.0243	4.0000e-005		2.3700e-003	2.3700e-003		2.3700e-003	2.3700e-003	0.2496	0.0139	0.2635	6.0000e-004	1.0000e-005	0.2818
Energy	1.9900e-003	0.0180	0.0145	1.1000e-004		1.3700e-003	1.3700e-003		1.3700e-003	1.3700e-003	0.0000	66.2026	66.2026	5.1800e-003	1.3500e-003	66.7353
Mobile	0.1047	0.7830	1.3029	5.5300e-003	0.4013	4.8700e-003	0.4061	0.1080	4.5800e-003	0.1126	0.0000	509.9799	509.9799	0.0230	0.0000	510.5552
Waste						0.0000	0.0000		0.0000	0.0000	18.5026	0.0000	18.5026	1.0935	0.0000	45.8395
Water						0.0000	0.0000		0.0000	0.0000	7.1048	15.4806	22.5854	0.7313	0.0176	46.1016
Total	**0.5666**	**0.8012**	**1.3417**	**5.6800e-003**	**0.4013**	**8.6100e-003**	**0.4099**	**0.1080**	**8.3200e-003**	**0.1163**	**25.8571**	**591.6770**	**617.5341**	**1.8536**	**0.0189**	**669.5134**

	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**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**1.37**	**1.31**	**0.05**	**0.94**	**1.22**

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	5/1/2019	5/9/2019	5	7	
2	Grading	Grading	5/10/2019	6/28/2019	5	36	
3	Paving	Paving	7/1/2019	7/22/2019	5	16	
4	Building Construction	Building Construction	7/23/2019	11/26/2019	5	91	
5	Architectural Coating	Architectural Coating	8/6/2019	12/10/2019	5	91	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 5

Acres of Paving: 0.11

Residential Indoor: 2,268; Residential Outdoor: 756; Non-Residential Indoor: 144,837; Non-Residential Outdoor: 48,279; Striped Parking Area: 287 (Architectural Coating – sqft)

OffRoad Equipment

Lagoon Valley Self Storage - Yolo/Solano AQMD Air District, 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	1	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	2	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	1	8.00	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	15.00	9.00	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	8.00	0.00	814.00	15.00	9.00	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	6	43.00	17.00	0.00	15.00	9.00	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	15.00	9.00	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	9.00	0.00	0.00	15.00	9.00	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

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					0.0632	0.0000	0.0632	0.0348	0.0000	0.0348	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0152	0.1595	0.0772	1.3000e-004		8.3700e-003	8.3700e-003		7.7000e-003	7.7000e-003	0.0000	11.9590	11.9590	3.7800e-003	0.0000	12.0536
Total	**0.0152**	**0.1595**	**0.0772**	**1.3000e-004**	**0.0632**	**8.3700e-003**	**0.0716**	**0.0348**	**7.7000e-003**	**0.0425**	**0.0000**	**11.9590**	**11.9590**	**3.7800e-003**	**0.0000**	**12.0536**

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	3.2000e-004	2.4000e-004	2.3600e-003	1.0000e-005	0.0715	0.0000	0.0715	7.2500e-003	0.0000	7.2500e-003	0.0000	0.6479	0.6479	2.0000e-005	0.0000	0.6483
Total	**3.2000e-004**	**2.4000e-004**	**2.3600e-003**	**1.0000e-005**	**0.0715**	**0.0000**	**0.0715**	**7.2500e-003**	**0.0000**	**7.2500e-003**	**0.0000**	**0.6479**	**0.6479**	**2.0000e-005**	**0.0000**	**0.6483**

3.2 Site Preparation - 2019

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					0.0632	0.0000	0.0632	0.0348	0.0000	0.0348	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0152	0.1595	0.0772	1.3000e-004		8.3700e-003	8.3700e-003		7.7000e-003	7.7000e-003	0.0000	11.9590	11.9590	3.7800e-003	0.0000	12.0536
Total	**0.0152**	**0.1595**	**0.0772**	**1.3000e-004**	**0.0632**	**8.3700e-003**	**0.0716**	**0.0348**	**7.7000e-003**	**0.0425**	**0.0000**	**11.9590**	**11.9590**	**3.7800e-003**	**0.0000**	**12.0536**

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	3.2000e-004	2.4000e-004	2.3600e-003	1.0000e-005	6.6000e-004	0.0000	6.6000e-004	1.8000e-004	0.0000	1.8000e-004	0.0000	0.6479	0.6479	2.0000e-005	0.0000	0.6483
Total	**3.2000e-004**	**2.4000e-004**	**2.3600e-003**	**1.0000e-005**	**6.6000e-004**	**0.0000**	**6.6000e-004**	**1.8000e-004**	**0.0000**	**1.8000e-004**	**0.0000**	**0.6479**	**0.6479**	**2.0000e-005**	**0.0000**	**0.6483**

3.3 Grading - 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					0.1123	0.0000	0.1123	0.0601	0.0000	0.0601	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0381	0.4261	0.2104	4.2000e-004		0.0195	0.0195		0.0180	0.0180	0.0000	37.9122	37.9122	0.0120	0.0000	38.2121
Total	**0.0381**	**0.4261**	**0.2104**	**4.2000e-004**	**0.1123**	**0.0195**	**0.1318**	**0.0601**	**0.0180**	**0.0780**	**0.0000**	**37.9122**	**37.9122**	**0.0120**	**0.0000**	**38.2121**

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	3.5700e-003	0.1187	0.0191	3.4000e-004	0.6171	4.9000e-004	0.6176	0.0627	4.7000e-004	0.0632	0.0000	32.0131	32.0131	1.4100e-003	0.0000	32.0484
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	7.4000e-004	5.5000e-004	5.3900e-003	2.0000e-005	0.1635	1.0000e-005	0.1635	0.0166	1.0000e-005	0.0166	0.0000	1.4808	1.4808	4.0000e-005	0.0000	1.4818
Total	**4.3100e-003**	**0.1193**	**0.0245**	**3.6000e-004**	**0.7806**	**5.0000e-004**	**0.7811**	**0.0793**	**4.8000e-004**	**0.0798**	**0.0000**	**33.4940**	**33.4940**	**1.4500e-003**	**0.0000**	**33.5302**

3.3 Grading - 2019

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					0.1123	0.0000	0.1123	0.0601	0.0000	0.0601	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0381	0.4261	0.2104	4.2000e-004		0.0195	0.0195		0.0180	0.0180	0.0000	37.9121	37.9121	0.0120	0.0000	38.2120
Total	**0.0381**	**0.4261**	**0.2104**	**4.2000e-004**	**0.1123**	**0.0195**	**0.1318**	**0.0601**	**0.0180**	**0.0780**	**0.0000**	**37.9121**	**37.9121**	**0.0120**	**0.0000**	**38.2120**

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	3.5700e-003	0.1187	0.0191	3.4000e-004	6.6000e-003	4.9000e-004	7.0900e-003	1.8200e-003	4.7000e-004	2.2900e-003	0.0000	32.0131	32.0131	1.4100e-003	0.0000	32.0484
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	7.4000e-004	5.5000e-004	5.3900e-003	2.0000e-005	1.5100e-003	1.0000e-005	1.5200e-003	4.0000e-004	1.0000e-005	4.1000e-004	0.0000	1.4808	1.4808	4.0000e-005	0.0000	1.4818
Total	**4.3100e-003**	**0.1193**	**0.0245**	**3.6000e-004**	**8.1100e-003**	**5.0000e-004**	**8.6100e-003**	**2.2200e-003**	**4.8000e-004**	**2.7000e-003**	**0.0000**	**33.4940**	**33.4940**	**1.4500e-003**	**0.0000**	**33.5302**

3.4 Paving - 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					
Off-Road	0.0117	0.1227	0.1205	1.9000e-004		6.6700e-003	6.6700e-003		6.1300e-003	6.1300e-003	0.0000	16.7275	16.7275	5.2900e-003	0.0000	16.8598
Paving	1.4000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0118**	**0.1227**	**0.1205**	**1.9000e-004**		**6.6700e-003**	**6.6700e-003**		**6.1300e-003**	**6.1300e-003**	**0.0000**	**16.7275**	**16.7275**	**5.2900e-003**	**0.0000**	**16.8598**

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	6.2000e-004	4.6000e-004	4.4900e-003	1.0000e-005	0.1363	1.0000e-005	0.1363	0.0138	1.0000e-005	0.0138	0.0000	1.2340	1.2340	3.0000e-005	0.0000	1.2349
Total	**6.2000e-004**	**4.6000e-004**	**4.4900e-003**	**1.0000e-005**	**0.1363**	**1.0000e-005**	**0.1363**	**0.0138**	**1.0000e-005**	**0.0138**	**0.0000**	**1.2340**	**1.2340**	**3.0000e-005**	**0.0000**	**1.2349**

3.4 Paving - 2019

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	0.0117	0.1227	0.1205	1.9000e-004		6.6700e-003	6.6700e-003		6.1300e-003	6.1300e-003	0.0000	16.7275	16.7275	5.2900e-003	0.0000	16.8598
Paving	1.4000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0118**	**0.1227**	**0.1205**	**1.9000e-004**		**6.6700e-003**	**6.6700e-003**		**6.1300e-003**	**6.1300e-003**	**0.0000**	**16.7275**	**16.7275**	**5.2900e-003**	**0.0000**	**16.8598**

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	6.2000e-004	4.6000e-004	4.4900e-003	1.0000e-005	1.2600e-003	1.0000e-005	1.2600e-003	3.4000e-004	1.0000e-005	3.4000e-004	0.0000	1.2340	1.2340	3.0000e-005	0.0000	1.2349
Total	**6.2000e-004**	**4.6000e-004**	**4.4900e-003**	**1.0000e-005**	**1.2600e-003**	**1.0000e-005**	**1.2600e-003**	**3.4000e-004**	**1.0000e-005**	**3.4000e-004**	**0.0000**	**1.2340**	**1.2340**	**3.0000e-005**	**0.0000**	**1.2349**

3.5 Building Construction - 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					
Off-Road	0.0816	0.7080	0.5433	9.1000e-004		0.0412	0.0412		0.0391	0.0391	0.0000	78.5112	78.5112	0.0171	0.0000	78.9376
Total	**0.0816**	**0.7080**	**0.5433**	**9.1000e-004**		**0.0412**	**0.0412**		**0.0391**	**0.0391**	**0.0000**	**78.5112**	**78.5112**	**0.0171**	**0.0000**	**78.9376**

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	3.7900e-003	0.1065	0.0223	2.6000e-004	0.5281	7.0000e-004	0.5288	0.0539	6.7000e-004	0.0545	0.0000	25.1316	25.1316	1.4100e-003	0.0000	25.1667
Worker	0.0101	7.4400e-003	0.0732	2.2000e-004	2.2214	1.5000e-004	2.2215	0.2251	1.4000e-004	0.2252	0.0000	20.1198	20.1198	5.4000e-004	0.0000	20.1334
Total	**0.0138**	**0.1140**	**0.0955**	**4.8000e-004**	**2.7495**	**8.5000e-004**	**2.7503**	**0.2789**	**8.1000e-004**	**0.2797**	**0.0000**	**45.2514**	**45.2514**	**1.9500e-003**	**0.0000**	**45.3000**

3.5 Building Construction - 2019

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	0.0816	0.7080	0.5433	9.1000e-004		0.0412	0.0412		0.0391	0.0391	0.0000	78.5111	78.5111	0.0171	0.0000	78.9375
Total	**0.0816**	**0.7080**	**0.5433**	**9.1000e-004**		**0.0412**	**0.0412**		**0.0391**	**0.0391**	**0.0000**	**78.5111**	**78.5111**	**0.0171**	**0.0000**	**78.9375**

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	3.7900e-003	0.1065	0.0223	2.6000e-004	6.0100e-003	7.0000e-004	6.7100e-003	1.7500e-003	6.7000e-004	2.4200e-003	0.0000	25.1316	25.1316	1.4100e-003	0.0000	25.1667
Worker	0.0101	7.4400e-003	0.0732	2.2000e-004	0.0205	1.5000e-004	0.0206	5.4600e-003	1.4000e-004	5.6000e-003	0.0000	20.1198	20.1198	5.4000e-004	0.0000	20.1334
Total	**0.0138**	**0.1140**	**0.0955**	**4.8000e-004**	**0.0265**	**8.5000e-004**	**0.0273**	**7.2100e-003**	**8.1000e-004**	**8.0200e-003**	**0.0000**	**45.2514**	**45.2514**	**1.9500e-003**	**0.0000**	**45.3000**

3.6 Architectural Coating - 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					
Archit. Coating	0.6793					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0121	0.0835	0.0838	1.4000e-004		5.8600e-003	5.8600e-003		5.8600e-003	5.8600e-003	0.0000	11.6173	11.6173	9.8000e-004	0.0000	11.6418
Total	**0.6915**	**0.0835**	**0.0838**	**1.4000e-004**		**5.8600e-003**	**5.8600e-003**		**5.8600e-003**	**5.8600e-003**	**0.0000**	**11.6173**	**11.6173**	**9.8000e-004**	**0.0000**	**11.6418**

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	2.1000e-003	1.5600e-003	0.0153	5.0000e-005	0.4649	3.0000e-005	0.4650	0.0471	3.0000e-005	0.0471	0.0000	4.2111	4.2111	1.1000e-004	0.0000	4.2140
Total	**2.1000e-003**	**1.5600e-003**	**0.0153**	**5.0000e-005**	**0.4649**	**3.0000e-005**	**0.4650**	**0.0471**	**3.0000e-005**	**0.0471**	**0.0000**	**4.2111**	**4.2111**	**1.1000e-004**	**0.0000**	**4.2140**

3.6 Architectural Coating - 2019

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	0.6793					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0121	0.0835	0.0838	1.4000e-004		5.8600e-003	5.8600e-003		5.8600e-003	5.8600e-003	0.0000	11.6173	11.6173	9.8000e-004	0.0000	11.6418
Total	**0.6915**	**0.0835**	**0.0838**	**1.4000e-004**		**5.8600e-003**	**5.8600e-003**		**5.8600e-003**	**5.8600e-003**	**0.0000**	**11.6173**	**11.6173**	**9.8000e-004**	**0.0000**	**11.6418**

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	2.1000e-003	1.5600e-003	0.0153	5.0000e-005	4.2800e-003	3.0000e-005	4.3100e-003	1.1400e-003	3.0000e-005	1.1700e-003	0.0000	4.2111	4.2111	1.1000e-004	0.0000	4.2140
Total	**2.1000e-003**	**1.5600e-003**	**0.0153**	**5.0000e-005**	**4.2800e-003**	**3.0000e-005**	**4.3100e-003**	**1.1400e-003**	**3.0000e-005**	**1.1700e-003**	**0.0000**	**4.2111**	**4.2111**	**1.1000e-004**	**0.0000**	**4.2140**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	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	0.1047	0.7830	1.3029	5.5300e-003	0.4013	4.8700e-003	0.4061	0.1080	4.5800e-003	0.1126	0.0000	509.9799	509.9799	0.0230	0.0000	510.5552
Unmitigated	0.1047	0.7830	1.3029	5.5300e-003	0.4013	4.8700e-003	0.4061	0.1080	4.5800e-003	0.1126	0.0000	509.9799	509.9799	0.0230	0.0000	510.5552

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Parking Lot	0.00	0.00	0.00		
Refrigerated Warehouse-No Rail	31.60	31.60	31.60	134,538	134,538
Single Family Housing	9.52	9.91	8.62	35,504	35,504
Unrefrigerated Warehouse-No Rail	209.80	209.80	209.80	893,233	893,233
Total	250.92	251.31	250.02	1,063,275	1,063,275

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
Parking Lot	15.00	8.00	9.00	0.00	0.00	0.00	0	0	0
Refrigerated Warehouse-No Rail	15.00	8.00	9.00	59.00	0.00	41.00	92	5	3
Single Family Housing	15.00	8.00	9.00	46.00	13.00	41.00	86	11	3
Unrefrigerated Warehouse-No Rail	15.00	8.00	9.00	59.00	0.00	41.00	92	5	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Parking Lot	0.520277	0.038864	0.193543	0.118146	0.022917	0.005635	0.034518	0.053912	0.001336	0.002070	0.007104	0.000691	0.000987
Refrigerated Warehouse-No Rail	0.520277	0.038864	0.193543	0.118146	0.022917	0.005635	0.034518	0.053912	0.001336	0.002070	0.007104	0.000691	0.000987
Single Family Housing	0.520277	0.038864	0.193543	0.118146	0.022917	0.005635	0.034518	0.053912	0.001336	0.002070	0.007104	0.000691	0.000987
Unrefrigerated Warehouse-No Rail	0.520277	0.038864	0.193543	0.118146	0.022917	0.005635	0.034518	0.053912	0.001336	0.002070	0.007104	0.000691	0.000987

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Percent of Electricity Use Generated with Renewable 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	46.5559	46.5559	4.8000e-003	9.9000e-004	46.9718
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	54.7716	54.7716	5.6500e-003	1.1700e-003	55.2609
NaturalGas Mitigated	1.9900e-003	0.0180	0.0145	1.1000e-004		1.3700e-003	1.3700e-003		1.3700e-003	1.3700e-003	0.0000	19.6468	19.6468	3.8000e-004	3.6000e-004	19.7635
NaturalGas Unmitigated	1.9900e-003	0.0180	0.0145	1.1000e-004		1.3700e-003	1.3700e-003		1.3700e-003	1.3700e-003	0.0000	19.6468	19.6468	3.8000e-004	3.6000e-004	19.7635

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					
Parking Lot	0	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
Refrigerated Warehouse-No Rail	47909.4	2.6000e-004	2.3500e-003	1.9700e-003	1.0000e-005		1.8000e-004	1.8000e-004		1.8000e-004	1.8000e-004	0.0000	2.5566	2.5566	5.0000e-005	5.0000e-005	2.5718
Single Family Housing	29065.1	1.6000e-004	1.3400e-003	5.7000e-004	1.0000e-005		1.1000e-004	1.1000e-004		1.1000e-004	1.1000e-004	0.0000	1.5510	1.5510	3.0000e-005	3.0000e-005	1.5602
Unrefrigerated Warehouse-No Rail	291192	1.5700e-003	0.0143	0.0120	9.0000e-005		1.0800e-003	1.0800e-003		1.0800e-003	1.0800e-003	0.0000	15.5391	15.5391	3.0000e-004	2.8000e-004	15.6315
Total		**1.9900e-003**	**0.0180**	**0.0145**	**1.1000e-004**		**1.3700e-003**	**1.3700e-003**		**1.3700e-003**	**1.3700e-003**	**0.0000**	**19.6468**	**19.6468**	**3.8000e-004**	**3.6000e-004**	**19.7635**

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					
Parking Lot	0	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
Refrigerated Warehouse-No Rail	47909.4	2.6000e-004	2.3500e-003	1.9700e-003	1.0000e-005		1.8000e-004	1.8000e-004		1.8000e-004	1.8000e-004	0.0000	2.5566	2.5566	5.0000e-005	5.0000e-005	2.5718
Single Family Housing	29065.1	1.6000e-004	1.3400e-003	5.7000e-004	1.0000e-005		1.1000e-004	1.1000e-004		1.1000e-004	1.1000e-004	0.0000	1.5510	1.5510	3.0000e-005	3.0000e-005	1.5602
Unrefrigerated Warehouse-No Rail	291192	1.5700e-003	0.0143	0.0120	9.0000e-005		1.0800e-003	1.0800e-003		1.0800e-003	1.0800e-003	0.0000	15.5391	15.5391	3.0000e-004	2.8000e-004	15.6315
Total		**1.9900e-003**	**0.0180**	**0.0145**	**1.1000e-004**		**1.3700e-003**	**1.3700e-003**		**1.3700e-003**	**1.3700e-003**	**0.0000**	**19.6468**	**19.6468**	**3.8000e-004**	**3.6000e-004**	**19.7635**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Parking Lot	1677.06	0.2140	2.0000e-005	0.0000	0.2159
Refrigerated Warehouse-No Rail	123250	15.7267	1.6200e-003	3.4000e-004	15.8672
Single Family Housing	8090.57	1.0324	1.1000e-004	2.0000e-005	1.0416
Unrefrigerated Warehouse-No Rail	296227	37.7986	3.9000e-003	8.1000e-004	38.1363
Total		**54.7716**	**5.6500e-003**	**1.1700e-003**	**55.2609**

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Parking Lot	1425.5	0.1819	2.0000e-005	0.0000	0.1835
Refrigerated Warehouse-No Rail	104762	13.3677	1.3800e-003	2.9000e-004	13.4871
Single Family Housing	6876.98	0.8775	9.0000e-005	2.0000e-005	0.8853
Unrefrigerated Warehouse-No Rail	251793	32.1288	3.3100e-003	6.9000e-004	32.4158
Total		**46.5559**	**4.8000e-003**	**1.0000e-003**	**46.9718**

6.0 Area Detail

6.1 Mitigation Measures Area

	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	0.4599	2.9000e-004	0.0243	4.0000e-005		2.3700e-003	2.3700e-003		2.3700e-003	2.3700e-003	0.2496	0.0139	0.2635	6.0000e-004	1.0000e-005	0.2818
Unmitigated	0.4599	2.9000e-004	0.0243	4.0000e-005		2.3700e-003	2.3700e-003		2.3700e-003	2.3700e-003	0.2496	0.0139	0.2635	6.0000e-004	1.0000e-005	0.2818

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	0.0679					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.3818					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	9.8600e-003	2.0000e-004	0.0159	3.0000e-005		2.3300e-003	2.3300e-003		2.3300e-003	2.3300e-003	0.2496	0.0000	0.2496	5.9000e-004	1.0000e-005	0.2676
Landscaping	3.1000e-004	9.0000e-005	8.3300e-003	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005	0.0000	0.0139	0.0139	2.0000e-005	0.0000	0.0143
Total	**0.4599**	**2.9000e-004**	**0.0243**	**3.0000e-005**		**2.3700e-003**	**2.3700e-003**		**2.3700e-003**	**2.3700e-003**	**0.2496**	**0.0139**	**0.2635**	**6.1000e-004**	**1.0000e-005**	**0.2818**

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	0.0679					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.3818					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	9.8600e-003	2.0000e-004	0.0159	3.0000e-005		2.3300e-003	2.3300e-003		2.3300e-003	2.3300e-003	0.2496	0.0000	0.2496	5.9000e-004	1.0000e-005	0.2676
Landscaping	3.1000e-004	9.0000e-005	8.3300e-003	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005	0.0000	0.0139	0.0139	2.0000e-005	0.0000	0.0143
Total	**0.4599**	**2.9000e-004**	**0.0243**	**3.0000e-005**		**2.3700e-003**	**2.3700e-003**		**2.3700e-003**	**2.3700e-003**	**0.2496**	**0.0139**	**0.2635**	**6.1000e-004**	**1.0000e-005**	**0.2818**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	22.5854	0.7313	0.0176	46.1016
Unmitigated	22.5854	0.7313	0.0176	46.1016

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Refrigerated Warehouse-No Rail	2.923 / 0	2.9455	0.0955	2.2900e-003	6.0149
Single Family Housing	0.065154 / 0.0410754	0.0840	2.1300e-003	5.0000e-005	0.1526
Unrefrigerated Warehouse-No Rail	19.4065 / 0	19.5559	0.6337	0.0152	39.9342
Total		**22.5854**	**0.7313**	**0.0176**	**46.1016**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Refrigerated Warehouse-No Rail	2.923 / 0	2.9455	0.0955	2.2900e-003	6.0149
Single Family Housing	0.065154 / 0.0410754	0.0840	2.1300e-003	5.0000e-005	0.1526
Unrefrigerated Warehouse-No Rail	19.4065 / 0	19.5559	0.6337	0.0152	39.9342
Total		**22.5854**	**0.7313**	**0.0176**	**46.1016**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	18.5026	1.0935	0.0000	45.8395
Unmitigated	18.5026	1.0935	0.0000	45.8395

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Refrigerated Warehouse-No Rail	11.88	2.4115	0.1425	0.0000	5.9745
Single Family Housing	0.39	0.0792	4.6800e-003	0.0000	0.1961
Unrefrigerated Warehouse-No Rail	78.88	16.0119	0.9463	0.0000	39.6689
Total		**18.5026**	**1.0935**	**0.0000**	**45.8395**

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Refrigerated Warehouse-No Rail	11.88	2.4115	0.1425	0.0000	5.9745
Single Family Housing	0.39	0.0792	4.6800e-003	0.0000	0.1961
Unrefrigerated Warehouse-No Rail	78.88	16.0119	0.9463	0.0000	39.6689
Total		**18.5026**	**1.0935**	**0.0000**	**45.8395**

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 C

PRELIMINARY ONSITE SEWAGE DISPOSAL DESIGN RECOMMENDATIONS

PRELIMINARY ONSITE SEWAGE DISPOSAL DESIGN RECOMMENDATIONS

LAGOON VALLEY STORAGE

Based on our review of the preliminary soils/percolation testing, as well as our engineering analysis, the subject property can accommodate a sewage disposal system and replacement area. The recommended disposal system type is the Presby Advanced Enviro-Septic (AES) Wastewater Treatment System. System design calculations for the proposed system are summarized in Table 1 below.

Table 1 – Preliminary System Design Calculations	
Daily design flow: *(Office plus public restroom)*	100 GPD
Percolation rate:	53 mpi
Conventional soil application rate:	0.40 GPD/ft^2
Minimum System Sand bed area: *(100 GPD ÷ 0.40 GPD/ft^2)*	250 ft^2
Maximum allowable system slope/site slope: *(Table A, Presby Design Manual)*	15%/20%
Minimum lineal footage of AES pipe: *(100 GPD ÷ 3 GPD/ft)*	33 ft
Minimum number of serial sections required: *(100 GPD ÷ 750 GPD)*	1
Total number of rows:	1
Row length: *(33 ft ÷ 1)*	40 ft
Row spacing:	1.5 ft
Pipe layout width (PLW): (Table C, Presby Design Manual)	0 ft
System sand bed width (SSBW): *[250 ft^2 ÷ (40 ft + 1 ft)]*	6.5 ft
System sand extension (place entirely on downslope side):	4.5 ft

As illustrated by these system design calculations and the included utility concept plan, the recommended Presby System will consist of one row of 40 foot long AES pipe installed within a bed of "System Sand". System Sand is sand that must adhere to the particular requirements of the Presby System. Each row of AES pipe is proposed to be spaced 1.5 feet apart measured center to center. The Presby System will receive sewage (effluent) via pumped flow.

The System Sand disposal field will be 41 feet long by 6.5 feet wide. This includes a minimum of six inches of System Sand placed horizontally around the perimeter of the row as well as a 4.5 foot wide System Sand extension located on the downslope side of the bed.

The required 200 percent replacement area will need to be a minimum size of 500 square feet. This is based on a soil application rate 0.40 gpd/ft^2 and design flow rate of 100 gpd.

APPENDIX D

ARBORIST REPORT

Kurt Stegen Consulting Arborist

Certified Arborist WE-6356A, State Lic. 494115
Office (916) 652-3840 Cell (916) 709-3840
6299 Horseshoe Bar Rd Loomis CA 95650
kurtstegen@sbcglobal.net

Date: August 20, 2018

Location: Lagoon Valley Storage

Vacaville, California

APN: 127-04-0140

Customer: PRAXIS PROPERTIES LLC

5701 Lonetree Blvd Ste. 102

Rocklin, CA 95765

(916) 257-9377

ASSIGNMENT: Kurt Stegen is to do the following:

- Evaluate thirty four trees on a commercial lot in the City of Roseville, California and write an arborist report to satisfy the city requirements.
- Number, tag and update site map with tree numbers.
- The report will also include evaluations of the health of listed trees along with arborists' recommendations.

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SUMMARY:

A storage complex is proposed for a commercial lot in Vacaville California. There are a total of 34 trees on the parcel. There are 23 trees that will have to be removed. Trees #1, #2, #3, #4, #5, #6, #8, #10, #11, #12, #13, #14, #18, #24, #25, #26, #27, #28, #29, #31, #32, #33 and #34 are in the footprint of the construction and will need to be removed and mitigated. Tree #1 is dead and should not be included in the mitigation. The tree is hazardous; people and property should be kept away. Trees #7, #9, #15, #16, #17, #19, #20, #21, #22 and #23 will be retained. Intrusion into to the dripline of the trees should not exceed 20 percent. Fencing is recommended to protect the trees during construction.

THIS REPORT IS LIMITED BY:

• Most of the inspection was done from the ground. As a result, not all tree defects may be visible from the ground.

• Visual Tree Assessment (VTA) did not include diagnostic testing.

METHOD:

Visual Tree Assessment was used to inspect trees. Species, diameter, and condition were recorded. The diameter at standard height (DSH, rounded to the inch) was taken using a Spencer Diameter Tape. Tree species, diameter, identification number and condition were recorded in a data dictionary and transferred to the "Tree Evaluation Form."

OBSERVATIONS:

The lot is located in Vacaville, California. The lot consists of mostly native oaks with a few non-native trees. It is a six acre parcel that is mostly level. The lot is bordered by Pottery Paradise a retail business. There are two trees that are on the property line. The south boundary is Interstate 80 and there are trees near the property line. The west boundary line is New Life

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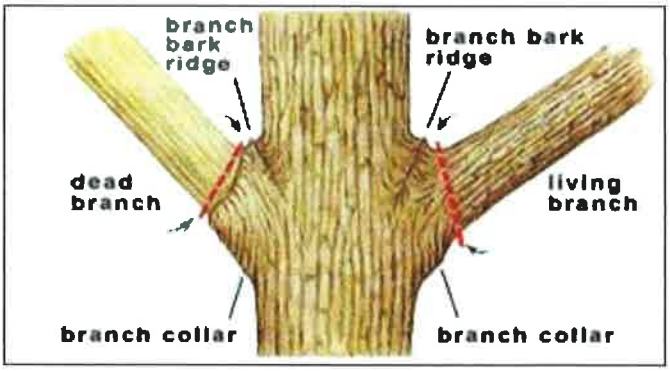
Church. It also shares the ownership of some trees. One tree along Cherry Glen Road is completely dead.

DISCUSSION:

The commercial lot is located in Vacaville, California. The lot consists of mostly native oaks with a few non-native trees. It is a six acre parcel that is mostly level. The lot is bordered by Pottery Paradise a retail business. There are two trees that are on the property line that will be retained. The owner of Pottery Paradise expressed interest in removing the trees. The south boundary is Interstate 80 and there are trees on both sides of the freeway fencing. The west boundary line is New Life Church. It also shares the ownership of some trees. Permission should be granted from the owners of the trees in writing before any work commences on the trees. The City of Vacaville requires a Tree Removal Permit that must be submitted and approve by the city before any work is done. One tree along Cherry Glen Road is completely dead. There is the possibility that the tree will drop limbs. Caution should be taken that property and people should be kept away from the tree until it is removed. Ground squirrels have excavated the trunks of several trees. In extreme cases this could destabilize the tree.

Trimming limbs that will be interfering with the project should be kept to a minimum. Flush cutting and removing the branch collar will prevent healing and may result in the formation of cavities. When removing any limbs, leave a small stub to retain the branch collar. (See diagram below)



Preventing physical damage to the tree is vital. Damaging the tree's vascular system will cause the tree to go into decline and eventually die. It is recommended that there is no more than 20% encroachment into the dripline. Damage to the trunk of the tree can lead to the tree's decline. Striking the tree with equipment and damaging the bark will leave open wounds that can lead to infection, decay and the tree's decline.

Protecting the soil under the tree's drip line is important. Compaction of the soil can damage the root system. The roots are the support system for the tree and damaging them will compromise the stability of the tree. If a tree falls, it could cause personal harm and property damage.

Changing the grade by removing soil or adding soil can damage roots. Adding more than six inches of heavy soil can suffocate the root system. If roots are encountered during soil removal, cutting any roots measuring larger than an inch in diameter should be avoided. Severed roots should be trimmed in a manner leaving no ragged edges or tears. Normally, this can be accomplished by using pruning shears or handsaws. If excavations are made and trenches are left open with tree roots exposed, wet burlap tarps should cover the exposed roots until the soil is replace. Covering the roots will help prevent further root damage. The root system is the support system for the tree and removing large roots can create stability problems for the tree that may become a hazard to public safety. Fencing the "Tree Protection Zone" is important to protect the roots from soil compaction and damage.

Tree Protection Zone (TPZ), should be established prior to construction to protect the remaining trees from damage. It is calucated by the longest horizontal branch, also known as the dripline radius (DLR), measured from the center point of the tree to the furthest point of the dripline, plus one foot (1'), shall be used as the radius of a circle around a protected tree.

The (TPZ) shall be fenced prior to construction. The following is typical of regulations to protect the trees.

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F. Protective Fencing.

1. Type of Fencing. A minimum five-foot high chain link or substitute fence approved by the Manager shall be installed at the outermost edge of the protected zone of each protected tree or groups of protected trees. Exceptions to this policy may occur in cases where protected trees are located on slopes that will not be graded. However, approval must be obtained from the Planning Division to omit fences in any area of the project.

2. Fence Installation. The fences shall be installed in accordance with the approved fencing plan prior to the commencement of any grading operations or such other time as determined by the review body. The developer shall call the Planning Division for an inspection of the fencing prior to grading operations.

3. Signing. Signs shall be installed on the fence in four equidistant locations around each individual protected tree. The size of each sign must be a minimum of two feet by two feet and must contain the following language:

"WARNING, THIS FENCE SHALL NOT BE REMOVED OR RELOCATED WITHOUT WRITTEN AUTHORIZATION FROM THE ROSEVILLE PLANNING DIVISION."

Signs placed on fencing around a grove of protected trees shall be placed at approximately 50-foot intervals.

4. Fence Maintenance. Once approval has been obtained, the fences shall remain in place throughout the entire construction period and shall not be removed, relocated, taken down, or otherwise modified in whole or in part without prior written authorization from the Planning Division.

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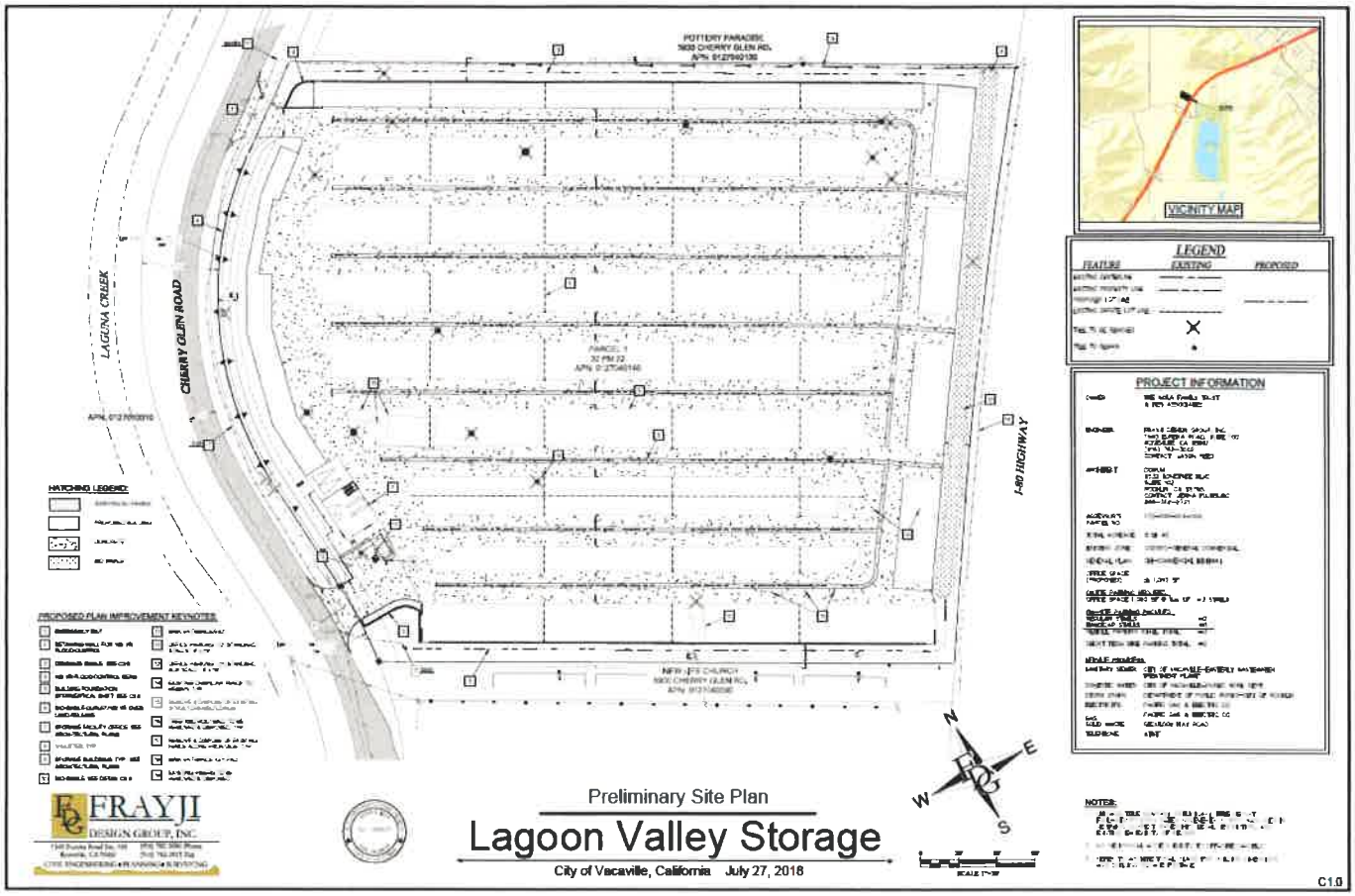
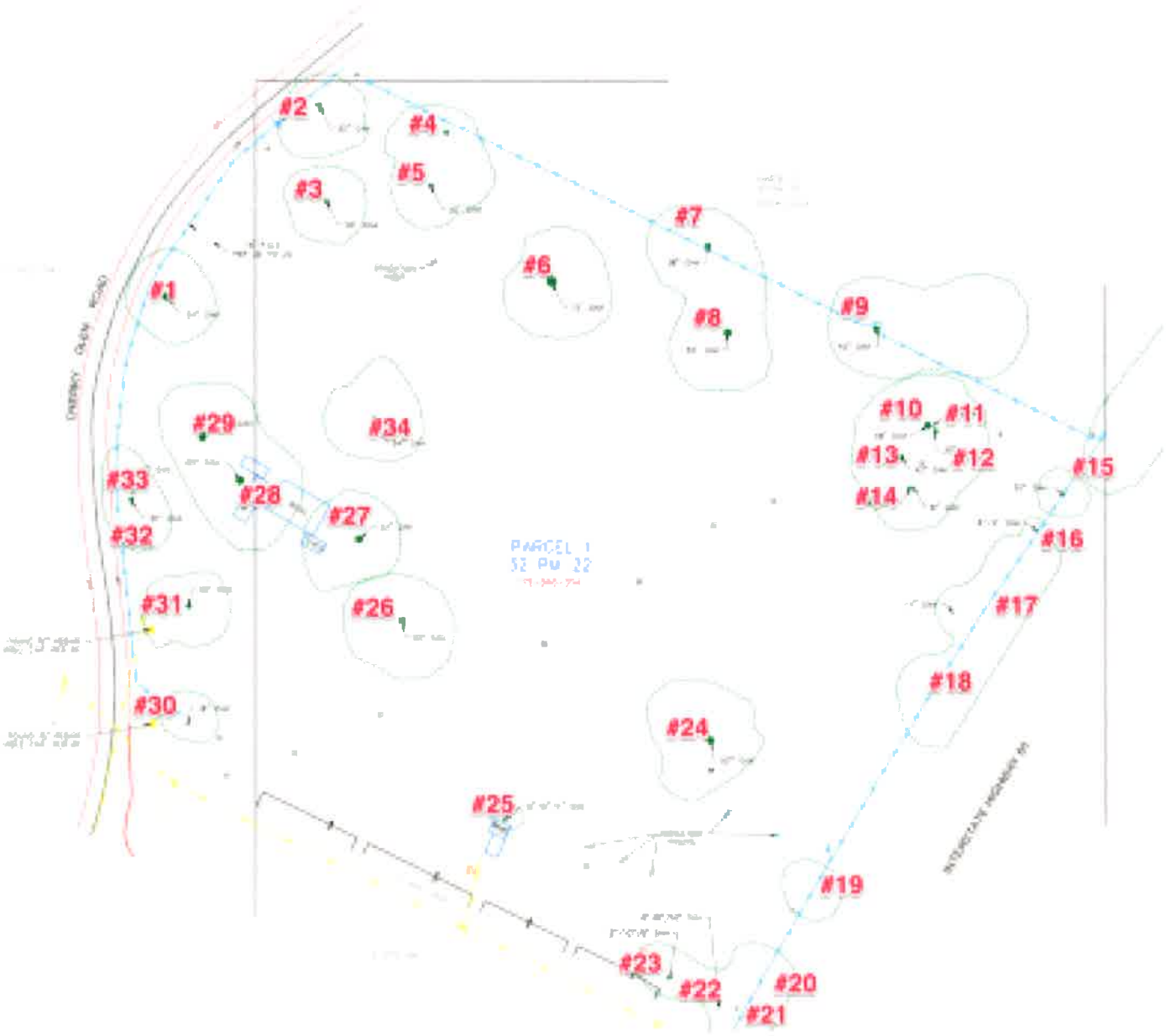
SITE PLAN:


LAGUNA CREEK
CHERRY GLEN ROAD
I-80 HIGHWAY
VICINITY MAP
LEGEND
PROJECT INFORMATION
HATCHING LEGEND:
PROPOSED PLAN IMPROVEMENT KEYNOTES
FRAYJI
DESIGN GROUP, INC.
Preliminary Site Plan
Lagoon Valley Storage
City of Vacaville, California July 27, 2018
NOTES:
C1.0

SITE MAP:



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PHOTOS:

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Looking South Towards Freeway

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EVALUATION FORM:

	Tree Number	Botanical Name	Common Name	West 121	North 38	DBH Inches	Drip Line	Height	Number of Trunks	Rating Health	Defects Trunk	Defect Scaffolds	Defects Branches	Comments
Remove	1	Quercus lobata	Valley Oak			54			1	Dead				Remove Hazardous
Remove	2	Quercus lobata	Valley Oak			30/32	44		2	Fair-	Included Bark		Previous Failure	Over Road
Remove	3	Quercus lobata	Valley Oak			34	36		1	Poor/Fair	Excavated Squirrel	Dead	Die Back	In Decline
Remove	4	Quercus lobata	Valley Oak			32/22	46		2	Fair-	Included Bark	Dead Wood	Previous Failure	Thinning Canopy
Remove	5	Quercus lobata	Valley Oak			31	40		1	Fair-			Dead Wood	Thinning Canopy
Remove	6	Quercus lobata	Valley Oak			58	54		1	Fair	Excavated Squirrel		Dead Wood	
	7	Quercus lobata	Valley Oak			37	38		1	Fair			Dead Wood	On Neighboring Property
Remove	8	Quercus lobata	Valley Oak			49	46		1	Fair	Excavated Squirrel		Dead Wood	
	9	Quercus lobata	Valley Oak			41	37		1	Fair			Dead Wood	On Property Line
Remove	10	Quercus lobata	Valley Oak			38	51		1	Fair	Included Bark		Dead Wood	
Remove	11	Quercus wislizenii	Live Oak			7	12		1	Fair				Understory
Remove	12	Quercus lobata	Valley Oak			33	48		1	Fair			Dead Wood	
Remove	13	Quercus lobata	Valley Oak			35	37		1	Fair				
Remove	14	Quercus lobata	Valley Oak			29	36		1	Fair-		Lean	Dead Wood	Understory
	15	Quercus lobata	Valley Oak			20	18		1	Fair-	Barb Wire		Dead Wood	
	16	Quercus lobata	Valley Oak			7/4	8		2	Fair		Crossed		

EVALUATION FORM:

	Tree Number	Botanical Name	Common Name	West 121	North 38	DBH Inches	Drip Line	Height	Number of Trunks	Rating Health	Defects Trunk	Defect Scaffolds	Defects Branches	Comments
	17	Quercus lobata	Valley Oak			16	21		1	Fair	Fencing		Dead Wood	
Remove	18	Quercus lobata	Valley Oak			11/11	30		2	Fair	Lean		Dead Wood	
	19	Quercus lobata	Valley Oak			30	25		1	Fair-	Included Bark		Dead Wood	Freeway Property
	20	Quercus lobata	Valley Oak			12/12/10/16	22		4	Fair-	Included Bark		Dead Wood	Freeway Property
	21	Quercus lobata	Valley Oak			22	20		1	Poor/Fair			Die Back	Freeway Property
	22	Quercus lobata	Valley Oak			9/10/12	24		3	Fair-	Included Bark		Die Back	
	23	Quercus lobata	Valley Oak			11/11/14	23		3	Fair-	Included Bark		Die Back	
Remove	24	Quercus lobata	Valley Oak			44	40		1	Fair			Dead Wood	
Remove	25	Juglans	Walnut			6/7/7	14		3	Good				
Remove	26	Quercus lobata	Valley Oak			42	42		1	Fair	Excavated Squirrel		Dead Wood	
Remove	27	Quercus lobata	Valley Oak			42	44		1	Fair-			Dead Wood	
Remove	28	Quercus lobata	Valley Oak			51	51		1	Fair			Dead Wood	
Remove	29	Quercus lobata	Valley Oak			41	44		1	Fair			Dead Wood	
	30	Quercus lobata	Valley Oak			19	24		1	Fair			Dead Wood	
Remove	31	Quercus lobata	Valley Oak			34	33		1	Fair				
Remove	32	Quercus lobata	Valley Oak			34	41		1	Fair	Wire in Trunk / Wound			
Remove	33	Quercus lobata	Valley Oak			12	16		1	Poor	Lean	Die Back		
Remove	34	Quercus lobata	Valley Oak			45	43		1	Fair				

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TREE REMOVAL PERMIT

(Please Print)

Property Owner/Applicant: _____

Address of Project Site: _____

E-MAIL address: _____ Phone: _____

Is applicant the owner of the property for which this permit is requested? ☐ Yes ☐ No
If NO, give name of Authorized Agent.

Name of Authorized Agent: _____ Phone: _____

Address: _____

Street address of property on which tree is located: _____

Tree species, size, and location of tree to be removed: _____

_____

_____

Reason for tree removal: _____

_____

_____

It is acknowledged that, if required as a condition of approval of this permit application, I will provide a replacement tree pursuant to Section 14.09.131.030.B(6) of the Vacaville Land Use and Development Code, within six (6) months of removal as per the planting requirements on the reverse side of this form.

_____ _____ _____

Applicant's Signature Mailing Address Date

_____

FOR PLANNING DIVISION USE ONLY

ACTION: ☐ Approved ☐ Denied ☐ Replant in 6 months

_____ Date: _____

PEYMAN BEHVAND, City Planner

ADDITIONAL CONDITIONS: _____

_____

_____

_____

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CERTIFICATION OF PERFORMANCE:

I, Kurt Stegen, Certify:

- That I have personally inspected the tree(s) and/or the property referred to in this report and have stated my findings accurately. The extent of the evaluation or appraisal is stated in the attached report and the Terms of Assignment;
- That I have no current or prospective interest in the vegetation or the property that is the subject of this report and have no personal interest or bias with respect to the parties involved;
- That the analysis, options and conclusions stated herein are my own and are based on current scientific procedures and facts;
- That my analysis, opinions and conclusions were developed and this report has been prepared according to commonly accepted arboricultural practices;
- That no one provided significant professional assistance to me, except as indicated within the report;
- That my compensation is not contingent upon the reporting of a predetermined conclusion that favors the cause of the client or any other party nor upon the results of the assessment, the attainment of stipulated results, or the occurrence of any subsequent events.

I further certify that I am a state licensed Tree Trimming Contractor (State License Number 494115), a Certified Arborist (ISA# WE-6356), and a member to the International Society of Arboriculture and American Society of Consulting Arborists. I have been involved in the field of Arboriculture in a full time capacity for a period of more than thirty years.

Signed: Kurt Stegen

Date: August 20, 2018

APPENDIX E

WETLANDS AND BIOLOGICAL RESOURCES ASSESSMENT

WETLANDS & BIOLOGICAL RESOURCES ASSESSMENT

Of the

Lagoon Valley Self Storage Project

at

~5900 Lincoln Hwy (Cherry Glen Rd)
APN 012-704-0140
Vacaville, CA 95688

Prepared For:

Lagoon Valley Self Storage LLC
5701 Lonetree Blvd. #102
Rocklin, CA 95765

June 12, 2018

Prepared By

BARNETT ENVIRONMENTAL

Environmental Consulting,
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Appendix B. California Natural Diversity Database Report
Appendix C. U.S. Fish & Wildlife Service's IPAC Report

1.0 Introduction

Barnett Environmental conducted a *Wetlands & Biological Resources Assessment* (WBRA) on an approximately six-acre property (Study Area; APNs 012-704-022, -014, & -009) at east of Cherry Glen Road and west of Interstate 80 in Vacaville, California on behalf of Lagoon Valley Self Storage LLC. The parcel is in the NE quadrant (Township 6 North, Range 1 West) of the Fairfield, California 7.5-minute USGS quadrangle map (Figure 1.) It sits at 219-230 feet above mean sea level (msl), at approximately 38° 20' 18" North latitude and 122° 01' 2" West longitude within the Lower Sacramento River Watershed (HUC 18020109) with commercial parcels to the north and south, agricultural land to the west, and Pena Adobe & Lagoon Valley Regional Parks to the east, across Interstate 80.

This report:

- Identifies and describes the vegetation communities present;
- Records all plant and animal species observed during the field survey(s);
- Evaluates and identifies sensitive habitats and special status plant and animal species that may occur in the Permit Area and could be affected by project activities; and
- Provides conclusions and recommendations for mitigating potential adverse impacts to identified resources.

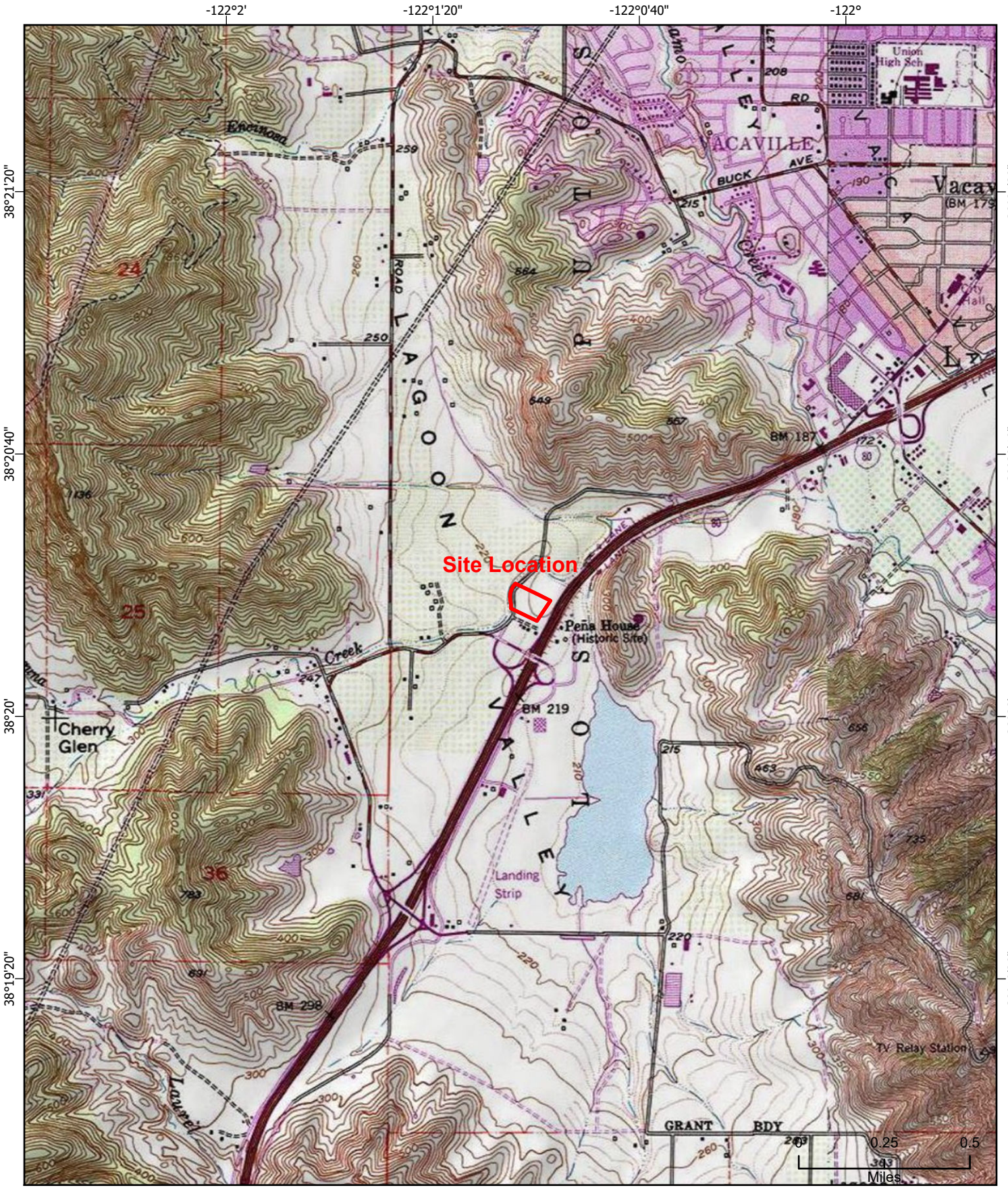
2.0 Regulatory Setting

The following federal and California state laws, regulations and/or policies provide the legal framework guiding the protection of wetland and biological resources.

2.1 Relevant Federal Laws & Regulations

Federal Endangered Species Act (FESA) – The FESA, enacted in 1973, prohibits the taking, possession, sale, or transport of endangered species. Under the FESA, the Secretary of the Interior and the Secretary of Commerce jointly have the authority to list a species as threatened or endangered. FESA is administered by both the National Marine Fisheries Service (NMFS) and the U.S. Fish & Wildlife Service (USFWS). NMFS is accountable for animals that are threatened or endangered (16 United States Code [USC] 1533[c]) and spend most of their lives in marine waters, including marine fish, most marine mammals, and anadromous fish such as Pacific salmon. The USFWS is accountable for all other federally-listed plants and animals.

Pursuant to the requirements of FESA, a federal agency reviewing a project within its jurisdiction must determine whether any federally listed threatened or endangered species could be present in the Permit Area and whether the project will have a potentially significant impact on such species. In addition, federal agencies are required to determine whether the project is likely to jeopardize the continued existence of any species proposed to be listed under FESA or result in the destruction or adverse modification of critical habitat proposed to be designated for such species (16 USC 1536[3], [4]).



Source: USGS 7.5-Minute Topographic Quadrangles for Elmira, CA and Fairfield North, CA

Scale 1:24,000 (original report)

FIGURE 1: VICINITY MAP

LAGOON VALLEY SELF STORAGE • SOLANO COUNTY, CALIFORNIA

May 29, 2018

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Projects that would result in a "take" of any federally-listed threatened or endangered species are required to obtain authorization from NMFS and/or USFWS through either Section 7 (interagency consultation) or section 10(a) (incidental take permit) of FESA, depending on whether the federal government is involved in permitting or funding the project. The Section 7 authorization process is used to determine if a project with a federal nexus would jeopardize the continued existence of a listed species and what mitigation measures would be required to avoid jeopardizing the species. The Section 10(a) process allows take of endangered species or their habitat in non-federal activities.

Migratory Bird Treaty Act – The Migratory Bird Treaty Act (MBTA) regulates or prohibits taking, killing, possession of, or harm to migratory bird species listed in Title 50 Code of Federal Regulations (CFR) Section 10.13. The MBTA is an international treaty for the conservation and management of bird species that migrate through more than one country, and is enforced in the United States by the USFWS. Hunting of specific migratory game birds is permitted under the regulations listed in Title 50 CFR 20. The MBTA was amended in 1972 to include protection for migratory birds of prey (raptors).

Bald and Golden Eagle Protection Act – The federal Bald and Golden Eagle Protection Act regulates or prohibits taking, possession, sale, purchase, barter, offer to sell, purchase or barter, transport, export or import, of any bald or golden eagle, alive or dead, including any part, nest, or egg, unless allowed by permit (16 U.S.C. 668(a); 50 CFR 22). "Take" includes pursue, shoot, shoot at, poison, wound, kill, capture, trap, collect, molest or disturb (16 U.S.C. 668c; 50 CFR 22.3).

Federal Clean Water Act (CWA)

Section 401 – The State Water Resources Control Board (SWRCB) has authority over wetlands and "other waters of the U.S." through Section 401 (Water Quality Certification of the CWA.

The CWA requires that an applicant for a Section 404 permit (to discharge dredged or fill material into waters of the United States) first obtain a certificate from the appropriate state agency stating that the fill is consistent with the State's water quality standards and criteria. In California, the authority to either grant certification or waive the requirement for permits is delegated by the SWRCB to the nine regional boards. The Central Valley Regional Water Quality Control Board (CVRWQCB) is the appointed authority for Section 401 compliance in the project site. A request for certification or waiver is submitted to the regional board at the same time an application is filed with the USACE. The regional board has 60 days to review the application and act on it. Because no USACE permit is valid under the CWA unless "certified" by the state, these boards may effectively veto or add conditions to any USACE permit.

Section 404 - Section 404 of the CWA identifies the U.S. Army Corps of Engineers (USACE) as the principal authority to regulate activity that could discharge fill or dredge material or otherwise adversely modify wetlands or Waters of the U.S. (WOUS). The USACE implements the federal policy embodied in Executive Order 11990, which, when implemented, is intended to result in no net loss of wetland values or function. U.S. Congress has authorized the Environmental Protection Agency (EPA) to have a specific oversight role over USACE's authority.

2.2 Relevant State Laws & Regulations

California Endangered Species Act (CESA) – The CESA was enacted in 1984. Under the CESA, the California Fish and Wildlife Commission (CFWC) has the responsibility for maintaining a list of threatened and endangered species, while The California Department of Fish & Wildlife (CDFW) is responsible for enforcement. CDFW also maintains lists of species of special concern. A Species of Special Concern (CSC) is a species, subspecies, or distinct population of an animal native to California that currently satisfies one or more of the following (not necessarily mutually exclusive) criteria:

- is extirpated from the State or, in the case of birds, in its primary seasonal or breeding role;
- is listed as Federally-, but not State-, threatened or endangered;
- meets the State definition of threatened or endangered but has not formally been listed;
- is experiencing, or formerly experienced, serious (noncyclical) population declines or range retractions (not reversed) that, if continued or resumed, could qualify it for State threatened or endangered status;
- has naturally small populations exhibiting high susceptibility to risk from any factor(s), that if realized, could lead to declines that would qualify it for State threatened or endangered status.

CESA prohibits the take of California listed animals and plants in most cases, but CDFW may issue incidental take permits under special conditions. Pursuant to the requirements of CESA, a State agency reviewing a project within its jurisdiction must determine whether any state-listed endangered or threatened species could be present in the project site and determine whether the project would have a potentially significant impact on such species. In addition, CDFW encourages consultation on any project that could affect a listed or candidate species.

CA Fish and Game Code

Sections 1600-1616 – Under Sections 1600-1616 of the California Fish and Game Code, the CDFW regulates activities that would alter the flow, bed, channel, or bank of streams and lakes. The limits of CDFW's jurisdiction are defined in the code as the "… *bed, channel or bank of any river, stream, or lake designated by the department in which there is at any time an existing fish or wildlife resource or from which these resources derive benefit* ..." (Section 1601). In practice, the CDFW usually marks its jurisdictional limit at the top of the stream or bank, or at the outer edge of the riparian vegetation, whichever is wider.

The CDFW also derives its authority to oversee activities that affect wetlands from state legislation. This authority includes Sections 1600-1616 of the Fish and Game Code (lake and streambed alteration agreements), Section 30411 of the California Coastal Act (CDFW becomes the lead agency for the study and identification of degraded wetlands within the Coastal Zone), CESA (protection of state listed species and their habitats - which could include wetlands), and the Keene-Nejedly California Wetlands Preservation Act of 1976 (states a need for an affirmative and sustained public policy program directed at wetlands preservation, restoration,

and enhancement). In general, the CDFW asserts authority over wetlands within the state either through review and comment on USACE Section 404 permits, review and comment on CEQA documents, preservation of state listed species, or through stream and lakebed alteration agreements.

Sections 1900-1913 – These Sections embody the Native Plant Protection Act, which is intended to preserve, protect, and enhance endangered or rare native plants in the state. The act directs CDFW to establish criteria for determining what native plants are rare or endangered. Under Section 1901, a species is endangered when its prospects for survival and reproduction are in immediate jeopardy from one or more causes. A species is rare when, although not threatened with immediate extinction, it is in such small numbers throughout its range that it may become endangered if its present environment worsens. Under the act, CDFW may adopt regulations governing the taking, possessing, propagation or sale of any endangered or rare native plant.

Section 1913 of that Act allows landowners in conducting certain activities to take actions that will destroy rare or endangered plants, provided that, where the Department of Fish and Game (DFG) has previously notified the owner "that a rare or endangered plants is growing" on his or her land, the owner notifies CDFW "at least 10 days in advance of hanging the land" to allow the state agency to come and "salvage" the plants. Subject to this requirement, section 1913 states that "the presence of rare or endangered plants" on a property shall not restrict (1) timber operations conducted pursuant to an approved timber harvest plan, (2) "required mining assessment work pursuant to federal or state mining laws," (3) "the removal of endangered or rare native plants from a canal, lateral ditch, building site, or road, other right-of-way by the owner of the land or his agent," or (4) "the performance by a public agency or publicly or privately owned public utility of its obligation to provide service to the public."

Sections 3503, 3503.5, 3513 – Fish and Game Code Section 3503 states that it is unlawful to take, possess, or needlessly destroy the nests or eggs of any bird, except as otherwise provided by this code or any regulation made pursuant thereto. Fish and Game Code Section 3503.5 protects all birds-of-prey (raptors) and their eggs and nests. Section 3513 states that it is unlawful to take or possess any migratory non-game bird as designated in the Migratory Bird Treaty Act.

Sections 3511, 4700, 5050, and 5515 – Sections 3511 (birds), 4700 (mammals), 5050 (reptiles and amphibians), and 5515 (fish) of the California Fish and Game Code designate certain species as "fully protected." Fully protected species, or parts thereof, may not be taken or possessed at any time, and no provision of the CFWC or any other law may be construed to authorize the issuance of permits of licenses to take any fully protected species. No such permits or licenses heretofore issued may have any force or effect for any such purpose, except that the CFGC may authorize the collecting of such species for necessary scientific research. Legally imported and fully protected species or parts thereof may be possessed under a permit issued by CDFW.

Porter-Cologne Water Quality Control Act – The Porter-Cologne Water Quality Control Act established the SWRCB and each Regional Water Quality Control Board (RWQCB) as the principal state agencies for coordinating and controlling water quality in California. Responsibility for the protection of water quality in California rests with the SWRCB and nine RWQCBs. The SWRCB establishes statewide policies and regulations for the implementation of

water quality control programs mandated by federal and state water quality statutes and regulations. Pursuant to the Act, each of California's nine regional boards must prepare and periodically update basin plans that set forth water quality standards for surface and groundwater, as well as actions to control point and non-point sources of pollution to achieve and maintain these standards. Basin plans offer an opportunity to achieve wetlands protection through enforcement of water quality standards.

The Porter-Cologne Water Quality Control Act provides that "All discharges of waste into the waters of the State are privileges, not rights." Waters of the State are defined in Section 13050(e) of the Porter-Cologne Water Quality Control Act as "…any surface water or groundwater, including saline waters, within the boundaries of the state." All dischargers are subject to regulation under the Porter-Cologne Water Quality Control Act, including both point and nonpoint source dischargers. The RWQCB has the authority to implement water quality protection standards through the issuance of permits for discharges to waters at locations within its jurisdiction, which would include the project site. As noted above, the RWQCB is the appointed authority for Section 401 compliance in the project site. If the USACE determines that they have no regulatory authority on the project site and they also determine that a CWA Section 404 permit is not required, the project proponent could still be responsible for obtaining the appropriate CWA Section 401 permit or waiver from RWQCB for impacts to Waters of the State.

California Oak Woodlands Conservation Act of 2001 – acknowledges the importance of private land stewardship to the conservation of the state's valued oak woodlands. The Act establishes the California Oak Woodlands Conservation Program, which aims to conserve oak woodlands existing in the state's working landscapes by providing education and incentives to private landowners. The program provides technical and financial incentives to private landowners to protect and promote biologically functional oak woodlands.

California Environmental Quality Act – Although specific federal and state statutes protect threatened and endangered species, California Environmental Quality Act (CEQA) Guidelines Section 15380(b) provides that a species not listed on the federal or state list of protected species may be considered rare or endangered if the species can be shown to meet certain criteria. These criteria have been modeled after the definition in FESA and the section of the California Fish and Game Code dealing with rare or endangered plants and animals, and allows a public agency to undertake a review to determine if a significant effect on a species that has not yet been listed by either the USFWS or CDFW (i.e., species of concern) would occur. Whether a species is rare, threatened, or endangered can be legally significant because, under CEQA Guidelines Section 15065, an agency must find an impact to be significant if a project would "substantially reduce the number or restrict the range of an endangered, rare, or threatened species." Thus, CEQA provides an agency with the ability to protect a species from a project's potential impacts until the respective government agencies have an opportunity to designate the species as protected, if warranted.

2.3 Relevant Local Laws & Regulations

Solano Multi-Species Habitat Conservation Plan – The US Bureau of Reclamation is responsible for water management and constructed many of the dams, power plants, and canals in the western United States. The Solano County Water Agency (SCWA) is a whole water agency providing untreated water throughout Solano County. The US Bureau of Reclamation, together with the SCWA and its eight member agency contracts with the Cities of Vacaville, Fairfield, Suisun City, and Vallejo, the Solano Irrigation District, the Maine Prairie Water District, the University of California, Davis, and the California Medical Facility/California State Prison, Vacaville, have agreed to implement conservation measures to ensure the protection of threatened and endangered species and their habitat within the SCWA contract service area.9 Full implementation of the conservation measures outlined in the Solano Project Water Service Contract Renewal Biological Opinion is key to the survival and recovery of listed species. As such, SCWA and the member agencies are developing the Solano Multi-Species Habitat Conservation Plan (HCP) for the Solano Project contract service area. The HCP is intended to support the issuance of a Section 10(a)1(B) "incidental take permit" under the Endangered Species Act for activities associated with future water use in the Solano Project contract service area. The HCP participants also intend to secure incidental take authorization from CDFG for State-listed species. Once the applicable State and federal incidental take permits are issued, the HCP participants will assume primary responsibility for extending incidental take coverage for their own activities, extending coverage to third parties over which the HCP participants have direct regulatory control (e.g. through issuance of grading permits, occupancy permits, and use permits), and ensuring compliance with required avoidance, minimization, and mitigation measures. The HCP effectively shifts endangered species regulations compliance from a federal and State level to the local level under the authority of a well-regulated, regional plan.

The Solano HCP proposes to secure incidental take authorization for 37 species present within the county. The scope of the HCP includes take coverage for federally listed fish species under the jurisdiction of NMFS and species listed as threatened or endangered under the California Endangered Species Act. The HCP further addresses other species of concern, that is, species recognized by groups such as CDFG and the California Native Plant Society (CNPS) as having declining or vulnerable populations, but not officially listed as threatened or endangered species.

An additional 35 species are addressed in the HCP's Conservation Strategy as "Special Management Species." Special Management Species include species that were initially considered for inclusion in the HCP as Covered Species and are considered under CEQA Section 15380 to be threatened or endangered. However, the life history and/or habitat associations for such species may not be fully known. While these species will benefit from the broader community conservation provided for other Covered Species, sufficient information on their biology and management is not available to allow the federal agencies to make the necessary findings under the "No Surprises" assurances that the proposed Conservation Program and Covered Activities will not appreciably reduce the likelihood of survival and recovery of the species in the wild.

Vacaville Land Use and Development Code – Section 14.09.131 of the Vacaville Land Use and Development Code sets forth criteria for the preservation of native species, healthy trees, large specimens, and visually prominent trees. Impacts to any tree greater than 31 inches in circumference at 4.5 feet above the ground surface requires a City permit.

Section 14.12.174.050 of the Vacaville Land Use and Development Code sets forth criteria for the designation of development setbacks for creeks, with a minimum setback standard of 40 feet from the top of the stable bank, as determined by the City Engineer.

Section 14.09.098 of the Vacaville Land Use and Development Code establishes the permitted and conditional uses allowed in the Agricultural Hillside (AH) district, and establishes development standards for uses in this district. The AH district provides for low intensity agricultural uses on privately held hillside lands. Lands within this designation are generally areas of steep slope, lacking the necessary public infrastructure to support urban development. Development is limited to one dwelling unit per 20 acres and other accessory uses associated with agriculture.

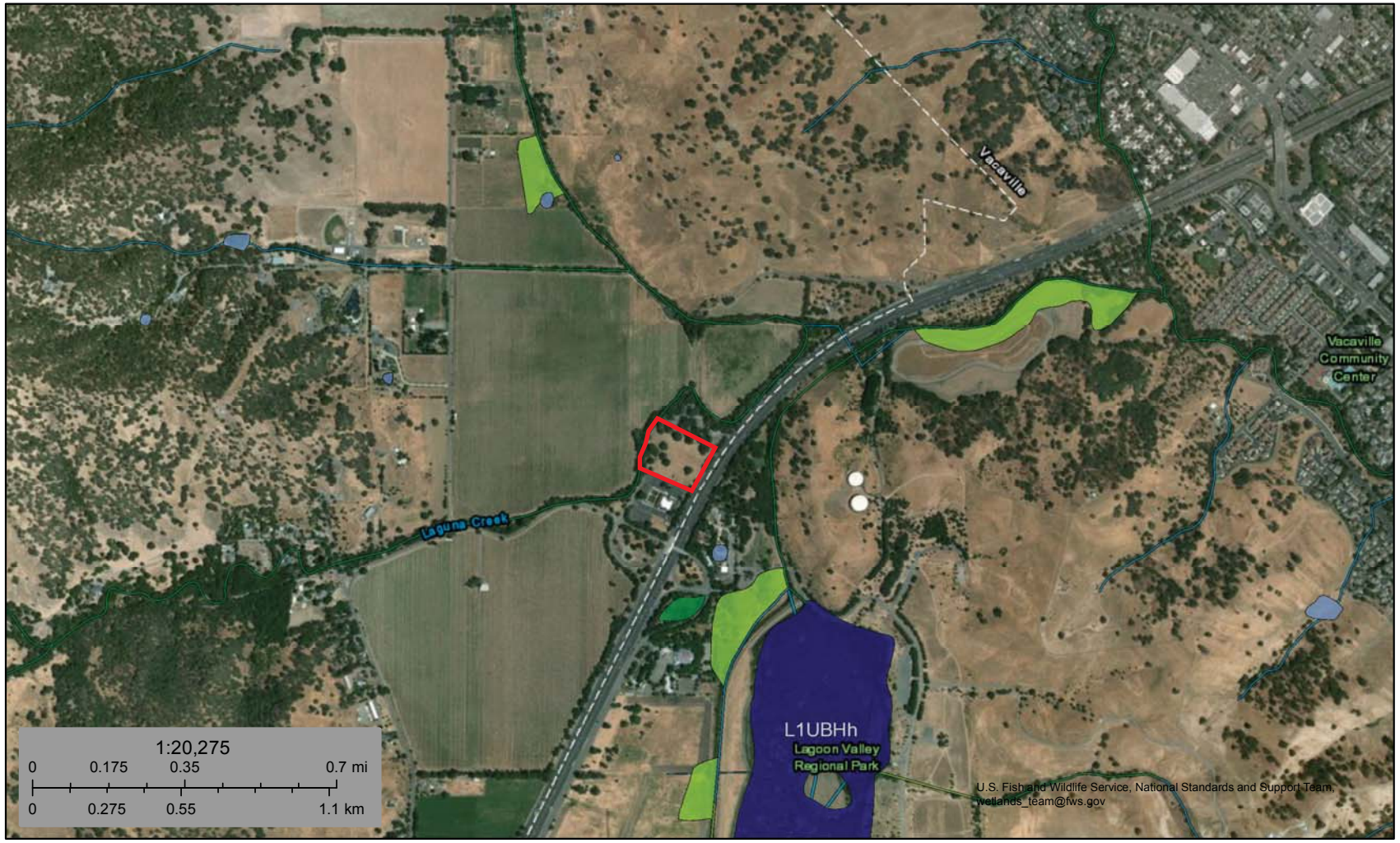
Section 14.09.101 of the Vacaville Land Use and Development Code establishes development standards for the Open Space (OS) district. The purpose of the OS district is to provide for the preservation of public open space lands such as hillsides, ridgelines, and scenic areas. The OS district also includes areas with limited development potential due to physical characteristics of the land or lack of access. The purposes of the OS chapter are to: promote the preservation of public open space lands in order to protect natural resources, wildlife habitat, ridgelines, and areas of scenic beauty and cultural significance; provide for continued agricultural uses; provide for low intensity outdoor recreational uses in natural environments; protect the public health and safety by limiting the use of lands which are subject to fire, landslide, or seismic hazards; and implement the goals, objectives, and policies of the Land Use and Development Code and the General Plan.

3.0 Methodology

Prior to our field survey, we queried the U.S. Fish & Wildlife Service's *National Wetland Inventory* (NWI; Figure 2), EcoAtlas' *California Aquatic Resources Inventory* (CARI; Figure 3), and the NRCS *Web Soil Survey* (Appendix A; Figure 4) and *Hydric Soil Map Units for Solano County, California* to determine whether any wetlands or "other waters of the U.S.", "waters of the State", or soils compatible with wetland resources had been historically recorded on or around, or are likely to occur on the site, as defined by the 1987 U.S. Army Corps of Engineers (USACE) Wetlands Delineation Manual and its 2008 Arid West Regional Supplement. We also assessed potentially federal and/or state jurisdictional wetlands and other waters in the Study Area in accordance with the 2008 Arid West Region Regional Supplement and the 2014 Corps *Field Guide to the Identification of the Ordinary High Water Mark (OHWM) for Non-perennial Streams in the Arid West Region of the Western United States.*

U.S. Fish and Wildlife Service
National Wetlands Inventory

Wetlands



May 1, 2018

Wetlands

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
- Other
- Riverine

This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

National Wetlands Inventory (NWI)
This page was produced by the NWI mapper

FIGURE 2: NATIONAL WETLANDS INVENTORY MAP

Not to Specific Scale

N

Date: May 8, 2018

LAGOON VALLEY SELF STORAGE • SOLANO COUNTY, CALIFORNIA

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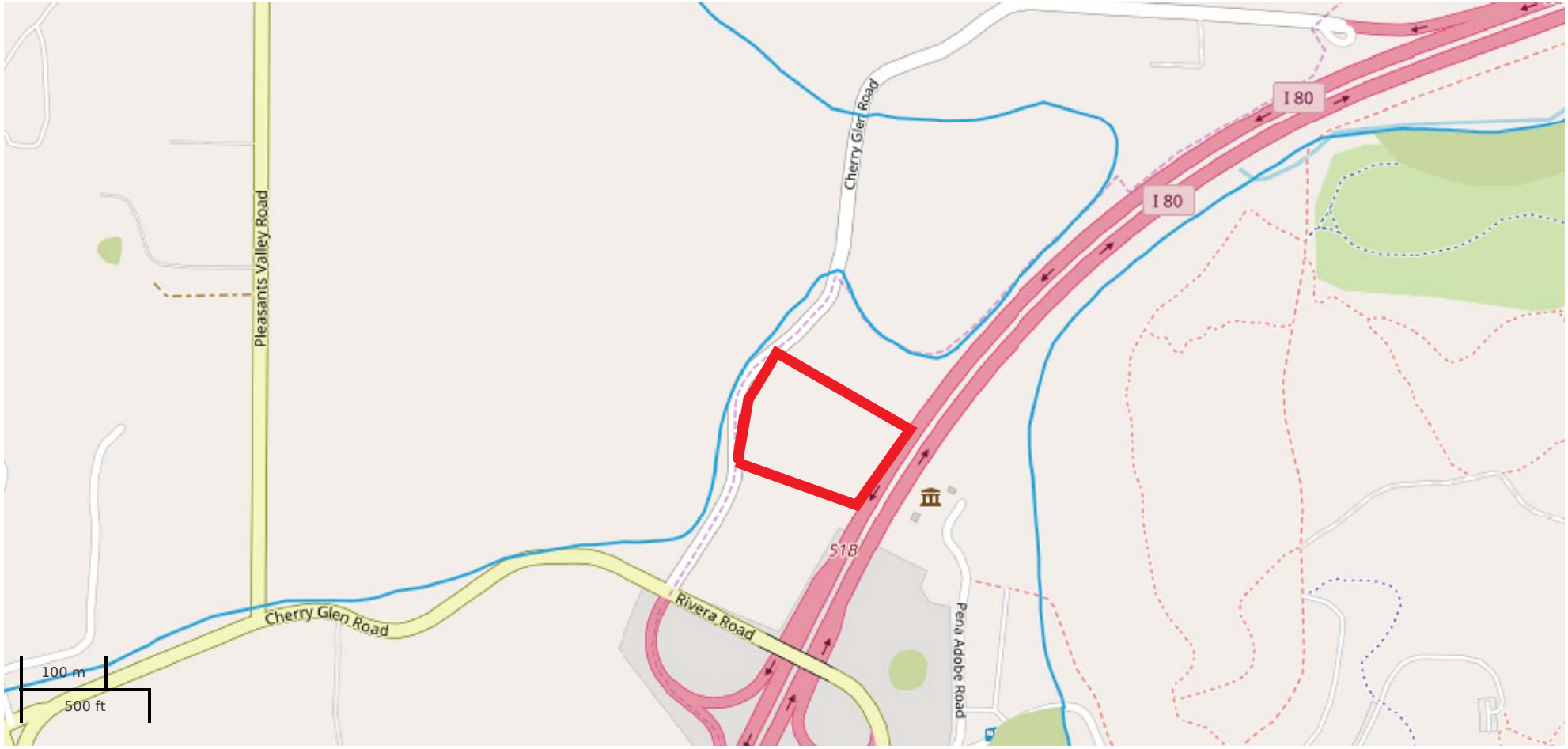


Legend

- Pond and Associated Vegetation
- Lake, Reservoir and Associated Vegetation
- Playa
- Project Boundary
- Fluvial Channel
- Slope and Seep Wetlands
- Vernal Pool

FIGURE 3: CALIFORNIA AQUATIC RESOURCES INVENTORY

Not to Specific Scale

N

Date: May 8, 2018

LAGOON VALLEY SELF STORAGE • SOLANO COUNTY, CALIFORNIA

In addition, we queried the following online resources for information on the Study Area's potential plant and wildlife resources:

1. California Department of Fish & Wildlife's Natural Diversity Database (RareFind 5) for observations of special status plant and animal species within five miles of the Study Area (Table 1, Appendix B),
2. U.S. Fish and Wildlife Service's *iPac* Database of federally-listed special status species in Solano County (Appendix C),
3. The California Native Plant Society's Inventory of Rare & Endangered Plants in California

We surveyed the Study Area on May 16, 2018 for special status plant and wildlife and/or habitats that could support them within the Study Area and recorded observations of : (1) dominant vegetation communities, (2) observed plant and animals and animal species (with emphasis on rare and endangered species) or their sign (nests, burrows, tracks, scat) and (3) the suitability of onsite habitats and those immediately adjoining the Project Area to support special status plant or animals species. We used generalized plant community classification schemes to classify onsite habitat types (Sawyer, Keeler-Wolf, and Evens, 2009). The site assessment consisted of walking the entire Study Area to note current habitat conditions, surrounding land uses, general habitat types, and wildlife species.

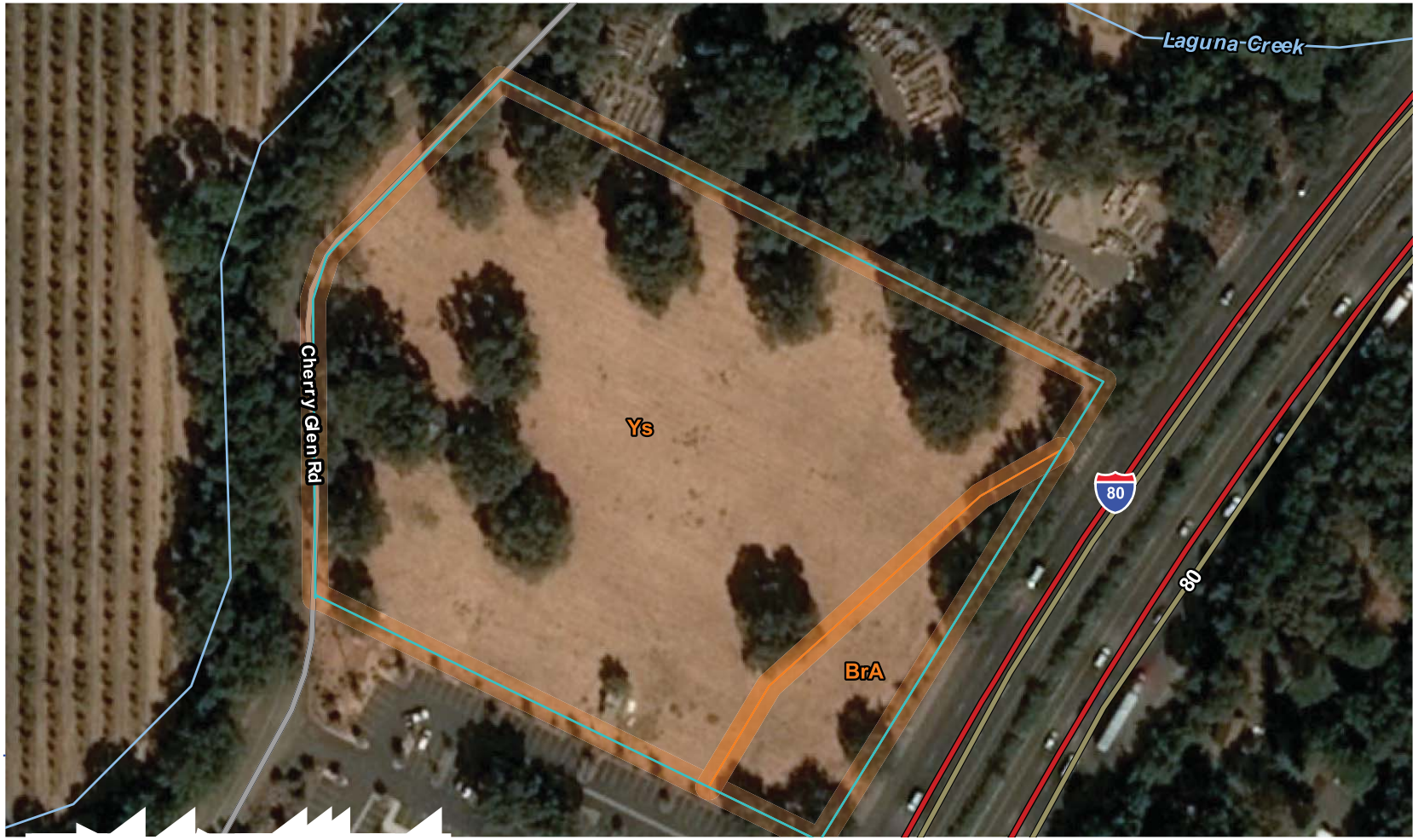
4.0 Existing Conditions

4.1 Soils

According to Natural Resources Conservation Services (NRCS), the Study Area is comprised of two primary soil types (Figure 4 and Appendix A), with:

1. Brentwood clay loam, 0-2% slopes, covering approximately 11% of the Study Area's south western corner; and
2. Yolo silty clay loam, 0-2% slopes, covering remaining 89% of the Study Area (Figure 4).

Brentwood clay loam soils are deep, moderately well-drained soils that occur at elevations between 40-400 feet. The mean annual precipitation is 12 to 20 inches with an average annual temperate approximately 60 to 62 degrees Fahrenheit. The surface layer is made up of grayish brown clay loam about 18 inches thick. The subsoil layer is comprised of brown heavy clay loam approximately 33 inches thick. The lowest horizon of subsoil is yellowish brown silty clay loam about 33 to 60 inches below the surface. Brentwood clay loam soil has a moderately slow permeability with a very slow to medium runoff rate.



Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
BrA	Brentwood clay loam, 0 to 2 percent slopes	0.6	10.6%
Ys	Yolo silty clay loam, 0 to 2 percent slopes, MLRA 17	5.4	89.4%
Totals for Area of Interest		**6.0**	**100.0%**

Map Scale: 1:1,120 if printed on A landscape (11" x 8.5") sheet.

Meters: 0 15 30 60 90

Feet: 0 50 100 200 300

Map projection: Web Mercator Corner coordinates: WGS84

FIGURE 4: Soils Map

Not to Specific Scale

N

Date: May 8, 2018

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Yolo silty clay loam soils are deep, moderately well-drained soils that occur on alluvium fans and flood plains at elevations near seal level to 2,400 feet. The mean annual precipitation is approximately 20 inches with an average annual temperate approximately 60 to 64 degrees Fahrenheit. The surface layer is made up of grayish brown silty clay loam about 19 inches thick. The subsoil layer is comprised of brown olive brown silty clay loam approximately 33 inches thick. The lowest horizon of subsoil is a pale brown to yellowish brown silty clay loam about 58 to 65 inches below the surface. Yolo silty clay loam soil has a moderately permeability with a very slow to medium runoff rate.

4.2 Hydrology

The Study Area lies within the Lower Sacramento watershed (HUC 18020109) and receives water in the form of direct precipitation and runoff from surrounding uplands and hardscape surfaces associated with, commercial, and agricultural lands. Topography on the site is relatively flat with ≤1% slopes.

4.3 Wetland & Other Waters of the United States

While Laguna Creek flows in an easterly direction along the north side of Cherry Glen Road and east side of the neighboring "Pottery Paradise" – from the Vaca Hills, approximately 3.5 miles west of the Study Area, to Alamo Creek, approximately one mile to the east. The site itself, however, does not support any U.S. Clean Water Act wetlands and/or "other waters of the U.S." or any "waters of the State" under the Porter-Cologne Act.

4.4 Vegetation Communities

Valley Oak (*Quercus lobata*) Savanna habitat covers the entire site. This habitat is characterized by a non-native grass understory interspersed with occasional (23) Valley oak trees. Vegetation within this community type consists primarily of annual grasses and herbaceous plant species. These include, but are not limited to wild oats (*Avena* sp.), filaree (*Erodium* spp.), brome/chess (*Bromus* sp.), field mustard (*Brassica rapa* ssp. *syvestris*), and Italian rye (*Lolium multiflorum*).

4.5 Wildlife

No terrestrial wildlife was observed on the site during either of the field surveys and the ongoing disturbance of the annual grassland and encroaching oak savanna habitat at this location likely precludes the presence of most wildlife species that commonly use such grasslands. The occasional western fence lizard (*Sceloporus occidentalis*) and western rattlesnake (*Crotalus viridis*) could be seen here, as well as mammals such as the western gray squirrel (*Sciurus griseus*) and deer mouse (*Peromiscus* sp.), and common birds like the northern flicker (*Colaptes auratus*), common raven (*Corvus corax)*, northern mockingbird (*Mimus polyglottos*), California and spotted towhees (*Pipilo* sp.) and western scrub jay (*Aphelocoma coerulescens*). Occasional raptors such as the red-tailed hawk (*Buteo jamaicensis*), northern harrier (*Circus cyaneus*), and turkey vulture (*Cathartes aura*) can also be seen soaring overhead.

5.0 Special Status Species

Special status species are those that fall into one or more of the following categories:

- Listed as endangered or threatened under the Federal Endangered Species Act (FESA) (50 CFR 17.11/17.12) (or formally proposed for listing) (64 FR 205, October 25, 1999; 57533-57547),
- Designated as a Species of Concern by the Sacramento District of the U.S. Fish and Wildlife Service,
- Listed as endangered or threatened under the California Endangered Species Act (CESA) (or proposed for listing) (14 California Code of Regulations [CCR] 670.5),
- Designated as rare, protected, or fully protected pursuant to California Fish and Game Code (FGC, Section 3511 [birds], 4700 [mammals], and 5050 [reptiles and amphibians]).
- Designated a Species of Concern by the California Department of Fish and Game,
- Defined as rare or endangered under the California Environmental Quality Act (CEQA), or
- Occurring on List 1 or 2 maintained by the California Native Plant Society.

Barnett reviewed CNDDB, CNPS, and iPAC for special status species with similar habitat and elevation requirements and have listed those species in the table below. Potential for occurrence in the Study Area is based on the following parameters: (1) occurrence within the vicinity, defined as a five-mile radius around the Study Area; (2) similar habitat; (3) elevation; (4) human disturbance; and (5) potential for migration. There are two special status plant species – the Contra Costa goldfields (*Lasthenia conjugens*) and showy Indian clover (*Trifolium amoenum*) – is known to occur in the vicinity of the Study Area, along with eight (6) animal species, including: valley elderberry longhorn beetle (*Desmocerus californicus dimorphus*), Delta green ground beetle (*Elaphrus viridis*), California red-legged frog (*Rana draytonii*), giant garter snake (*Thamnophis gigas*),California tiger salamander (*Ambystoma californiense*), Swainson's hawk (*Buteo swainsoni*).. A query of the California Natural Diversity Database (Rarefind) resulted in no records of any of these species within the Study Area (Table 1 and Appendix B).

Table 1: Special Status Species with Potential to Occur in the Project Area

Species	Federal	State	CNPS	Habitat	Potential for Occurrence in Study Area	Rationale for Assessing Potential for Occurrence
Plants						
Contra Costa goldfields *Lasthenia conjugens*	FE	-	1B	Valley and foothill grasslands, vernal pools, alkaline playas, low depressions in open grassy areas, and cismontane woodland.	None	The Study Area lacks suitable habitat like vernal pools or low depressions in open grassy areas. There is no water located within the Study Area. According to CNDDB, there are five recorded occurrences within five miles of the Study Area with the nearest occurrence two and a half miles west. No Contra Costa goldfields were observed during the May 2018 site visit.
Showy Indian clover *Trifolium amoenum*	FE	-	1B	Occasionally found in serpentine soils, open sunny sites and swales in valley and foothill grasslands and coastal bluff scrub.	None	The Study Area lacks suitable serpentine soils and swale habitat. There is no water located within the Study Area. Additionally, there are no CNDDB recorded occurrences within five miles of the Study Area. No showy Indian clovers were observed during the May 2018 site visit.
Invertebrates						
Delta Green Ground Beetle *Elaphrus viridis*	FT		-	Prefers open habitat in the grassland within vernal pool, nearby trails, roads, and ditches.	None	The Study Area does not contain suitable vernal pool habitat. Additionally, there are no CNDDB recorded occurrences within five miles of the Study Area. No Delta green ground beetles were observed during the May 2018 site visit.

Species	Federal	State	CNPS	Habitat	Potential for Occurrence in Study Area	Rationale for Assessing Potential for Occurrence
Invertebrates						
Valley elderberry longhorn beetle *Desmocerus californicus dimorphus*	FT	-		Riparian and oak woodlands. Requires the presence of blue or Mexican elderberry shrubs.	None	The Study Area lacks the host plant (Mexican or blue elderberry) for this species. There are two CNDDB occurrences within five miles of the Study Area, with the nearest occurrence two miles north. No valley elderberry longhorn beetles or their host plants were observed during the May 2018 site visit.
Amphibians, Fish, and Reptiles						
California red-legged frog *Rana draytonii*	FT	-		Prefers lowlands and foothills in or near permanent sources of deep water with dense shrubby or emergent vegetation.	None	The Study Area does not contain suitable habitat such as deep sources of water within dense shrubby habitat. According to CNDDB, there are no recorded occurrences within five miles of the Study Area. No California red-legged frogs were observed during the Mau 2018 site visit.
California tiger salamander *Amboystoma californiense*	FT	CT	-	Cismontane and riparian woodland, meadow, seep, and valley and foothill grassland. Need underground refuge, especially ground squirrel burrows, and vernal pools or other seasonal water sources for breeding.	None	The Study Area lacks natural vernal or ephemeral or artificial ponds and suitable upland habitat for summer aestivation. No salamanders were found during the May 2018 site assessment. Additionally, there are four recorded CNDDB occurrences within five miles of the Study Area with the nearest occurrence four miles south. No California tiger salamanders were observed during the May 2018 site visit.

Species	Federal	State	CNPS	Habitat	Potential for Occurrence in Study Area	Rationale for Assessing Potential for Occurrence
Amphibians, Fish, and Reptiles						
Giant garter snake *Thamnophis gigas*	FT	CT		Prefers freshwater marsh, gradient streams, swamp, and riparian scrub. Has adapted to drainage canals and irrigation ditches.	None	The Study Area does not provide suitable habitat such as freshwater marsh, streams, swamps, or riparian scrub. Additionally, the CNDDB search revealed no occurrence of this species within five miles of the Study Area. No giant garter snakes were observed during the May 208 site visit.
Birds						
Swainson's hawk *Buteo swainsoni*	-	CT	-	Great Basin grassland, riparian forest and woodlands, valley, and foothill grassland. Breeds in grasslands with scattered trees, juniper-sage flats, savannahs, & agricultural or ranch lands with groves or lines of trees.	Moderate	The Study Area does contain suitable grassland foraging habitat with scattered oak trees. According to CNDDB there are 11 recorded occurrences of this species within five miles of the Study Area with the nearest occurrence 0.04 miles southwest.

Special Status Species Codes:

Federal: *FE = Federal Endangered* *FT = Federal Threatened*

State: *CSC = California Species of Concern* *CE = California Endangered*
CFP = California Fully Protected *CT = California Threatened*

CNPS: *1B = Rare or threatened in CA and elsewhere* *2B = Rare, threatened, or Endangered in CA, but more common elsewhere*

Potential for Occurrence Codes:

None: *No suitable habitat for the special status species within the Study Area*

Very Low: *Either the special status species is known to occur within five miles but no suitable habitat exists in the Study Area, or the Study Area provides suitable habitat but the species is not known to occur within a five-mile radius.*

Low *Marginally suitable habitat exists in the Study Area and the special status species occurs within 5 miles but surrounding urban land use conditions and regularity of human activity make it unlikely that the species occurs in the Study Area.*

Moderate: *The special status species is known to occur within a five-mile radius and the Study Area contains suitable habitat, however surrounding urban land use conditions and onsite disturbance reduce the likelihood of occurrence.*

High: *The Study Area provides suitable habitat and there is either documentation of species occurrence within a five-mile radius or evidence gathered by a professional surveyor during an onsite field assessment.*

Present: *Species known to occur within the Study Area based on record search and/or evidence collect during onsite field surveys.*

5.1 Critical Habitat for Special Status Species

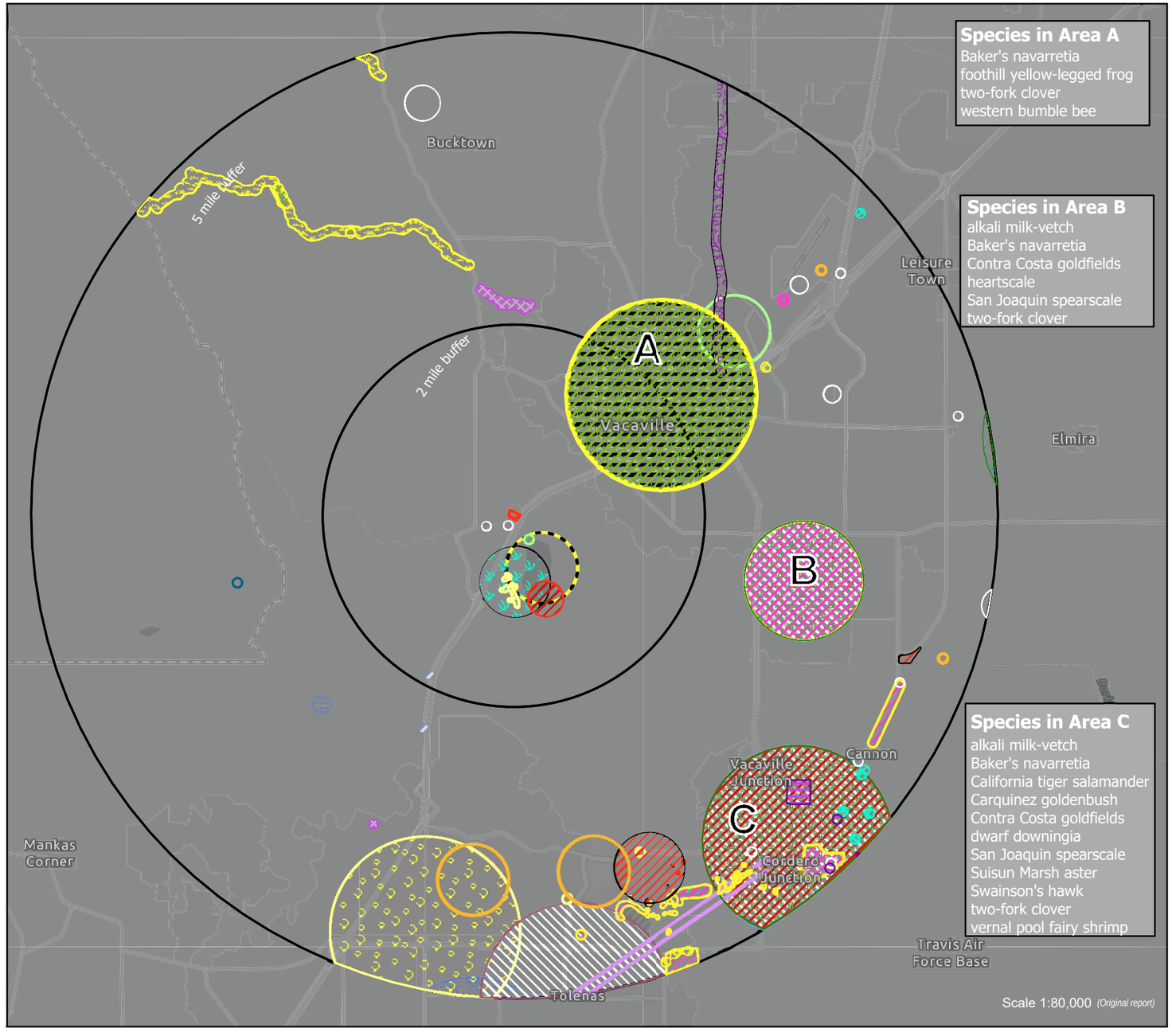
The Federal Endangered Species Act (FESA) requires the federal government to designate critical habitat for any listed species. Critical habitat is defined as: (1) specific areas within the geographical area occupied by the species at the time of listing, if they contain physical or biological features essential to conservation, and those features may require special management considerations or protection; and (2) specific areas outside the geographical area occupied by the species if the agency determines that the area itself is essential for conservation. There is no designated critical habitat within the Study Area (Appendix B).

5.2 Special Status Wildlife

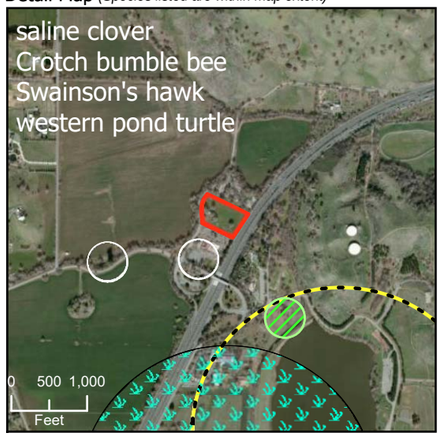
California (State) Listed Species

State listed species are plants and animals that are legally protected under the California Endangered Species Act (CESA). A single species has the potential to occur, but is not known to occur within the Study Area:

1. **Swainson's hawk** (*Buteo swainsoni*) – The Swainson's hawk is a California threatened, large (1.75 - 2 pounds), broad-winged bird-of-prey (raptor) that frequents open country. It is a long-distance migrator that nests in the Central Valley from March 1 to September 15 and over-winters in Mexico or South America. This hawk forages almost exclusively in agricultural row-crops and grasslands. Unlike some other local raptors, urban areas or dense vegetation do not provide suitable foraging habitat for this hawk. Sacramento, Yolo, and San Joaquin Counties support most of the Central Valley Swainson's hawk breeding population. Narrow riparian systems and scattered Valley oak trees, combined with suitable agricultural foraging habitat, provide high-quality habitat conditions in Sacramento County, where an estimated 100 pairs nest. Swainson's hawks are monogamous and actively nest from March through July. This species has a moderate potential occur given the grassland habitat foraging requirements with scattered oaks. There are 11 documented CNDDB Swainson's hawk occurrences within a five-mile radius, with the nearest occurrence 0.04 miles southwest of the Study Area (Figure 5). However, no Swainson's hawks were observed onsite during the May 2018 site assessment of the parcel.



Detail Map *(Species listed are within map extent)*



Vicinity Map

CNDDB

- American badger
- Baker's navarretia
- Brewer's western flax
- California linderiella
- California tiger salamander
- Carquinez goldenbush
- Contra Costa goldfields
- Crotch bumble bee
- San Joaquin spearscale
- Suisun Marsh aster
- Swainson's hawk
- Townsend's big-eared bat
- Wilbur Springs shorebug
- adobe-lily
- alkali milk-vetch
- brittlescale
- burrowing owl
- dwarf downingia
- foothill yellow-legged frog
- heartscale
- legenere
- oval-leaved viburnum
- pappose tarplant
- recurved larkspur
- saline clover
- tricolored blackbird
- two-fork clover
- valley elderberry longhorn beetle
- vernal pool fairy shrimp
- vernal pool tadpole shrimp
- western bumble bee
- western pond turtle
- Site Location

FIGURE 5: CALIFORNIA NATIONAL DIVERSITY DATABASE - 2 and 5 MILE RADIUS

Date: May 25, 2018 Scaled to Fit

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6.0 Effects of Proposed Action

6.1 Effects of Proposed Action on Wildlife and Habitat

The following discussion of biological resources impacts and mitigation measures is based on implementation of the proposed project in comparison to existing conditions.

Oak Trees

If the City of Vacaville considers the existing interior and live oak trees on the property to be categorized as native tree species than under the City of Vacaville Chapter 14.09.131 *Tree Preservation Guidelines*, the project would mitigate onsite for the adversely affect trees by replacing and replanting removed trees as follows:

- Native trees with a diameter at breast height (dbh) of 6 to 10 inches shall be replaced at a ratio of two replacement trees to one removed tree (2:1).
- Native trees with a dbh of 10.1 to 18 inches shall be replaced at a ratio of 4:1.
- Native trees with a dbh of 18.1 to 36 inches shall be replaced at a ratio of 6:1.
- Native trees with a dbh over 36 inches shall be replaced at a ratio of 8:1.

The replanted tress shall be irrigated and maintained by applicant for a minimum of period of five years after installation.

Special Status Bird Species, Nesting Raptors, and Migratory Bird

The CNDDB search, as well as, the Barnett's May 2018 site assessment did not reveal any occurrences of special status bird within the Study Area. There are no recorded CNDDB occurrences of northern spotted owls within a five-mile radius of the Study Area, however, there are 11 recorded CNDDB occurrences of Swainson's hawk within five miles with the nearest occurrence approximately 0.04 miles southwest of the Study Area. Additionally, the Study Area does provide suitable grassland and oak woodland habitat for both Swainson's hawk and northern spotted owl, as well as, other migratory birds. Therefore, the following measures to avoid or minimize impacts to migratory birds and raptors include:

1. If any site disturbance or construction activity for any phase of development begins outside the February 1 to August 31 breeding season, a preconstruction survey for active nests shall not be required.

2. If any site disturbance or construction activity for any phase of development is scheduled to begin between February 1 and August 31, a qualified biologist shall conduct a preconstruction survey for active tree nests and ground nests from publicly accessible areas within 14 days prior to site disturbance for any phase of development. The survey area shall cover the construction site and a 100-foot radius surrounding the construction site. The

preconstruction survey shall be submitted to the County of Solano for review. If no nesting migratory birds are found, then further mitigation measures are not necessary.

3. If an active nest of a migratory bird, or other CDFW-protected bird is discovered that may be adversely affected by any site disturbance, or an injured or killed bird is found, the project applicant shall immediately:

    - Stop all work within a 100-foot radius of the discovery.
    - Notify the City of Vacaville Development Department.
    - Do not resume work within the 100-foot radius until authorized by the biologist.
    - The biologist shall establish a minimum 100-foot Environmentally Sensitive Area (ESA) around the nest. The ESA may be reduced if the biologist determines that a smaller ESA would still adequately protect the active nest. Further work may not occur within the ESA until the biologist determines that the nest is no longer active.

7.0 Conclusion

1. There are no jurisdictional wetlands and "other waters of the United States" within the Study Area. However, if the U.S. Army Corps of Engineers suggested that wetlands may be present at the site and a wetland delineation should be performed. If the U.S. Army Corps of Engineers verifies that wetlands and/or other waters of the U.S. are present within the Study Area then a Section 404 permit from the U.S. Army Corps of Engineers and a Section 401 water quality certification from the Regional Water Quality Control Board will be required.

2. The California Natural Diversity Database (Rarefind), iPAC, and CNPS contains no records of any species of special concern within the Study Area due to lack of appropriate habitat and elevations requirements. Additionally, historic and ongoing disturbance may preclude any special status species from occupying the Study Area.

8.0 References

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APPENDIX A – Natural Resources Conservation Services (NRCS) Soil Report

United States Department of Agriculture

NRCS

Natural Resources Conservation Service

A product of the National Cooperative Soil Survey, a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local participants

Custom Soil Resource Report for Solano County, California

June 12, 2018

Preface

Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (https://offices.sc.egov.usda.gov/locator/app?agency=nrcs) or your NRCS State Soil Scientist (http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2_053951).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

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How Soil Surveys Are Made

Soil surveys are made to provide information about the soils and miscellaneous areas in a specific area. They include a description of the soils and miscellaneous areas and their location on the landscape and tables that show soil properties and limitations affecting various uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They observed and described many soil profiles. A soil profile is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed or from the surface down to bedrock. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

Currently, soils are mapped according to the boundaries of major land resource areas (MLRAs). MLRAs are geographically associated land resource units that share common characteristics related to physiography, geology, climate, water resources, soils, biological resources, and land uses (USDA, 2006). Soil survey areas typically consist of parts of one or more MLRA.

The soils and miscellaneous areas in a survey area occur in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landform or with a segment of the landform. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landform, a soil scientist develops a concept, or model, of how they were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil

scientists classified and named the soils in the survey area, they compared the individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

The objective of soil mapping is not to delineate pure map unit components; the objective is to separate the landscape into landforms or landform segments that have similar use and management requirements. Each map unit is defined by a unique combination of soil components and/or miscellaneous areas in predictable proportions. Some components may be highly contrasting to the other components of the map unit. The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The delineation of such landforms and landform segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, onsite investigation is needed to define and locate the soils and miscellaneous areas.

Soil scientists make many field observations in the process of producing a soil map. The frequency of observation is dependent upon several factors, including scale of mapping, intensity of mapping, design of map units, complexity of the landscape, and experience of the soil scientist. Observations are made to test and refine the soil-landscape model and predictions and to verify the classification of the soils at specific locations. Once the soil-landscape model is refined, a significantly smaller number of measurements of individual soil properties are made and recorded. These measurements may include field measurements, such as those for color, depth to bedrock, and texture, and laboratory measurements, such as those for content of sand, silt, clay, salt, and other components. Properties of each soil typically vary from one point to another across the landscape.

Observations for map unit components are aggregated to develop ranges of characteristics for the components. The aggregated values are presented. Direct measurements do not exist for every property presented for every map unit component. Values for some properties are estimated from combinations of other properties.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Some interpretations are modified to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and

identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

Soil Map

The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.

Custom Soil Resource Report
Soil Map

MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils
- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features
- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background
- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Solano County, California
Survey Area Data: Version 11, Oct 5, 2017

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Data not available.

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
BrA	Brentwood clay loam, 0 to 2 percent slopes	0.6	10.1%
Ys	Yolo silty clay loam, 0 to 2 percent slopes, MLRA 17	5.2	89.9%
Totals for Area of Interest		**5.8**	**100.0%**

Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however,

onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

Solano County, California

BrA—Brentwood clay loam, 0 to 2 percent slopes

Map Unit Setting

National map unit symbol: h9kp
Elevation: 80 to 250 feet
Mean annual precipitation: 18 to 25 inches
Mean annual air temperature: 61 to 63 degrees F
Frost-free period: 260 to 280 days
Farmland classification: Prime farmland if irrigated

Map Unit Composition

Brentwood and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Brentwood

Setting

Landform: Alluvial fans
Landform position (two-dimensional): Footslope
Landform position (three-dimensional): Base slope
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium derived from sedimentary rock

Typical profile

H1 - 0 to 6 inches: clay loam
H2 - 6 to 34 inches: clay loam
H3 - 34 to 60 inches: clay loam

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Well drained
Runoff class: Medium
Capacity of the most limiting layer to transmit water (Ksat): Moderately high (0.20 to 0.57 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Salinity, maximum in profile: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water storage in profile: High (about 10.8 inches)

Interpretive groups

Land capability classification (irrigated): 1
Land capability classification (nonirrigated): 4c
Hydrologic Soil Group: C
Hydric soil rating: No

Minor Components

Yolo

Percent of map unit: 10 percent

Hydric soil rating: No

Rincon

Percent of map unit: 5 percent
Hydric soil rating: No

Ys—Yolo silty clay loam, 0 to 2 percent slopes, MLRA 17

Map Unit Setting

National map unit symbol: 2w8b1
Elevation: 10 to 420 feet
Mean annual precipitation: 16 to 28 inches
Mean annual air temperature: 61 to 63 degrees F
Frost-free period: 240 to 270 days
Farmland classification: Prime farmland if irrigated

Map Unit Composition

Yolo and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Yolo

Setting

Landform: Alluvial fans
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium derived from igneous, metamorphic and sedimentary rock

Typical profile

Ap - 0 to 9 inches: silty clay loam
A1 - 9 to 18 inches: silty clay loam
A2 - 18 to 28 inches: silty clay loam
Bw1 - 28 to 36 inches: clay loam
Bw2 - 36 to 44 inches: loam
Bw3 - 44 to 60 inches: loam

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Well drained
Runoff class: Low
Capacity of the most limiting layer to transmit water (Ksat): Moderately high (0.20 to 0.60 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: Rare
Frequency of ponding: None
Calcium carbonate, maximum in profile: 1 percent

Salinity, maximum in profile: Nonsaline (0.3 to 0.5 mmhos/cm)
Available water storage in profile: High (about 11.1 inches)

Interpretive groups

Land capability classification (irrigated): 1
Land capability classification (nonirrigated): 4c
Hydrologic Soil Group: B
Hydric soil rating: No

Minor Components

Reiff

Percent of map unit: 5 percent
Hydric soil rating: No

Brentwood

Percent of map unit: 5 percent
Hydric soil rating: No

Sycamore

Percent of map unit: 5 percent
Hydric soil rating: No

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APPENDIX B – California Natural Diversity Database Report

Multiple Occurrences per Page

California Department of Fish and Wildlife

California Natural Diversity Database

Query Criteria: Quad IS (Fairfield North (3812231))
 AND (Federal Listing Status IS (Endangered OR Threatened) OR State Listing Status IS (Endangered OR Threatened OR Rare))

Buteo swainsoni **Element Code:** ABNKC19070

Swainson's hawk

Listing Status:	**Federal:**	None	**CNDDB Element Ranks:**	**Global:**	G5
	State:	Threatened		**State:**	S3
	Other:	BLM_S-Sensitive, IUCN_LC-Least Concern, USFWS_BCC-Birds of Conservation Concern			
Habitat:	**General:**	BREEDS IN GRASSLANDS WITH SCATTERED TREES, JUNIPER-SAGE FLATS, RIPARIAN AREAS, SAVANNAHS, & AGRICULTURAL OR RANCH LANDS WITH GROVES OR LINES OF TREES.			
	Micro:	REQUIRES ADJACENT SUITABLE FORAGING AREAS SUCH AS GRASSLANDS, OR ALFALFA OR GRAIN FIELDS SUPPORTING RODENT POPULATIONS.			

Occurrence No.	1460	**Map Index:** 62356	**EO Index:** 62393	**Element Last Seen:**	2010-06-21
Occ. Rank:	Good		**Presence:** Presumed Extant	**Site Last Seen:**	2010-06-21
Occ. Type:	Natural/Native occurrence		**Trend:** Unknown	**Record Last Updated:**	2013-01-04

Quad Summary: Fairfield North (3812231)

County Summary: Solano

Lat/Long:	38.33650 / -122.02245	**Accuracy:**	specific area
UTM:	Zone-10 N4243603 E585432	**Elevation (ft):**	235
PLSS:	T06N, R01W, Sec. 30, SW (M)	**Acres:**	10.0

Location: NORTH SIDE OF CHERRY GLEN ROAD, BETWEEN PLEASANT VALLEY ROAD AND THE I-80/PENA ADOBE INTERCHANGE, NORTH OF FAIRFIELD.

Detailed Location: MAPPED TO COORDINATES FROM FIELD SURVEY FORMS. RESSEGUIE SITE FAIRFIELD NORTH 1. 2004-05 NEST TREE WITHIN A ROW OF TREES ALONG A DITCH (LAGUNA CREEK) ON THE NORTH SIDE OF THE ROAD. 2010 NEST TREE JUST EAST OF PLEASANTS VALLEY RD.

Ecological: 2004-05: NEST AT 90% HEIGHT OF LARGE BLUE GUM EUCALYPTUS, ON N SIDE OF TREE; SURROUNDED BY LARGE CULTIVATED FIELDS. 2010: NEST ON PROPERTY WITH ANNUAL GRASSLAND & MANY MATURE TREES. PARK ON EAST SIDE OF I-80 USED FOR FORAGING (1999).

General: ADULT AND FLEDGLINGS OBSERVED AT THIS SITE TOO LATE IN 2003 TO INFER NESTING. NEST MONITORED 5 APR-1 AUG 2004; 1 FLEDGED. NEST MONITORED 19 APR-4 AUG 2005; 2 FLEDGED. 1 FLEDGED IN 2006. NEST WITH 2 YOUNG OBSERVED 21 JUN 2010.

Owner/Manager: PVT

Occurrence No.	2746	**Map Index:** A8504	**EO Index:** 110294	**Element Last Seen:**	2013-07-XX
Occ. Rank:	Unknown		**Presence:** Presumed Extant	**Site Last Seen:**	2013-07-XX
Occ. Type:	Natural/Native occurrence		**Trend:** Unknown	**Record Last Updated:**	2018-02-16

Quad Summary: Fairfield North (3812231)

County Summary: Solano

Lat/Long:	38.26959 / -122.0908	**Accuracy:**	80 meters
UTM:	Zone-10 N4236118 E579533	**Elevation (ft):**	63
PLSS:	T05N, R02W, Sec. 21, N (M)	**Acres:**	5.0

Location: 0.2 MILE SE OF INTERSECTION OF MANKAS CORNER ROAD AND ABERNATHY ROAD, ALONG LEDGEWOOD CREEK, EAST OF FAIRFIELD.

Detailed Location: MAPPED TO PROVIDED COORDINATES.

Ecological: NEST TREE WAS A VALLEY OAK.

General: 1 YOUNG FLEDGED IN 2013.

Owner/Manager: PVT

Branchinecta lynchi

Element Code: ICBRA03030

vernal pool fairy shrimp

Listing Status:	**Federal:**	Threatened	**CNDDB Element Ranks:**	**Global:**	G3
	State:	None		**State:**	S3
	Other:	IUCN_VU-Vulnerable			
Habitat:	**General:**	ENDEMIC TO THE GRASSLANDS OF THE CENTRAL VALLEY, CENTRAL COAST MOUNTAINS, AND SOUTH COAST MOUNTAINS, IN ASTATIC RAIN-FILLED POOLS.			
	Micro:	INHABIT SMALL, CLEAR-WATER SANDSTONE-DEPRESSION POOLS AND GRASSED SWALE, EARTH SLUMP, OR BASALT-FLOW DEPRESSION POOLS.			

Occurrence No.	331	**Map Index:** 48443	**EO Index:**	48443	**Element Last Seen:** 2002-01-24
Occ. Rank:	Poor		**Presence:**	Presumed Extant	**Site Last Seen:** 2002-01-24
Occ. Type:	Natural/Native occurrence		**Trend:**	Unknown	**Record Last Updated:** 2002-08-05

Quad Summary: Fairfield North (3812231)

County Summary: Solano

Lat/Long:	38.26374 / -122.00747	**Accuracy:**	specific area
UTM:	Zone-10 N4235544 E586829	**Elevation (ft):**	40
PLSS:	T05N, R01W, Sec. 19, SE (M)	**Acres:**	7.2

Location: TOLENAS, APPROXIMATELY 960 FEET SW (ALONG RAILROAD AVE) FROM THE INTERSECTION OF RAILROAD AVE AND TABOR AVE.

Detailed Location: SITE 26-05 IS SITUATED BETWEEN RAILROAD TRACKS AND RAILROAD AVE.

Ecological: HABITAT CONSISTS OF A SEASONALLY PONDED DEPRESSION IN A RAILROAD BORROW PIT. AREA IS SURROUNDED BY SUBURBAN/COMMERCIAL DEVELOPMENT, RAILROAD TRACKS AND ROADWAY.

General: UNKNOWN NUMBER OBSERVED 28 DEC 2001 AND 9 & 24 JAN 2002. COLLECTION MADE BUT NOT YET ACCESSIONED AT CALIFORNIA ACADEMY OF SCIENCES.

Owner/Manager: UNKNOWN

Desmocerus californicus dimorphus

Element Code: IICOL48011

valley elderberry longhorn beetle

Listing Status:	**Federal:**	Threatened	**CNDDB Element Ranks:**	**Global:**	G3T2
	State:	None		**State:**	S2
	Other:				
Habitat:	**General:**	OCCURS ONLY IN THE CENTRAL VALLEY OF CALIFORNIA, IN ASSOCIATION WITH BLUE ELDERBERRY (SAMBUCUS MEXICANA).			
	Micro:	PREFERS TO LAY EGGS IN ELDERBERRIES 2-8 INCHES IN DIAMETER; SOME PREFERENCE SHOWN FOR "STRESSED" ELDERBERRIES.			

Occurrence No.	91	**Map Index:**	33023	**EO Index:**	3711	**Element Last Seen:**	1991-06-18
Occ. Rank:	Good			**Presence:**	Presumed Extant	**Site Last Seen:**	1991-06-18
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	1998-08-11

Quad Summary:	Fairfield North (3812231)
County Summary:	Napa

Lat/Long:	38.35367 / -122.12509	**Accuracy:**	80 meters
UTM:	Zone-10 N4245418 E576444	**Elevation (ft):**	320
PLSS:	T06N, R02W, Sec. 19 (M)	**Acres:**	0.0

Location:	SUISUN CREEK, JUST BELOW GORDON VALLEY DAM ON LAKE CURRY, 7 MILES WEST OF VACAVILLE.
Detailed Location:	REPORT ON: TAXONOMY; DISTRIBUTION; LIFE HISTORY; HABITAT; FIELD TECHNIQUES & OBSERVATIONS; BEETLE RECOVERY.
Ecological:	
General:	AN OLD EXIT HOLE WAS FOUND ON AN ISOLATED ELDERBERRY CLUMP.
Owner/Manager:	UNKNOWN

Occurrence No.	92	**Map Index:**	33024	**EO Index:**	3709	**Element Last Seen:**	1991-06-18
Occ. Rank:	Good			**Presence:**	Presumed Extant	**Site Last Seen:**	1991-06-18
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	1998-08-11

Quad Summary:	Fairfield North (3812231)
County Summary:	Solano

Lat/Long:	38.29252 / -122.09877	**Accuracy:**	80 meters
UTM:	Zone-10 N4238655 E578811	**Elevation (ft):**	140
PLSS:	T05N, R02W, Sec. 08 (M)	**Acres:**	0.0

Location:	UNNAMED TRIBUTARY TO LEDGEWOOD CREEK, ALONG CLAYTON ROAD, 0.5 MILE NE OF GORDON VALLEY ROAD, 3 MILES NW OF FAIRFIELD.
Detailed Location:	REPORT ON: TAXONOMY; DISTRIBUTION; LIFE HISTORY; HABITAT; FIELD TECHNIQUES & OBSERVATIONS; BEETLE RECOVERY.
Ecological:	HABITAT CONSISTS OF ELDERBERRIES GROWING ALONG A CREEK IN AN ORCHARD.
General:	4-5 CLUMPS OF ELDERBERRY; 1 OLD HOLE IN DEAD WOOD OBSERVED.
Owner/Manager:	PVT

Occurrence No.	93	**Map Index:**	26483	**EO Index:**	3517	**Element Last Seen:**	1991-06-18
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	1991-06-18
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	1998-08-11

Quad Summary:	Fairfield North (3812231)
County Summary:	Solano

Lat/Long:	38.30257 / -122.10662	**Accuracy:**	specific area
UTM:	Zone-10 N4239764 E578113	**Elevation (ft):**	145
PLSS:	T05N, R02W, Sec. 05 (M)	**Acres:**	13.9

Location:	GORDON VALLEY CREEK, IN THE VICINITY OF THE BRIDGE ON GORDON VALLEY ROAD (#B174), 4 MILES NW OF FAIRFIELD.
Detailed Location:	REPORT ON: TAXONOMY; DISTRIBUTION; LIFE HISTORY; HABITAT; FIELD TECHNIQUES & OBSERVATIONS; BEETLE RECOVERY.
Ecological:	HABITAT CONSISTS OF ONE RATHER LARGE, RELATIVELY YOUNG, ELDERBERRY CLUMP WITH MANY TRUNKS, AND 1 SMALL CLUMP ACROSS THE CREEK; SURROUNDED BY ORCHARDS AND FARMLAND.
General:	POSSIBLE OLD EXIT HOLES IN DEAD WOOD OBSERVED.
Owner/Manager:	PVT

Occurrence No.	192	**Map Index:**	48984	**EO Index:**	48984	**Element Last Seen:**	2002-09-12
Occ. Rank:	Good			**Presence:**	Presumed Extant	**Site Last Seen:**	2002-09-12
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2002-10-09

Quad Summary:	Fairfield North (3812231)
County Summary:	Solano

Lat/Long:	38.29133 / -122.04412	**Accuracy:**	80 meters
UTM:	Zone-10 N4238571 E583591	**Elevation (ft):**	158
PLSS:	T05N, R02W, Sec. 11 (M)	**Acres:**	0.0

Location:	0.5 MILE WEST OF I-80, ON THE NORTH EDGE OF FAIRFIELD.
Detailed Location:	ELDERBERRY WITH EMERGENCE HOLES LOCATED ON THE SOUTH BANK OF THE CREEK BED; SMALLER SHRUBS FOUND ON BOTH BANKS.
Ecological:	HABITAT CONSISTS OF A RIPARIAN CORRIDOR DOMINATED BY QUERCUS LOBATA, POPULUS FREMONTII, AESCULUS CALIFORNICA, CERCIS OCCIDENTALIS, AND ALNUS RHOMBIFOLIA, WITH AN UNDERSTORY OF TYPHA LATIFOLIA, JUNCUS XIPHIOIDES, AND JUNCUS EFFUSUS.
General:	VELB EMERGENCE HOLES FOUND ON A LARGE (BASAL DIAMETER = 14-16") ELDERBERRY ON 12 SEP 2002.
Owner/Manager:	CITY OF FAIRFIELD

Occurrence No.	259	**Map Index:**	95008	**EO Index:**	96139	**Element Last Seen:**	2008-09-16
Occ. Rank:	Good			**Presence:**	Presumed Extant	**Site Last Seen:**	2008-09-16
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2015-03-09

Quad Summary: Fairfield North (3812231)

County Summary: Solano

Lat/Long:	38.37024 / -122.01866	**Accuracy:**	nonspecific area
UTM:	Zone-10 N4247350 E585724	**Elevation (ft):**	255
PLSS:	T06N, R01W, Sec. 18, NW (M)	**Acres:**	45.0

Location: ALONG ALAMO CREEK, FROM 0-0.3 MI E OF HESPELLER RD & PLEASANTS VALLEY RD INTERSECTION, NW EDGE OF VACAVILLE.

Detailed Location: MAPPED ACCORDING TO PROVIDED MAP FOR SURVEY AREA, EXACT LOCATION OF EXIT HOLES WITHIN THE SURVEY AREA UNKNOWN. ALAMO CREEK IS A SLOW-MEDIUM MOVING STREAM WITH SANDY/GRAVELLY BOTTOM.

Ecological: RIPARIAN CORRIDOR EXTENDS APPROX. 35-50 FT ON EITHER SIDE OF CREEK. OVERSTORY: VALLEY OAKS, JUGLANS CALIFORNICA, SALIX LAEVIGAT, QUERCUS WISLIZENI, & ACER MACROPHYLLUM. UNDERSTORY: RUBUS DISCOLOR, SALIX LASIOLEPIS, & SAMBUCUS MEXICANA.

General: NUMEROUS ELDERBERRY STEMS WITH EXIT HOLES OBSERVED DURING PROTOCOL SURVEYS CONDUCTED ON 10 & 11 JUN, 3 JUL, AND 15 & 16 SEP 2008.

Owner/Manager: CITY OF VACAVILLE

Lasthenia conjugens

Element Code: PDAST5L040

Contra Costa goldfields

Listing Status:	**Federal:**	Endangered	**CNDDB Element Ranks:**	**Global:**	G1
	State:	None		**State:**	S1
	Other:	Rare Plant Rank - 1B.1, SB_UCBBG-UC Berkeley Botanical Garden			
Habitat:	**General:**	VALLEY AND FOOTHILL GRASSLAND, VERNAL POOLS, ALKALINE PLAYAS, CISMONTANE WOODLAND.			
	Micro:	VERNAL POOLS, SWALES, LOW DEPRESSIONS, IN OPEN GRASSY AREAS. 1-450 M.			

Occurrence No.	28	**Map Index:**	32993	**EO Index:**	541	**Element Last Seen:**	1993-XX-XX
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	1993-XX-XX
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	1996-02-05

Quad Summary: Fairfield North (3812231)

County Summary: Solano

Lat/Long:	38.27456 / -122.00415	**Accuracy:**	80 meters
UTM:	Zone-10 N4236747 E587107	**Elevation (ft):**	60
PLSS:	T05N, R01W, Sec. 17, SW (M)	**Acres:**	0.0

Location: NE OF FAIRFIELD, 0.1 MILE NORTH OF AIR BASE PARKWAY, 1.75 AIR MILES DUE SOUTH OF SUMMIT OF CEMENT HILL.

Detailed Location:

Ecological:

General: ABOUT 10 PLANTS IN 1993.

Owner/Manager: UNKNOWN

Trifolium amoenum **Element Code:** PDFAB40040

two-fork clover

Listing Status:	**Federal:**	Endangered	**CNDDB Element Ranks:**	**Global:**	G1
	State:	None		**State:**	S1
	Other:	Rare Plant Rank - 1B.1, SB_RSABG-Rancho Santa Ana Botanic Garden, SB_USDA-US Dept of Agriculture			
Habitat:	**General:**	VALLEY AND FOOTHILL GRASSLAND, COASTAL BLUFF SCRUB.			
	Micro:	SOMETIMES ON SERPENTINE SOIL, OPEN SUNNY SITES, SWALES. MOST RECENTLY CITED ON ROADSIDE AND ERODING CLIFF FACE. 5-310 M.			

Occurrence No.	11	**Map Index:**	24739	**EO Index:**	46523	**Element Last Seen:**	1892-06-18
Occ. Rank:	Unknown			**Presence:**	Presumed Extant	**Site Last Seen:**	1892-06-18
Occ. Type:	Natural/Native occurrence			**Trend:**	Unknown	**Record Last Updated:**	2001-11-15

Quad Summary:	Elmira (3812138), Fairfield North (3812231)
County Summary:	Solano

Lat/Long:	38.35642 / -121.98869	**Accuracy:**	1 mile
UTM:	Zone-10 N4245845 E588359	**Elevation (ft):**	
PLSS:	T06N, R01W, Sec. 20 (M)	**Acres:**	0.0

Location:	VACAVILLE.
Detailed Location:	EXACT LOCATION UNKNOWN. MAPPED BY CNDDB AS BEST GUESS CENTERED ON THE TOWN OF VACAVILLE.
Ecological:	
General:	ONLY SOURCE OF INFORMATION IS AN 1892 JEPSON COLLECTION. NEEDS FIELDWORK.
Owner/Manager:	UNKNOWN

APPENDIX C – iPAC Report

IPaC **U.S. Fish & Wildlife Service**

IPaC resource list

This report is an automatically generated list of species and other resources such as critical habitat (collectively referred to as *trust resources*) under the U.S. Fish and Wildlife Service's (USFWS) jurisdiction that are known or expected to be on or near the project area referenced below. The list may also include trust resources that occur outside of the project area, but that could potentially be directly or indirectly affected by activities in the project area. However, determining the likelihood and extent of effects a project may have on trust resources typically requires gathering additional site-specific (e.g., vegetation/species surveys) and project-specific (e.g., magnitude and timing of proposed activities) information.

Below is a summary of the project information you provided and contact information for the USFWS office(s) with jurisdiction in the defined project area. Please read the introduction to each section that follows (Endangered Species, Migratory Birds, USFWS Facilities, and NWI Wetlands) for additional information applicable to the trust resources addressed in that section.

NOT FOR CONSULTATION

Location

Solano County, California

Local office

Sacramento Fish And Wildlife Office

(916) 414-6600
(916) 414-6713

Federal Building
2800 Cottage Way, Room W-2605
Sacramento, CA 95825-1846

Endangered species

This resource list is for informational purposes only and does not constitute an analysis of project level impacts.

The primary information used to generate this list is the known or expected range of each species. Additional areas of influence (AOI) for species are also considered. An AOI includes areas outside of the species range if the species could be indirectly affected by activities in that area (e.g., placing a dam upstream of a fish population, even if that fish does not occur at the dam site, may indirectly impact the species by reducing or eliminating water flow downstream). Because species can move, and site conditions can change, the species on this list are not guaranteed to be found on or near the project area. To fully determine any potential effects to species, additional site-specific and project-specific information is often required.

Section 7 of the Endangered Species Act **requires** Federal agencies to "request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action" for any project that is conducted, permitted, funded, or licensed by any Federal agency. A letter from the local office and a species list which fulfills this requirement can **only** be obtained by requesting an official species list from either the Regulatory Review section in IPaC (see directions below) or from the local field office directly.

For project evaluations that require USFWS concurrence/review, please return to the IPaC website and request an official species list by doing the following:

1. Draw the project location and click CONTINUE.
2. Click DEFINE PROJECT.
3. Log in (if directed to do so).
4. Provide a name and description for your project.
5. Click REQUEST SPECIES LIST.

Listed species[1] and their critical habitats are managed by the Ecological Services Program of the U.S. Fish and Wildlife Service (USFWS) and the fisheries division of the National Oceanic and Atmospheric Administration (NOAA Fisheries[2]).

Species and critical habitats under the sole responsibility of NOAA Fisheries are **not** shown on this list. Please contact NOAA Fisheries for species under their jurisdiction.

NOT FOR CONSULTATION

1. Species listed under the Endangered Species Act are threatened or endangered; IPaC also shows species that are candidates, or proposed, for listing. See the listing status page for more information.
2. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

The following species are potentially affected by activities in this location:

Birds

NAME	STATUS

California Clapper Rail Rallus longirostris obsoletus — Endangered
No critical habitat has been designated for this species.
https://ecos.fws.gov/ecp/species/4240

Northern Spotted Owl Strix occidentalis caurina — Threatened
There is **final** critical habitat for this species. Your location is outside the critical habitat.
https://ecos.fws.gov/ecp/species/1123

Reptiles

NAME	STATUS
Giant Garter Snake Thamnophis gigas No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/4482	Threatened

Amphibians

NAME	STATUS
California Red-legged Frog Rana draytonii There is **final** critical habitat for this species. Your location is outside the critical habitat. https://ecos.fws.gov/ecp/species/2891	Threatened
California Tiger Salamander Ambystoma californiense There is **final** critical habitat for this species. Your location is outside the critical habitat. https://ecos.fws.gov/ecp/species/2076	Threatened

Fishes

NAME	STATUS
Delta Smelt Hypomesus transpacificus There is **final** critical habitat for this species. Your location is outside the critical habitat. https://ecos.fws.gov/ecp/species/321	Threatened

Insects

NAME	STATUS
Delta Green Ground Beetle Elaphrus viridis There is **final** critical habitat for this species. Your location is outside the critical habitat. https://ecos.fws.gov/ecp/species/2319	Threatened

NOT FOR CONSULTATION

NAME	STATUS
Valley Elderberry Longhorn Beetle Desmocerus californicus dimorphus There is **final** critical habitat for this species. Your location is outside the critical habitat. https://ecos.fws.gov/ecp/species/7850	Threatened

Crustaceans

NAME	STATUS
California Freshwater Shrimp Syncaris pacifica No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/7903	Endangered
Conservancy Fairy Shrimp Branchinecta conservatio There is **final** critical habitat for this species. Your location is outside the critical habitat. https://ecos.fws.gov/ecp/species/8246	Endangered
Vernal Pool Fairy Shrimp Branchinecta lynchi There is **final** critical habitat for this species. Your location is outside the critical habitat. https://ecos.fws.gov/ecp/species/498	Threatened

Flowering Plants

NAME	STATUS
Contra Costa Goldfields Lasthenia conjugens There is **final** critical habitat for this species. Your location is outside the critical habitat. https://ecos.fws.gov/ecp/species/7058	Endangered
Showy Indian Clover Trifolium amoenum No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/6459	Endangered

Critical habitats

Potential effects to critical habitat(s) in this location must be analyzed along with the endangered species themselves.

THERE ARE NO CRITICAL HABITATS AT THIS LOCATION.

Migratory birds

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Certain birds are protected under the Migratory Bird Treaty Act[1] and the Bald and Golden Eagle Protection Act[2].

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats should follow appropriate regulations and consider implementing appropriate conservation measures, as described below.

1. The Migratory Birds Treaty Act of 1918.
2. The Bald and Golden Eagle Protection Act of 1940.

Additional information can be found using the following links:

- Birds of Conservation Concern http://www.fws.gov/birds/management/managed-species/birds-of-conservation-concern.php
- Measures for avoiding and minimizing impacts to birds http://www.fws.gov/birds/management/project-assessment-tools-and-guidance/conservation-measures.php
- Nationwide conservation measures for birds http://www.fws.gov/migratorybirds/pdf/management/nationwidestandardconservationmeasures.pdf

The birds listed below are birds of particular concern either because they occur on the USFWS Birds of Conservation Concern (BCC) list or warrant special attention in your project location. To learn more about the levels of concern for birds on your list and how this list is generated, see the FAQ below. This is not a list of every bird you may find in this location, nor a guarantee that every bird on this list will be found in your project area. To see exact locations of where birders and the general public have sighted birds in and around your project area, visit the E-bird data mapping tool (Tip: enter your location, desired date range and a species on your list). For projects that occur off the Atlantic Coast, additional maps and models detailing the relative occurrence and abundance of bird species on your list are available. Links to additional information about Atlantic Coast birds, and other important information about your migratory bird list, including how to properly interpret and use your migratory bird report, can be found below.

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, click on the PROBABILITY OF PRESENCE SUMMARY at the top of your list to see when these birds are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON (IF A BREEDING SEASON IS INDICATED FOR A BIRD ON YOUR LIST, THE BIRD MAY BREED IN YOUR PROJECT AREA SOMETIME WITHIN THE TIMEFRAME SPECIFIED, WHICH IS A VERY LIBERAL ESTIMATE OF THE DATES INSIDE WHICH THE BIRD BREEDS ACROSS ITS ENTIRE RANGE. "BREEDS ELSEWHERE" INDICATES

NOT FOR CONSULTATION

THAT THE BIRD DOES NOT LIKELY BREED IN YOUR PROJECT AREA.)

Allen's Hummingbird Selasphorus sasin — Breeds Feb 1 to Jul 15
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/9637

Bald Eagle Haliaeetus leucocephalus — Breeds Jan 1 to Aug 31
This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.

Burrowing Owl Athene cunicularia — Breeds Mar 15 to Aug 31
This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA
https://ecos.fws.gov/ecp/species/9737

California Thrasher Toxostoma redivivum — Breeds Jan 1 to Jul 31
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Clark's Grebe Aechmophorus clarkii — Breeds Jan 1 to Dec 31
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Common Yellowthroat Geothlypis trichas sinuosa — Breeds May 20 to Jul 31
This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA
https://ecos.fws.gov/ecp/species/2084

Golden Eagle Aquila chrysaetos — Breeds Jan 1 to Aug 31
This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.
https://ecos.fws.gov/ecp/species/1680

Lawrence's Goldfinch Carduelis lawrencei — Breeds Mar 20 to Sep 20
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/9464

Lewis's Woodpecker Melanerpes lewis — Breeds Apr 20 to Sep 30
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/9408

NOT FOR CONSULTATION

Long-billed Curlew Numenius americanus — Breeds elsewhere
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/5511

Nuttall's Woodpecker Picoides nuttallii — Breeds Apr 1 to Jul 20
This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA
https://ecos.fws.gov/ecp/species/9410

Oak Titmouse Baeolophus inornatus — Breeds Mar 15 to Jul 15
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/9656

Rufous Hummingbird selasphorus rufus — Breeds elsewhere
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/8002

Short-billed Dowitcher Limnodromus griseus — Breeds elsewhere
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/9480

Song Sparrow Melospiza melodia — Breeds Feb 20 to Sep 5
This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA

Spotted Towhee Pipilo maculatus clementae — Breeds Apr 15 to Jul 20
This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA
https://ecos.fws.gov/ecp/species/4243

Tricolored Blackbird Agelaius tricolor — Breeds Mar 15 to Aug 10
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/3910

Willet Tringa semipalmata — Breeds elsewhere
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Wrentit Chamaea fasciata — Breeds Mar 15 to Aug 10
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

NOT FOR CONSULTATION

Yellow-billed Magpie Pica nuttalli — Breeds Apr 1 to Jul 31

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/9726

Probability of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read and understand the FAQ "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence (▪)

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is 0.25/0.25 = 1; at week 20 it is 0.05/0.25 = 0.2.
3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

To see a bar's probability of presence score, simply hover your mouse cursor over the bar.

Breeding Season (▪)
Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

Survey Effort (|)
Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

To see a bar's survey effort range, simply hover your mouse cursor over the bar.

No Data (–)
A week is marked as having no data if there were no survey events for that week.

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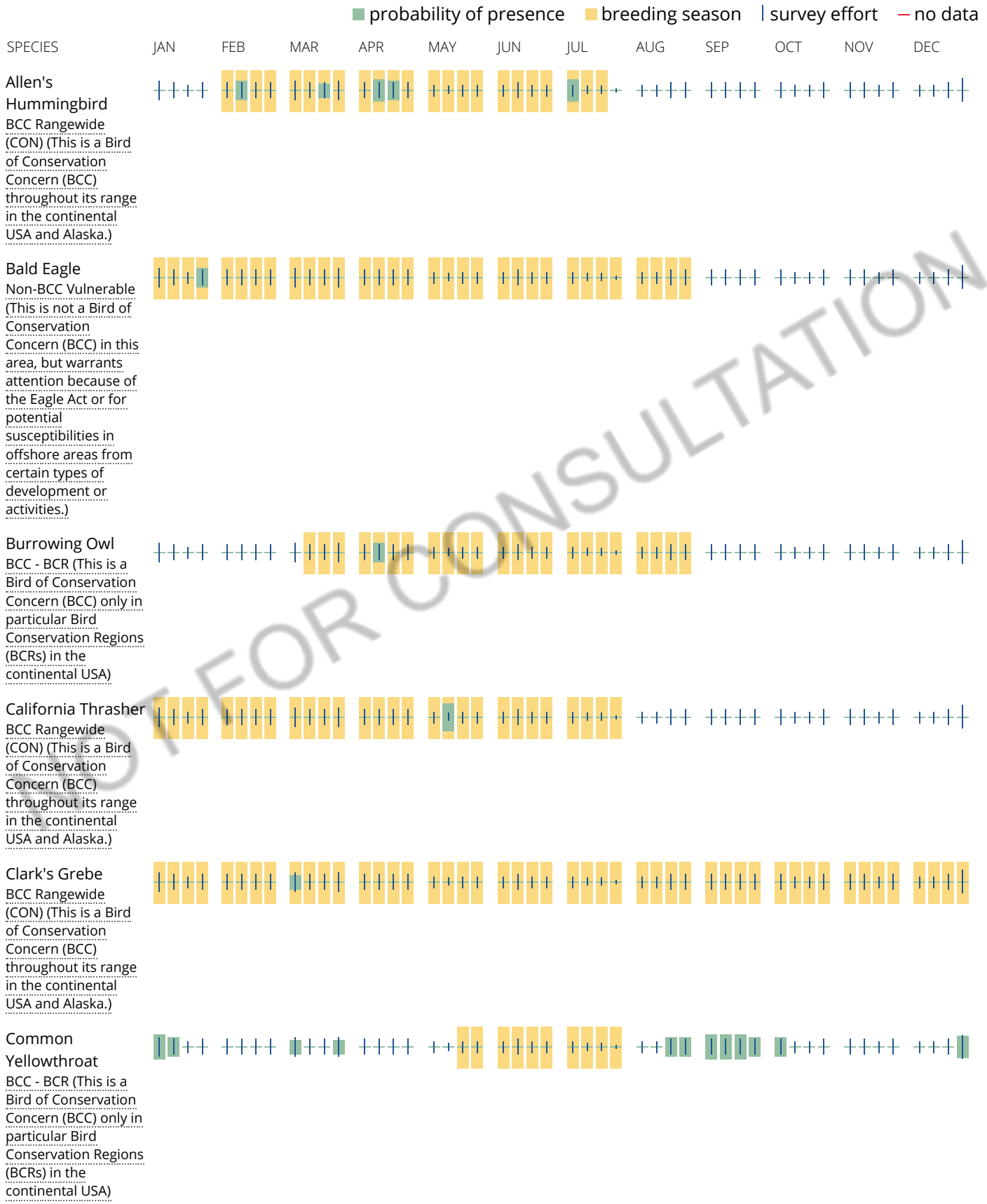
Survey Timeframe

Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.



NOT FOR CONSULTATION

Golden Eagle
Non-BCC Vulnerable (This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.)

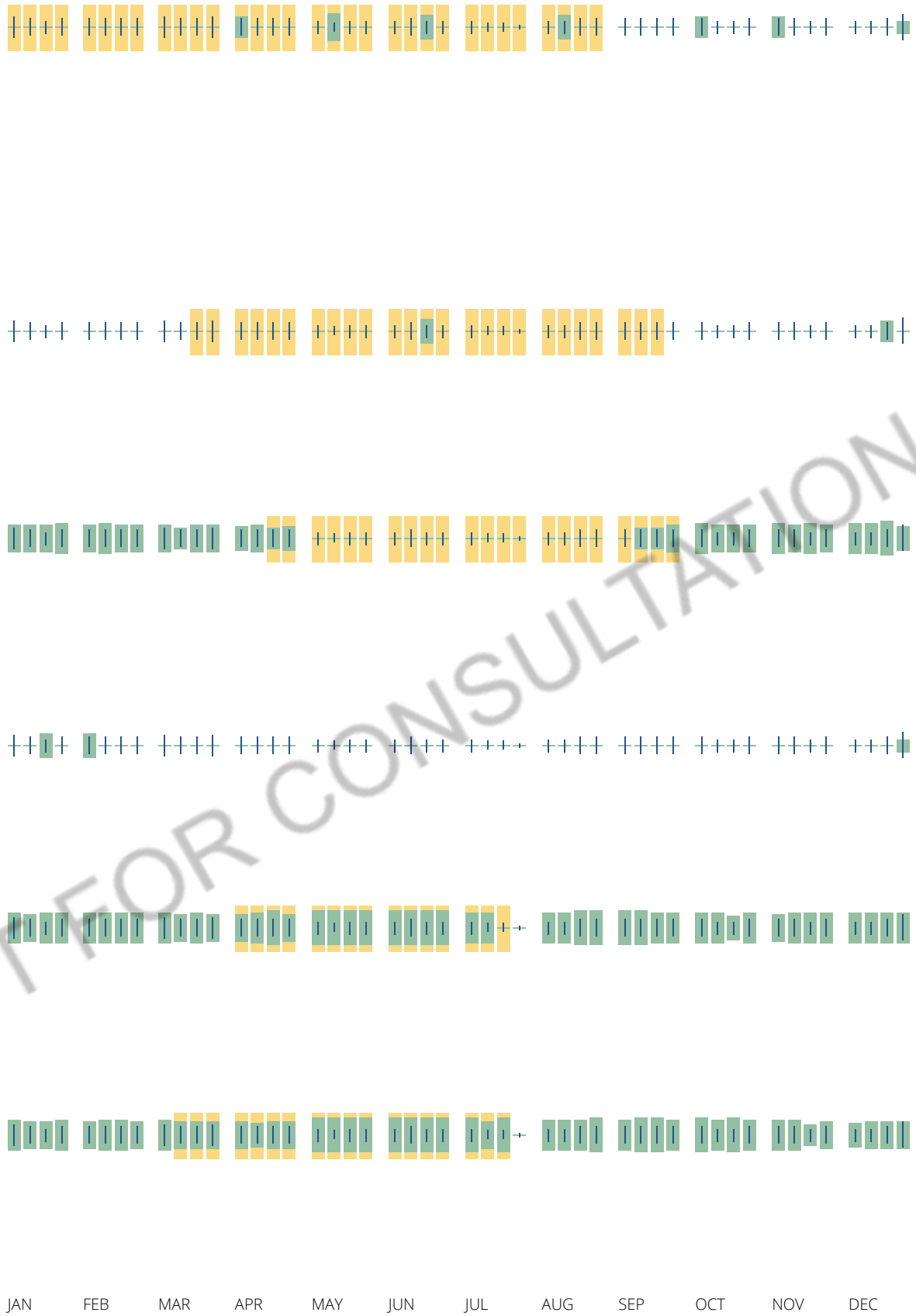
Lawrence's Goldfinch
BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)

Lewis's Woodpecker
BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)

Long-billed Curlew
BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)

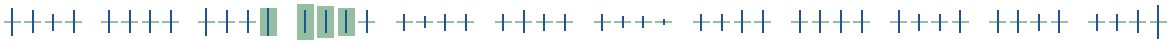
Nuttall's Woodpecker
BCC - BCR (This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA)

Oak Titmouse
BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)



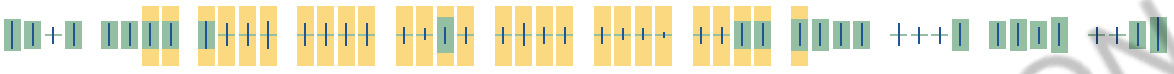
NOT FOR CONSULTATION

Rufous Hummingbird
BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)

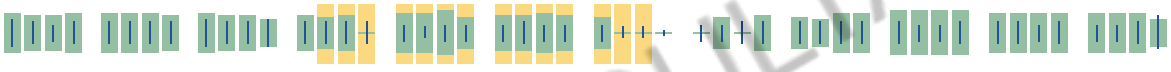


Short-billed Dowitcher
BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)

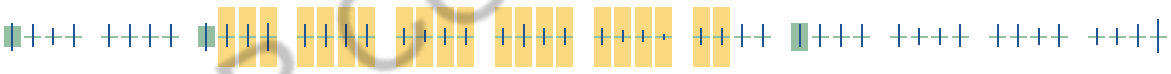
Song Sparrow
BCC - BCR (This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA)



Spotted Towhee
BCC - BCR (This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA)

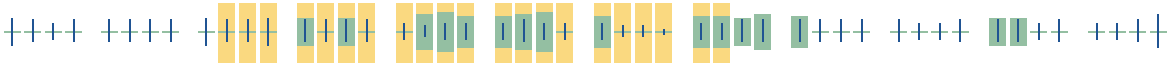


Tricolored Blackbird
BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)



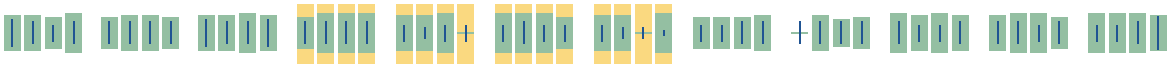
Willet
BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)

Wrentit
BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)



NOT FOR CONSULTATION

Yellow-billed Magpie
BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)



Tell me more about conservation measures I can implement to avoid or minimize impacts to migratory birds.

Nationwide Conservation Measures describes measures that can help avoid and minimize impacts to all birds at any location year round. Implementation of these measures is particularly important when birds are most likely to occur in the project area. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is a very helpful impact minimization measure. To see when birds are most likely to occur and be breeding in your project area, view the Probability of Presence Summary. Additional measures and/or permits may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

What does IPaC use to generate the migratory birds potentially occurring in my specified location?

The Migratory Bird Resource List is comprised of USFWS Birds of Conservation Concern (BCC) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the Avian Knowledge Network (AKN). The AKN data is based on a growing collection of survey, banding, and citizen science datasets and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle (Eagle Act requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the E-bird Explore Data Tool.

What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?

The probability of presence graphs associated with your migratory bird list are based on data provided by the Avian Knowledge Network (AKN). This data is derived from a growing collection of survey, banding, and citizen science datasets .

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

How do I know if a bird is breeding, wintering, migrating or present year-round in my project area?

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may refer to the following resources: The Cornell Lab of Ornithology All About Birds Bird Guide, or (if you are unsuccessful in locating the bird of interest there), the Cornell Lab of Ornithology Neotropical Birds guide. If a bird on your migratory bird species list has a breeding season associated with it, if that bird does occur in your project area, there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

What are the levels of concern for migratory birds?

NOT FOR CONSULTATION

Migratory birds delivered through IPaC fall into the following distinct categories of concern:

1. "BCC Rangewide" birds are Birds of Conservation Concern (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);
2. "BCC - BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and
3. "Non-BCC - Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the Eagle Act requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).

Although it is important to try to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially eagles and BCC species of rangewide concern. For more information on conservation measures you can implement to help avoid and minimize migratory bird impacts and requirements for eagles, please see the FAQs for these topics.

Details about birds that are potentially affected by offshore projects

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the Northeast Ocean Data Portal. The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf project webpage.

Bird tracking data can also provide additional details about occurrence and habitat use throughout the year, including migration. Models relying on survey data may not include this information. For additional information on marine bird tracking data, see the Diving Bird Study and the nanotag studies or contact Caleb Spiegel or Pam Loring.

What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need to obtain a permit to avoid violating the Eagle Act should such impacts occur.

Proper Interpretation and Use of Your Migratory Bird Report

The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated, and see options for identifying what other birds may be in your project area, please see the FAQ “What does IPaC use to generate the migratory birds potentially occurring in my specified location”. Please be aware this report provides the “probability of presence” of birds within the 10 km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please also look carefully at the survey effort (indicated by the black vertical bar) and for the existence of the “no data” indicator (a red horizontal bar). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list helps you know what to look for to confirm presence, and helps guide you in knowing when to implement conservation measures to avoid or minimize potential impacts from your project activities, should presence be confirmed. To learn more about conservation measures, visit the FAQ “Tell me about conservation measures I can implement to avoid or minimize impacts to migratory birds” at the bottom of your migratory bird trust resources page.

NOT FOR CONSULTATION

Facilities

National Wildlife Refuge lands

Any activity proposed on lands managed by the National Wildlife Refuge system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

THERE ARE NO REFUGE LANDS AT THIS LOCATION.

Fish hatcheries

THERE ARE NO FISH HATCHERIES AT THIS LOCATION.

Wetlands in the National Wetlands Inventory

Impacts to NWI wetlands and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local U.S. Army Corps of Engineers District.

THERE ARE NO KNOWN WETLANDS AT THIS LOCATION.

Data limitations

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

Data exclusions

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tuberficid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

Data precautions

NOT FOR CONSULTATION

Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.

NOT FOR CONSULTATION

APPENDIX F

CULTURAL RESOURCES ASSESSMENT

CULTURAL RESOURCE ASSESSMENT

FOR THE LAGOON VALLEY SELF STORAGE

PROJECT, CITY OF VACAVILLE

SOLANO COUNTY CALIFORNIA

Prepared by

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Prepared for

Lagoon Valley Self Storage LLC
5701 Lonetree Blvd #102
Rocklin, CA 95765

July 2018
(Job #18-035)

INTRODUCTION

The project area lies on the west side of Interstate 80 north of the Pena Adobe Road exit, and on the east side of Cherry Glen Road on APN 127-04-0140 in the City of Vacaville, CA. The project is a private storage facility and will include construction of a manager's office and residence, construction of seven buildings of storage units, a large parking lot for vehicle storage.

The project area lies on a portion of the Los Putos land grant, mapped on in the on the Fairfield North 7.5-minute USGS topographic quadrangle (Figures 1 and 2).

The current project involved collection of background data, including a record search through the Northwest Information Center of the California Historical Resources Information System, and a complete pedestrian survey of the project area. Due to the proximity of a number of prehistoric period resources, Peak & Associates also conducted backhoe trenching throughout the proposed facility to ensure there were no buried cultural materials.

Melinda Peak served as principal investigator for the current study, preparing the report, with Michael Lawson completing the fieldwork (resumes, Appendix 1).

STATE REGULATIONS

State historic preservation regulations affecting this project include the statutes and guidelines contained in the California Environmental Quality Act (CEQA; Public Resources Code sections 21083.2 and 21084.1 and sections 15064.5 and 15126.4 (b) of the CEQA Guidelines). CEQA Section 15064.5 requires that lead agencies determine whether projects may have a significant effect on archaeological and historical resources. Public Resources Code Section 21098.1 further cites: A project that may cause a substantial adverse change in the significance of an historical resource is a project that may have a significant effect on the environment.

A "historical resource" includes, but is not limited to, any object, building, structure, site, area, place, record or manuscript that is historically or archaeologically significant (Public Resources Code section 5020.1).

Advice on procedures to identify such resources, evaluate their importance, and estimate potential effects is given in several agency publications such as the series produced by the Governor's Office of Planning and Research (OPR), *CEQA and Archaeological Resources*, 1994. The technical advice series produced by OPR strongly recommends that Native American concerns and the concerns of other interested persons and corporate entities, including, but not limited to, museums, historical commissions, associations and societies be solicited as part of the process of cultural resources inventory. In addition, California law protects Native American burials, skeletal remains, and associated grave goods regardless of the antiquity and provides for the sensitive treatment and disposition of those remains (California Health and Safety Code Section 7050.5, California Public Resources Codes Sections 5097.94 et al).

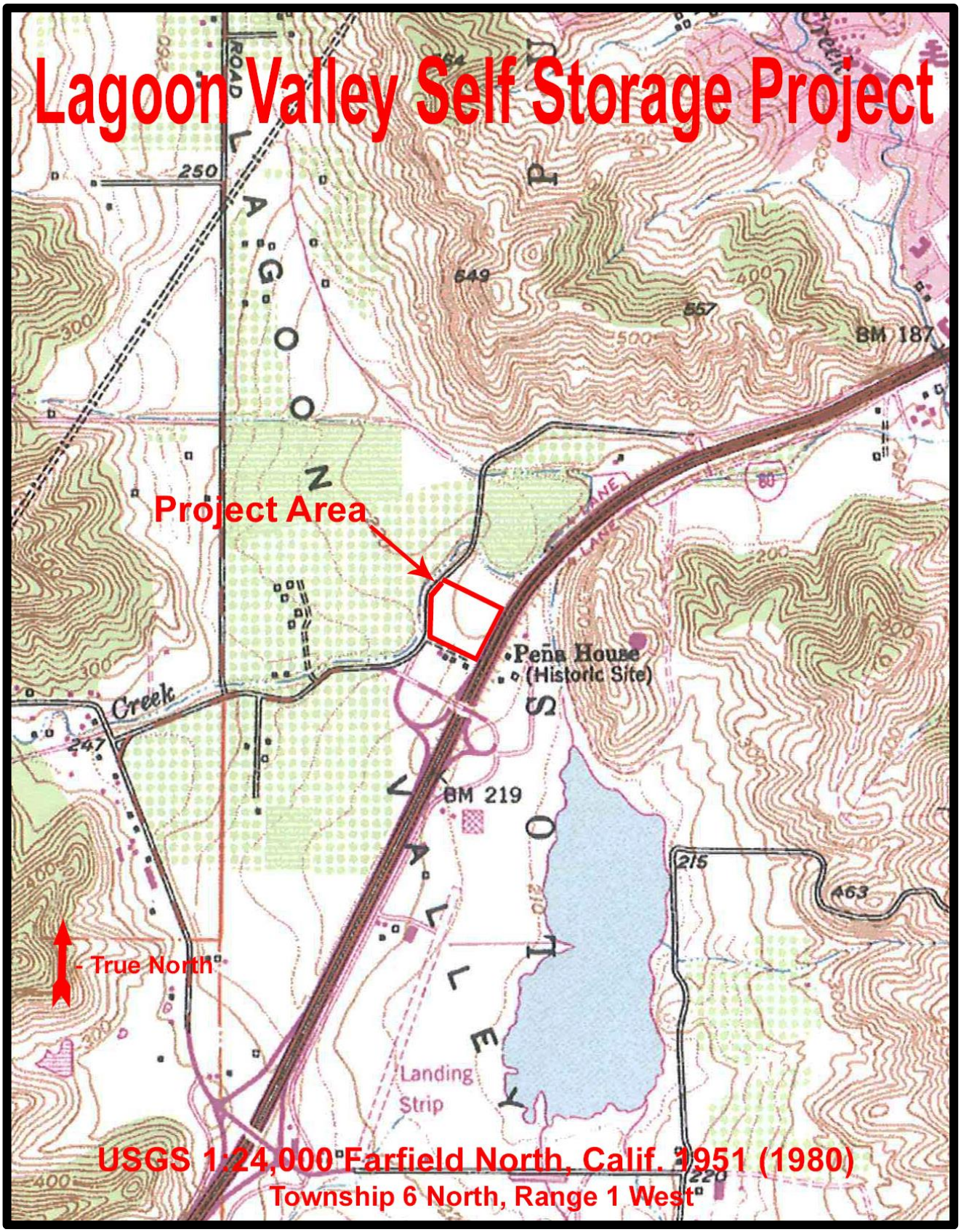
Lagoon Valley Self Storage Project
LAGOON VALLEY ROAD
Project Area
Pena House
(Historic Site)
BM 219
BM 187
Creek
Landing
Strip
True North
USGS 1:24,000 Farfield North, Calif. 1951 (1980)
Township 6 North, Range 1 West

Figure 1

1 ARCHITECTURAL SITE
SCALE 1" = 30'-0"

AREA SUMMARY

PROPOSED BUILDING AREA	
BUILDING A OFFICE/MANAGERS UNIT	1,890 SF
CONDITIONED SPACE	1,890 SF
BUILDING B	4,700 SF
BUILDING C	8,905 SF
BUILDING D	12,300 SF
BUILDING E	6,073 SF
BUILDING F	12,550 SF
BUILDING G	12,600 SF
BUILDING H	13,125 SF
	70,254 SF
Grand total	72,144 SF

PRAXIS PROPERTIES STORAGE FACILITIY

VACAVILLE, CA
APN: 127-04-0140

DOMUM
888-351-AAC1 - 6532 Lonetree Blvd, Suite 102 - Rocklin, CA 95765 - info@domum.design

Stamp

Proj. No: 2015.000 Template
Drawn By: Author
Reviewed Checker

Issue/Revision

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SITE PLAN

Figure 2

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The California Register of Historical Resources (Public Resources Code Section 5020 et seq.)

The State Historic Preservation Office (SHPO) maintains the California Register of Historical Resources (CRHR). Properties listed, or formally designated as eligible for listing, on the National Register of Historic Places are automatically listed on the CRHR, as are State Landmarks and Points of Interest. The CRHR also includes properties designated under local ordinances or identified through local historical resource surveys.

For the purposes of CEQA, an historical resource is a resource listed in, or determined eligible for listing in the California Register of Historical Resources. When a project will impact a site, it needs to be determined whether the site is an historical resource. The criteria are set forth in Section 15064.5(a) (3) of the CEQA Guidelines, and are defined as any resource that does any of the following:

A. Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;

B. Is associated with the lives of persons important in our past;

C. Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or

D. Has yielded, or may be likely to yield, information important in prehistory or history.

In addition, the CEQA Guidelines, Section 15064.5(a) (4) states:

The fact that a resource is not listed in, or determined to be eligible for listing in the California Register of Historical Resources, not included in a local register of historical resources (pursuant to section 5020.1(k) of the Public Resources Code), or identified in an historical resources survey (meeting the criteria in section 5024.1(g) of the Public Resources Code) does not preclude a lead agency from determining that the resource may be an historical resource as defined in Public Resources Code section 5020.1(j) or 5024.1.

California Health and Safety Code Sections 7050.5, 7051, And 7054

These sections collectively address the illegality of interference with human burial remains, as well as the disposition of Native American burials in archaeological sites. The law protects such remains from disturbance, vandalism, or inadvertent destruction, and establishes procedures to be implemented if Native American skeletal remains are discovered during construction of a project, including the treatment of remains prior to, during, and after evaluation, and reburial procedures.

California Public Resources Code Section 15064.5(e)

This law addresses the disposition of Native American burials in archaeological sites and protects such remains from disturbance, vandalism, or inadvertent destruction. The section establishes procedures to be implemented if Native American skeletal remains are discovered during construction of a project and establishes the Native American Heritage Commission as the entity responsible to resolve disputes regarding the disposition of such remains.

Assembly Bill 52

Assembly Bill (AB) 52 establishes a formal consultation process for California tribes as part of CEQA and equates significant impacts on tribal cultural resources with significant environmental impacts. AB 52 defines a "California Native American Tribe" as a Native American tribe located in California that is on the contact list maintained by the Native American Heritage Commission. AB 52 requires formal consultation with California Native American Tribes prior to determining the level of environmental document if a tribe has requested to be informed by the lead agency of proposed projects. AB 52 also requires that consultation address project alternatives, mitigation measures, for significant effects, if requested by the California Native American Tribe, and that consultation be considered concluded when either the parties agree to measures to mitigate or avoid a significant effect, or the agency concludes that mutual agreement cannot be reached. Under AB 52, such measures shall be recommended for inclusion in the environmental document and adopted mitigation monitoring program if determined to avoid or lessen a significant impact on a tribal cultural resource.

CULTURAL SETTING

Ethnography

The Patwin occupied the southern Sacramento Valley west of the Sacramento River from the town of Princeton, north to Colusa, south to San Pablo and Suisun bays. Patwin territory extended approximately 90 miles north to south and 40 miles east to west. Distinction is made between the River Patwin, who resided in large villages near the Sacramento River, especially between Colusa and Knights Landing, and the Hill Patwin, whose villages were situated in the small valleys along the lower hills of the Vaca Mountains and Coast Range, with concentrations in Long, Indian, Bear, Capay, Cortina and Napa valleys (Johnson 1978:350; Powers 1877:218). The term "Patwin" refers to the people belonging to the many small contiguous independent political entities in this area who shared linguistic and cultural similarities. Hill and River Patwin dialects are grouped into a North Patwin language, separate from South Patwin, spoken by people who live near present-day Knight's Landing and Suisun. Together, these are classified as southern Wintuan and belonging to the Penutian language family as do the languages of the Miwok and Costanoan peoples (Johnson 1978:350-359; Kroeber 1925:351-354).

Politically, the Patwin were organized in small tribes or tribelets, each consisting of a primary village with satellite villages. Tribelets were autonomous and differed from other such units in minor cultural variations. Dialects might encompass several tribelets. Territories were vaguely defined but included fishing and gathering areas used by the group. In each village, the leader or chief administered subsistence ventures, such as hunting or gathering, and presided over ceremonies. Social and economic activities were divided among families within a village, with certain families responsible for different specialties such as trapping ducks, collecting salt, making foot drums, or performing particular dances or shamanistic rituals (Johnson 1978:354-355).

Patwin territory includes the riverine environment of tule marshes, vines and brush near the Sacramento River, the flat grasslands dotted with oak groves, and the hills and small valleys of the Coast range. The villages situated on low bluffs near the river were often very large; in 1848, General Bidwell estimated at least 1000 residents at *Koru*, near Colusa (Powers 1877:219). In the hills, the Patwin settled in the small valleys, particularly along Cache and Putah creeks, where large populations were reported. The plains were least hospitable; there, villages were sparse because of winter flooding and lack of reliable water sources during the dry months. As Powers described:

> *In winter, there was too much water on them, in summer none at all, and the aborigines had no means of procuring an artificial supply. Besides there was no wood on them, and the overflowed portions in early summer breed millions of accursed gnats, which render human life a burden and a weariness. Hence, they were compelled to live beside water-sources, except during certain limited periods in the winter, then they established hunting-camps out on the plains* (Powers 1877:219).

Kroeber noted that the Patwin responded to these seasonal changes by shifting their habitation sites:

> *The valley people evidently had their permanent villages on the river itself -- that is, in the marsh belt -- but appear to have left this during the dry half of the year to live on the adjacent plains, mostly by the side of tributaries. The upland people built their winter homes where the streams issue on these creeks, and in summer moved away from the main water courses into the hills or mountains* (Kroeber 1925:354).

Within a village, the Patwin constructed earth-covered semi-subterranean structures. The Hill Patwin used a circular floor plan while the River Patwin favored an elliptical shape. Four types of building occurred in a predictable pattern: the ceremonial dance house was placed a short distance to the north or south of the village, the sudatory or sweat house was positioned to the east or west of the dance house, and the menstrual hut was built on the edge of the village, farthest from the dance house. Family dwellings could be erected anywhere within the community. Family lodges were built by one's paternal relatives while the other structures were the product of a communal effort. They used readily available materials, forming a framework of saplings, and covering the walls and roof with mud and brush (Johnson 1978:357-358; Powers 1877:220-221).

Natural resources flourished in Patwin territory. They gathered seeds and plant foods and hunted game animals on the plains, shot or netted ducks and other migratory water fowl in the thick tule marshes, and netted salmon and other fish in the rivers and streams. Some of these activities were conducted by groups or families assigned to particular resource areas by a village chief.

Acorns were a staple in the Patwin diet. Two types of Valley oak and rarely, live oak acorns, were gathered at communally-owned groves (Johnson 1978:355). The common practice was to store abundant quantities of acorns in tall granaries to assure against hunger in years of poor harvest. Kroeber observed a Patwin granary more than eight feet tall and three feet in diameter (Heizer and Elsasser 1980:99). Women prepared the bitter crop by pulverizing the acorns, then leaching out the bitter tannic acid before making bread or acorn soup. At privately-owned gathering tracts on the plains, families gathered seeds, including sunflower, alfilaria, clover, bunchgrass, wild oat and yellow-blossom. The Patwin also collected a variety of bulbs, nuts, roots and berries. These included buckeye, pine nuts, juniper berries, manzanita berries, blackberries, wild grapes, brodiaea bulbs, and tule roots. To obtain salt, the Patwin scraped off rocks that were found near Cortina, burned a grass that grew on the plains, or obtained it in trade from the neighboring Pomo (Johnson 1978:355).

King salmon, silver salmon and steelhead trout that run from the ocean to freshwater rivers and streams were an important diet item. Explorers observed Patwin fishing for salmon with a boom net in 1854 (Heizer and Elsasser 1980: Figure 37). The Patwin also caught smaller fish and collected mussels from the river bottom. They attracted wild ducks by setting out realistic decoys, then drove the fowl into large nets stretched above the marshes. Hunters also netted mud hens, geese and quail. The Suisun tribelet pursued waterfowl in tule rafts (Powers 1877:220). The Patwin hunted large game, such as tule elk, deer, antelope and bear, and took many varieties of small animals, reptiles, insects and birds either to eat or to use for ceremonial and practical materials (Johnson 1978:355).

The ceremonial life of the Patwin was centered on the Kuksu cult system, which features one or more secret societies, each with its own dances and rituals. The Kuksu cult occurs among several north central California tribes, but it was more elaborate among the Patwin who possessed three secret societies: the Kuksu, ghost and Hesi types, each with a slightly different purpose. The ghost society stressed initiation, the Kuksu emphasized curing and shamanistic functions, and the Hesi elaborated on ceremonial dance (Johnson 1978:353). In addition to ritual duties, shamans were called upon to heal the sick by applying native medicines or by sucking out the offending spiritual cause of the illness. The Patwin generally buried their dead, although the tribelets furthest south may have cremated the deceased. The Patwin near Colusa bent the body, wrapped it with strings of shell money, and covered it with an animal skin secured with ropes. They interred the corpse with material goods in a grave situated within a village or within 100 yards of a dwelling or dance house (Kroeber 1925:359-361).

Historical accounts of the Patwin include the early mission registers of baptisms, marriages and deaths of Indians taken to Mission Dolores and Mission San Jose as early as 1800. In 1823, Mission San Francisco Solano was established in nearby Sonoma and it continued the missions'

work until about 1832-1836, when all the missions were secularized. During this time, several Mexican land grants were awarded and large ranchos were established on Putah and Cache creeks (Johnson 1978:351).

Pre-contact population is difficult to estimate, but a survey of various sources seems to indicate that the Patwin may have numbered 4000 before their first encounter with non-Indians. The Patwin suffered from a succession of devastating impacts to their numbers: missionization, punitive military expeditions, and fatal confrontations with ranchers took their toll on the populace. John Work's party of trappers from the Hudson's Bay Company came down the Sacramento River in 1832, returning up the river in 1833. They unintentionally introduced a deadly disease to native California and, in their wake, a malaria epidemic swept through the Sacramento Valley. Just four years later, in 1837, smallpox raged through the villages and, as a result of these diseases, up to 75 percent of the Patwin died (Cook 1955). Those who survived these tragedies eventually settled on small reservations or worked as ranch laborers. Throughout the 1800s and 1900s, the population decreased; in 1972, the Bureau of Indian Affairs counted only eleven Patwin in the entire territory. Three reservations--Colusa, Cortina and Rumsey--remain active; they are occupied primarily by descendants of Wintun and other groups (Johnson 1978:352).

Prehistory

Humans are believed to have resided in Solano County for the past 13,000 years. Archeologists who have studied these past cultures have uncovered evidence of widespread activities that allowed them to divide these previous 13,000 years into periods or phases based on the kinds of subsistence behaviors practiced.

Six periods have been identified with locally defined phases and regional cultures added to the mix. The six periods are (Milliken et al. in Jones and Klar 2007):

- Early Holocene (Lower Archaic), 8000 - 3500 B.C
- The Early Middle Period (Middle Archaic), 3500 B.C. - 500 B.C.
- The Lower Middle Period (Initial Upper Archaic), 500 B.C. – A.D. 430
- Upper Middle Period (Late Upper Archaic), A.D. 430 – A.D. 1050
- Initial Late Period (Lower Emergent), A.D. 1050 – A.D. 1550
- Terminal Late Period: Protohistoric Ambiguities, A.D. 1550 - 1775

Early Holocene (Lower Archaic), 8000 B.C. – 3500 B.C.
Few Bay Area sites have been discovered to represent this time period. A pattern of generalized mobile foraging with artifacts such as the milling slab and hand stone (mano and metate), and large wide stem and leaf shaped projectile points common.

The Early Middle Period (Middle Archaic), 3500 B.C. – 500 B.C.
New technological advances involving the use of the mortar and pestle first appear during this period as does the first evidence for the manufacture of shell beads. Researchers suggest increased sedentism occurred as did an expansion in trade.

The Lower Middle Period (Initial Upper Archaic), 500 B.C. – A.D. 430
A dramatic shift in the types of shell beads being manufactured is observed at site with components dating to this period. New types of bone tools, such as the barbless fish hooks, first appeared indicating an increasing exploitation of the immediate environment, probably brought on by increasing populations pressures.

Upper Middle Period (Late Upper Archaic), A.D. 430 – A.D. 1050
A.D. 430 witnessed another dramatic shift in the selection of bead styles and the way people were buried. What caused this dramatic cultural upheaval is uncertain. The formally popular style of shell beads became obsolete with new, smaller varieties becoming widespread.

Initial Late Period (Lower Emergent), A.D. 1050 – A.D. 1550
Populations continued to increase as did resource exploitation and with it a whole new level of the manufacture of numerous, finely-made grave goods that were buried with the dead. Social stratification can also be observed in the differing amounts of grave goods interred with a particular individual. The bow and arrow appeared in the area around A.D. 1250 causing among other things, a shift in the procurement of rock types and sources used in the manufacture in this new technological innovation.

Terminal Late Period: Protohistoric Ambiguities, A.D. 1550 – 1775
Once again, the style of shell beads abruptly changed throughout the Bay Area. Grave goods became less common and some researchers have suggested that populations were faced with increasing stress by over population and perhaps the early introduction of European-based diseases.

Historic Context

The project area lies about three miles north of the boundary of the Los Putos land grant a 44,384-acre (179.616 km^2) Mexican land grant in present day Solano County awarded in 1843 by Governor Manuel Micheltorena to Juan Felipe Peña and Juan Manuel Vaca. Both Peña and Vaca came from New Mexico to California with the Workman-Rowland party in 1841.

The restored Peña adobe is located near present-day Vacaville. The Los Putos name comes from the nearby Putah Creek (formerly Rio Los Putos). The Peñas and Vacas used local Native Americans as workers at their ranches (Palumbo 1963, Federal Census 1880).

In 1888, a publication detailed the early local history:

> The aboriginal population of the Vacaville District was composed chiefly of Indians and grizzly bears; and to the date of their entrance, history runneth not. The disappearance of the former is nearly as obscure as its origin, but tradition has it that their ranks were decimated by disease and by the inroads of Mexican soldiery; and the remnant was carried to the old mission establishment at Sonoma for duty and civilization. Certain it is that the first white settlers who came to the district

> found only the grizzlies to contest their rights of possession as conveyed by Mexican grants. It is said that the nearest Indian rancherias were in Capay valley twenty-five miles away (Wickman 1888:1).

Early census records do not indicate the presence of any Native Americans in the region (1850 and 1860 federal census; 1852 California census). This may be a reflection of the lack of Native American individuals in the region, or more likely, the failure of the census takers to interview and include these peoples in their lists. Native American populations in the region may have been depleted by the malaria epidemic of the early 1830s, removed to missions, gathered and used as servants at the Peña and Vaca residences, or some combination of these impacts, resulting in no listings in the census records.

The agricultural value of the land was discovered early in time, and the land was first used for grazing. Grazing gave way to fruit growing and other cultivation (Thompson and West 1878).

With the 1930s construction of the highway, later expanded to a freeway by 1968 adjacent to the property, the region has become residential and commercial in nature, with the project area appearing to remain open space.

RESEARCH

A record search was conducted for the project area at the Northwest Information Center of the California Historical Resources Information System on June 6, 2018 (RS#17-2618, Appendix 2).

No prehistoric or historic period sites have been recorded within the project area. Two sites lie nearby, on the other side of Interstate 80. A number of studies have been conducted at the Pena Adobe, across Interstate 80. There has been a suggestion that this site extended under Interstate 80, with the western boundary undefined due to the early date of construction of the roadway.

Many surveys have been conducted in the project area vicinity, with two apparently within the boundaries of the current project (Slaymaker and Griset 1992; Stevens and Meyer 2014).

FIELD ASSESSMENT

Field Survey

Michael Lawson completed a field survey of the project site on June 14, 2018, with a complete inspection of the entire proposed project site.

The parcel surveyed is part of an extended valley complex between hilly topography, with at least one year-round drainage within fifty feet of west boundary. The parcel is mostly open with native oaks and other vegetation around the perimeter and in the center.

Topography appears to have been altered at one point, possibly leveled for agriculture. Irrigation lines and connection points are visible. Interstate 80 is elevated at least 5 feet higher that the survey area, indicating possible grading of the survey area for construction soil.

The surface visibility was excellent, largely due to recently mowed grass and heavy rodent excavation. Light scraping with a hoe was included in the survey strategy to increase coverage. The soil color and soil type are uniform throughout parcel, with slightly darker soil below oak trees. The content of soil is high in fine dense clay and small gravels, light tan in color. A few cobbles of varying minerals were noted.

Survey strategy consisted of three- to five-meter overlapping transects throughout parcel, with extensive re-inspection near eastern and western boundaries.

Two buildings, a house-trailer and an office trailer sit on the property. Near the center is a well-house, likely not older than thirty years based on construction design and materials used. On the west side of the parcel are the trailers and what appears to be a modern agricultural shed, possibly for fruit packing and sales.

In spite of sensitivity related to nearby known sites and resources, no historic or prehistoric resources were observed within the project area.

Trenching Program

Due to the sensitivity of the area, we felt that a trenching effort should be made to check the subsurface soils. The work was undertaken on June 27, 2018, field directed by Mike Lawson.

The testing effort consisting of 27 test trenches has been completed with a backhoe using a 24" wide bucket with 6 teeth. All trenches measured roughly 8 feet to 10 feet long, 24" to 30" wide, with varying depths, ranging from 3 feet to 6 feet. A 10-15% sample of soil from each trench was screened through 1/8" mesh box screens.

Trenches 1 through 25 were placed parallel to the freeway fence adjacent to Interstate 80, and Trenches 16 through 25 parallel to Cherry Glen Road, on opposite side of project area. These trenches were placed either over or close to proposed building locations (Figure 3).

Trench 26 was placed at the crown of a slight rise located near the center of northwest property line and measured 20' in length (Figure 3).

Trench 27 was dug near the center of the project area, where a slight rise is located, and extensive ground squirrel activity was found (Figure 3).

Lagoon Valley Self Storage Project
Test Trench Locations
T16
T18
T17
T19
T20
T21
T22
T23
T24
T25
T26
T27
T15
T14
T13
T12
T11
T10
T9
T8
T7
T6
T5
T4
T3
T2
T1
Surface Scrape
Project Area
80
Tx - Test Trench Location/Number

Figure 3

A 6-foot-wide, 8" to 10" deep scrape done with a push blade on the backhoe was also completed, 465' in length. This scrape was superimposed over the location of proposed building "C", according to Lagoon Valley Self Storage construction plans (Figures 2 and 3).

All trenches were negative for visible cultural deposits represented by soil color changes due to organic deposition, thermal activity, excavation, or other human activity. All trenches except for number 11 were negative for artifacts or features, as was the 6' wide scrape.

Trench 11 revealed a broken projectile point at a level of two feet to three feet in depth. The projectile point fragment is 14.5cm in length and 1.2cm in width. The point type is consistent with Stockton serrated type, with tip damage and serrations broken off of one side and appears to be made from opaque black obsidian consistent with a known source in Napa County. To ensure there was no chance of a deposit, about 40% of removed soil was screened in a 1/8" mesh screen. No cultural deposit, strata, or other artifacts or foreign objects were located within Trench 11, or the associated back dirt. The artifact is an isolated find, not terribly surprising with the disturbance in the project area.

The site sediments are fairly consistent with few or no layers were observed. Ground water was encountered at 6 foot depth in Trench 14.

RECOMMENDATIONS

There is always a possibility that a site may exist in the project area and be obscured by vegetation, siltation or historic activities, leaving no surface evidence. If any artifact or unusual amounts of stone, bone or shell be discovered, an archeologist should be brought in to evaluate the finding.

Discovery of Human Remains

In the event of discovery or recognition of any human remains in any location other than a dedicated cemetery, there shall be no further excavation or disturbance of the site or any nearby area suspected to overlie adjacent remains until the Solano County Coroner has determined that the remains are not subject to any provisions of law concerning investigation of the circumstances, manner and cause of death, and the recommendations concerning the treatment and disposition of the human remains have been made to the person responsible for the excavation, or to his or her authorized representative. The coroner shall make his or her determination within two working days from the time the person responsible for the excavation, or his or her authorized representative, notifies the coroner of the discovery or recognition of the human remains.

If the Solano County Coroner determines that the remains are not subject to his or her authority and if the Coroner recognizes the human remains to be those of a Native American or has reason to believe that they are those of a Native American, he or she shall contact, by telephone within 24 hours, the Native American Heritage Commission (NAHC).

After notification, the NAHC will follow the procedures outlined in Public Resources Code Section 5097.98, that include notification of most likely descendants (MLDs), and recommendations for treatment of the remains. The MLDs will have 24 hours after notification by the NAHC to make their recommendations (PRC Section 5097.98).

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Stevens, Nathan and Jack Meyer
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APPENDIX 1

Resumes

PEAK & ASSOCIATES, INC.
RESUME

MELINDA A. PEAK **January 2018**
Senior Historian/Archeologist
3941 Park Drive, Suite 20 #329
El Dorado Hills, CA 95762
(916) 939-2405

PROFESSIONAL EXPERIENCE

Ms. Peak has served as the principal investigator on a wide range of prehistoric and historic excavations throughout California. She has directed laboratory analyses of archeological materials, including the historic period. She has also conducted a wide variety of cultural resource assessments in California, including documentary research, field survey, Native American consultation and report preparation.

In addition, Ms. Peak has developed a second field of expertise in applied history, specializing in site-specific research for historic period resources. She is a registered professional historian and has completed a number of historical research projects for a wide variety of site types.

Through her education and experience, Ms. Peak meets the Secretary of Interior Standards for historian, architectural historian, prehistoric archeologist and historic archeologist.

EDUCATION

M.A. - History - California State University, Sacramento, 1989
Thesis: *The Bellevue Mine: A Historical Resources Management Site Study in Plumas and Sierra Counties, California*
B.A. - Anthropology - University of California, Berkeley

RECENT PROJECTS

Ms. Peak completed the cultural resource research and contributed to the text prepared for the DeSabla-Centerville PAD for the initial stage of the FERC relicensing. She also served cultural resource project manager for the FERC relicensing of the Beardsley-Donnells Project. For the South Feather Power Project and the Woodleaf-Palermo and Sly Creek Transmission Lines, her team completing the technical work for the project.

In recent months, Ms. Peak has completed several determinations of eligibility and effect documents in coordination with the Corps of Engineers for projects requiring federal permits, assessing the eligibility of a number of sites for the National Register of Historic Places. She has also completed historical research projects on a wide variety of topics for a number of projects including the development of navigation and landings on the Napa River, farmhouses dating to the 1860s, bridges, an early roadhouse, Folsom Dam and a section of an electric railway line.

In recent years, Ms. Peak has prepared a number of cultural resource overviews and predictive models for blocks of land proposed for future development for general and specific plans. She has been able to direct a number of surveys of these areas, allowing the model to be tested.

She served as principal investigator for the multi-phase Twelve Bridges Golf Club project in Placer County. She served as liaison with the various agencies, helped prepare the historic properties treatment plan, managed the various phases of test and data recovery excavations, and completed the final report on the analysis of the test phase excavations of a number of prehistoric sites. She is currently involved as the principal investigator for the Clover Valley Lakes project adjacent to Twelve Bridges in the City of Rocklin, coordinating contacts with Native Americans, the Corps of Engineers and the Office of Historic Preservation.

Ms. Peak has served as project manager for a number of major survey and excavation projects in recent years, including the many surveys and site definition excavations for the 172-mile-long Pacific Pipeline proposed for construction in Santa Barbara, Ventura and Los Angeles counties. She also completed an archival study in the City of Los Angeles for the project. She also served as principal investigator for a major coaxial cable removal project for AT&T.

Additionally, she completed a number of small surveys, served as a construction monitor at several urban sites, and conducted emergency recovery excavations for sites found during monitoring. She has directed the excavations of several historic complexes in Sacramento, Placer and El Dorado Counties.

Ms. Peak is the author of a chapter and two sections of a published history (1999) of Sacramento County, *Sacramento: Gold Rush Legacy, Metropolitan Legacy*. She served as the consultant for a children's book on California, published by Capstone Press in 2003 in the land of Liberty series.

Michael D Lawson
Archaeologist
Sacramento CA

Resume

- Extensive monitoring of open space, streets and project development areas for prehistoric period and historic period resources. Areas monitored include Sutter Street in Folsom; Mud Creek Archeological District in Chico; Camp Roberts, San Luis Obispo County; Avila Beach, San Luis Obispo County; Edgewood Golf Course, South Lake Tahoe; Davis Water Project, Davis; Star Bend levee section, Sutter County; Feather River levees, Sutter County; Bodega Bay, Sonoma County; San Jose BART line extension, Santa Clara County; and numerous sites for PG&E in San Francisco.

- 22 years of experience working in CRM, volunteer, and academic settings in California historic, proto historic, and prehistoric archaeology.

- Expertise in pedestrian survey, excavation, feature (including burial) exposure, laboratory techniques, research. Field positions include crew chief and lead technician.

- Master flintknapper, focusing for 20 years on California/Great Basin cutting tool and projectile forms and production techniques, as well as stone source research. Proto historic glass use for projectile points also a major focus. Research done in person at Phoebe Hearst Museum, Berkeley.

- 18 years of experience in traditional blacksmithing with focus on mid to late 19th century coal/charcoal forge techniques. Special interest in analysis of historic artifacts.

- 15 years independent study of late 19th century to mid-20th century farm and ranch equipment.

- Extensive independent study of historic era household, industrial and military items.

- Independent study of Yahi/Southern Yana occupation and survival strategy in the Mt. Lassen foothills, including field trips and research. Discoveries contributed to 3 publications.

- Current independent research project focus on Yahi adaptation strategy during time of hiding from 1870 to 1911 in Deer, Antelope and Mill Creek Canyons.

Education

- B.A. Anthropology with focus on archaeology. California State University Sacramento.
- A.A. General Education, lower division completed in Anthropology.

Field experience

Survey, excavation, photography conducted in 46 California and 3 Nevada counties over 20 years.

Notable historic archaeology projects include Virginia Town excavation of Gold Rush Era Chinese mining camp; test excavation and data recovery at stage stop on Green Valley Rd, Placer County; monitoring and collection of burial material at historic Kilgore cemetery, Rancho Cordova, Car; Monitoring, data recovery, photography, and artifact cataloguing for Sutter Street Revitalization Project, Phase One, Historic Folsom, CA; Monitoring, test excavation, data recovery at The Presidio of San Francisco, CA; Monitoring for 230 kv line installation for PG&E in historic San Francisco, Ca. to name just a few.

Prehistoric and Proto-historic site project involvement highlights include survey, monitoring, excavation Twelve Bridges Golf Course, Lincoln, CA; survey, monitoring, excavation Clover Valley Lakes, Rocklin, CA; survey of Diamond Valley, Alpine County, CA; Survey, excavation, burial care and monitoring of Feather River Levee Setback Project, Sutter County, CA; monitoring, excavation, burial care, Feather River West Levee Project, Yuba County, CA; survey, monitoring, excavation, and burial care Alamo Creek Detention Basin Project, Solano County, CA; monitoring, excavation, burial care, BART extension Project, San Jose, Milpitas, CA; Survey, excavation San Clemente Island, US Channel Islands, Los Angeles County, CA.

Additional Skills

Mike is known for extensive knowledge of historic and prehistoric artifacts and regularly instructs new undergraduates as well as graduates on artifact identification, use, manufacture and commonality.

Mike is also known for his willingness to share and teach his expertise in field techniques from surveying to excavation and feature work.

APPENDIX 2

Record Search

CALIFORNIA HISTORICAL RESOURCES INFORMATION SYSTEM

ALAMEDA
COLUSA
CONTRA COSTA
DEL NORTE
HUMBOLDT
LAKE
MARIN
MENDOCINO
MONTEREY
NAPA
SAN BENITO
SAN FRANCISCO
SAN MATEO
SANTA CLATA
SANTA CRUZ
SOLANO
SONOMA
YOLO

Northwest Information Center
Sonoma State University
150 Professional Center Drive, Suite E
Rohnert Park, California 94928-3609
Tel: 707.588.8455
nwic@sonoma.edu
http://www.sonoma.edu/nwic

6/6/2018 NWIC File No.: 17-2618

Neal Neuenschwander
Peak & Associates, Inc.
3161 Godman Avenue
Chico, CA 95983

re: Praxis Properties Storage Facility Project

The Northwest Information Center received your record search request for the project area referenced above, located on the Fairfield North USGS 7.5' quad. The following reflects the results of the records search for the project area and a 1/8th mile radius:

Resources within project area:	P-48-38.
Resources within 1/8th mile radius:	P-48-47.
Reports within project area:	S-34320, 48993, & 15384.
Reports within 1/8th mile radius:	See enclosed database list.
Other Reports within records search radius:	S-595, 848, 6120, 9462, 9795, 17835, 30204, 32596, & 33600. These reports are classified as Other Reports; reports with little or no field work or missing maps. The electronic maps do not depict study areas for these reports, however a list of these reports has been provided. In addition, you have not been charged any fees associated with these studies.

Resource Database Printout (list): ☒ enclosed ☐ not requested ☐ nothing listed

Resource Database Printout (details): ☐ enclosed ☒ not requested ☐ nothing listed

Resource Digital Database Records: ☐ enclosed ☒ not requested ☐ nothing listed

Report Database Printout (list): ☒ enclosed ☐ not requested ☐ nothing listed

Report Database Printout (details): ☐ enclosed ☒ not requested ☐ nothing listed

Report Digital Database Records: ☐ enclosed ☒ not requested ☐ nothing listed

Resource Record Copies: ☒ enclosed ☐ not requested ☐ nothing listed

Report Copies: ☒ enclosed ☐ not requested ☐ nothing listed

OHP Historic Properties Directory: ☒ enclosed ☐ not requested ☐ nothing listed

Archaeological Determinations of Eligibility: ☐ enclosed ☐ not requested ☒ nothing listed

CA Inventory of Historic Resources (1976):	☒ enclosed	☐ not requested	☐ nothing listed
Caltrans Bridge Survey:	☐ enclosed	☒ not requested	☐ nothing listed
Ethnographic Information:	☐ enclosed	☒ not requested	☐ nothing listed
Historical Literature:	☐ enclosed	☒ not requested	☐ nothing listed
Historical Maps:	☒ enclosed	☐ not requested	☐ nothing listed
Local Inventories:	☐ enclosed	☐ not requested	☒ nothing listed
GLO and/or Rancho Plat Maps:	☒ enclosed	☐ not requested	☐ nothing listed
Shipwreck Inventory:	☐ enclosed	☒ not requested	☐ nothing listed

*Notes:

** Current versions of these resources are available on-line:

Caltrans Bridge Survey: http://www.dot.ca.gov/hq/structur/strmaint/historic.htm

Soil Survey: http://www.nrcs.usda.gov/wps/portal/nrcs/surveylist/soils/survey/state/?stateId=CA

Shipwreck Inventory: http://www.slc.ca.gov/Info/Shipwrecks.html

Please forward a copy of any resulting reports from this project to the office as soon as possible. Due to the sensitive nature of archaeological site location data, we ask that you do not include resource location maps and resource location descriptions in your report if the report is for public distribution. If you have any questions regarding the results presented herein, please contact the office at the phone number listed above.

The provision of CHRIS Data via this records search response does not in any way constitute public disclosure of records otherwise exempt from disclosure under the California Public Records Act or any other law, including, but not limited to, records related to archeological site information maintained by or on behalf of, or in the possession of, the State of California, Department of Parks and Recreation, State Historic Preservation Officer, Office of Historic Preservation, or the State Historical Resources Commission.

Due to processing delays and other factors, not all of the historical resource reports and resource records that have been submitted to the Office of Historic Preservation are available via this records search. Additional information may be available through the federal, state, and local agencies that produced or paid for historical resource management work in the search area. Additionally, Native American tribes have historical resource information not in the CHRIS Inventory, and you should contact the California Native American Heritage Commission for information on local/regional tribal contacts.

Should you require any additional information for the above referenced project, reference the record search number listed above when making inquiries. Requests made after initial invoicing will result in the preparation of a separate invoice.

Thank you for using the California Historical Resources Information System (CHRIS).

Sincerely,

Lisa C. Hagel
Researcher

Report List

Report No.	Other IDs	Year	Author(s)	Title	Affiliation	Resources
S-005170	Voided - ASC #722	1980	D. L. True	Archaeological survey of 5 acre parcel adjacent to the Pena Adobe Park (letter report)	University of California, Davis	
S-012183		1990	Charles Slaymaker	Archeological Resources of Lower Lagoon Valley		48-000038, 48-000047, 48-000048, 48-000050, 48-000051
S-012184		1990	Charles Slaymaker and Suzanne Griset	Archaeological Augering of the Proposed Lower Lagoon Valley Sewer Alignment, Vacaville, California: CA-SOL-270 and CA-SOL-30		48-000038, 48-000111
S-012302		1990	Charles Slaymaker	Archaeological Augering of the Proposed Lower Lagoon Valley Drain Alignment, Vacaville, California: Site CA-SOL-30		48-000038
S-012757		1964	Patti Palumbo	Archeological Program for Road X-Sol-7-C. Part I: Archeological Report on Pena Adobe at 4-Sol-30	California Parks & Recreation Department	48-000038, 48-000111
S-012757a		1964	Walter R. Brown	Part II: Report on the Cook Site, Vacaville, Solano County, Calif.	California Parks & Recreation Department	
S-015384		1992	Suzanne Griset and Charles Slaymaker	Results of Further Examination of Archaeological Resources, Infrastructure Design Phase, Lower Lagoon Valley, Vacaville, Solano County, California	Slaymaker and Associates	48-000038, 48-000048, 48-000111
S-029920		2003	Eric Wohlgemuth, Jeff Rosenthal, and Mary Maniery	Archaeological Survey for the Lower Lagoon Valley, Solano County, California.	Far Western Anthropological Research Group, Inc., PAR Environmental Services, Inc.	48-000038, 48-000047, 48-000048, 48-000050, 48-000051, 48-000111, 48-000157, 48-000705, 48-000706, 48-000707, 48-000708, 48-000709, 48-000718, 48-000719, 48-000720, 48-000721, 48-000790
S-030433		1984	Lynette Ann Curtice	An Archaeological and Historical Perspective on the Pena Adobe and Rancho Los Putos, Solano County, California	University of California, Riverside	48-000038
S-033141		2007	Sean D. Dexter	Cultural Resources Archaeological Survey Report for APN 124-040-013, Vacaville, Solano County, California (letter report)	Condor Country Consulting	
S-034320		2007	James M. Allan	Archaeological Survey and Cultural Resources Assessment for the New Life Church Project, Vacaville, Solano County, California	William Self Associates	
S-034829	Submitter - Job #07-179a	2008		Cultural Resource Assessment of the South Pleasants Valley Road Property Project, Solano County, California	Peak & Associates, Inc.	48-000111, 48-000811, 48-000812, 48-000813

Report List

Report No.	Other IDs	Year	Author(s)	Title	Affiliation	Resources
S-034830	Submitter - Job #07-179b	2008		Cultural Resource Assessment of the Cherry Glen Road Properties Project, Solano County, California	Peak and Associates, Inc.	
S-038052		2010	Lewis E. Somers, Stacy Kozakavich, and Heather Blind	Geophysical Survey of the Pena Residential Sites, Lower Lagoon Valley Policy Plan Implementation Project, Vacaville, Solano County, California	Archaeo-Physics, LLC; LSA Associates, Inc.	48-000038
S-048993	Caltrans - 0412000332; Caltrans - 04-SOL-80 PM 10.4/30.2; Caltrans - EA 04-4G0800	2014	Nathan Stevens and Jack Meyer	Archaeological Survey Report for the Interstate-80 Express Lanes Project from Red Top Road to I-505 in Solano County	Far Western Anthropological Research Group, Inc.	48-000038, 48-000049, 48-000111, 48-000157, 48-000897, 48-000898

Resource List

Primary No.	Trinomial	Other IDs	Type	Age	Attribute codes	Recorded by	Reports
P-48-000038	CA-SOL-000030/H	Resource Name - Juan Felipe - Demitrio Pena Adobe; Other - Map Reference # %; Other - Juan Felipe Pena Adobe (Vaca-Pena Adobe); Other - APN 127-050-040; Other - Pena Adobe; OHP Property Number - 046526; National Register - NPS-72000261-0000; OHP PRN - 5688-0002-0000; California Register - SHL-0534-0000; OHP PRN - HABS No. CA-1198	Building, Structure, Site	Prehistoric, Historic	AH04; AP15; HP16; HP44	1956 (Elsasser, Sacramento State College); 1959 (Edgar W. Strouse, State Parks); 1970 (Wood Young, Solano County Historical Society); 1979 (Jim Arbuckle, [none]); 1984 (A. Lewis Koue; Jack Barker Jr., NPS); 2003 (Webb; Hotchkiss, JRP Historical Consulting Services); 2003 (Wohlgemuth; Maniery; Rosenthal, Far Western Anthropological Research Services, Inc.); 2011 (William Hildebrandt; John Berg, Far Western Anthropological)	S-006120, S-012183, S-012184, S-012302, S-012757, S-015384, S-029920, S-030433, S-035905, S-038052, S-038627, S-048993
P-48-000047	CA-SOL-000039	Resource Name - B-16	Site	Prehistoric	AP04	1977 (Tony Drake, [none]); 2003 (E. Wohlgemuth, Far Western)	S-012183, S-029920

APPENDIX G

PHASE I ENVIRONMENTAL SITE ASSESSMENT

P□ASE I ENVIRONMENTAL SITE ASSESSMENT

□920 C□erry Glen Road

□APN 12□-04-0140□

Vacaville, California

□□ne 1, 201□

Pro□ect No. 42□□

Prepared for

Pra□is Properties, LLC

□y

G□larte & Associates, Inc.

Gularte & ASSOCIATES, INC.
Geotechnical Consultants

1049 NIC□OLS DRIVE, R□C□LIN, CA 9□□□□
P□one: **916.626.5577**
FA□: 91□.□2□.□□□□

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FIGURES

Figure 1 – Vicinity Map

Figure 2 – Site Plan, Proposed Site Layout

APPENDICES

Appendix A – EDR Records Check

Appendix B – Sanborn Map Report

Appendix C – Historical Topographic Maps

Appendix D – Historical Aerial Photographs

Appendix E – Site Photographs

Executive Summary

Our assessment of the proposed development located on Cherry Glen Road (APN 127-04-0140), in Vacaville, California, indicates that significant hazardous materials impacts are unlikely to be present at the Site; agricultural-use pesticides and herbicides may be present at the Site due to past and present uses.

We base these conclusions on: 1) based on air photos and topographic maps, historically the site was likely used for agricultural (orchard trees) purposes since before 1937; 2) potentially hazardous materials associated with past uses include herbicides and pesticides; 3) the site is not listed on any of the reviewed regulatory databases.

Gularte & Associates (G&A) have performed this Phase I Environmental Site Assessment in general compliance with ASTM E1527-13. Exceptions or deletions from E1527 are described in Section 5 of this report. Our assessment has shown no evidence of recognized environmental conditions or significant business environmental risks in connection with the subject Site.

1 INTRODUCTION

Praxis Properties, LLC retained Gularte & Associates, Inc. (G&A) to perform a Phase I Environmental Site Assessment (ESA) for the proposed self storage project, to be constructed on an undeveloped property located at 5920 Cherry Glen Road, in Vacaville, California.

To conduct this ESA we:

- Visited the site to observe current land use of the project property and surrounding properties, and to observe for obvious indications of potential contamination on the subject property;
- Reviewed historical aerial photographic coverage and historical USGS topographic maps of the site and surrounding properties for indications of potential sources for fill, buildings, or contamination;
- Performed federal, state, and county records review for indications of the use, misuse, or storage of hazardous and/or potentially hazardous materials on or near the site. The federal and state database search was provided by a record check service, Environmental Data Resources, Inc. (EDR) of Southport, Connecticut. A copy of their report is attached in Appendix A.
- Prepared this Phase I ESA Report.

2 PROJECT LOCATION DESCRIPTION AND PHYSICAL SETTINGS

2.1 Location

The site is generally flat and covered predominately by short grasses and weeds, with trees scattered throughout the property. Based on the appearance of the Site, some rough grading has occurred in the past, and based on its location between two developed properties to the north and south, some utilities are likely installed along the perimeter of the site where adjacent to Cherry Glen Rd. The site currently appears unused. The proposed site development consists of approximately 12 to 14 long slender buildings across the property.

The property is roughly square in shape, about 500 feet by 420 feet (~5 acres). The Site is bordered Pottery Paradise on the north, by Cherry Glen Rd on the east, by the New Life Church on the south and by Interstate 80 (I-80) on the west. Based partially on a Solano County's Recorders Office, the Site consists of one parcel: APN 0127-040-140. See Site Plan Figure 2.

Improvements appear to be limited to the adjacent road, possible above- and below-ground utilities and moderate grading to level the site.

Commercial development borders the site on the north and south, and consist of the previously described church and pottery buildings and associated development (parking, pavement, etc.); I-80 also borders the site. Residential development is located to the east in the city of Vacaville. The Site is located about 1.5 miles west of downtown Vacaville. Nearby towns include Fairfield, Bucktown and Elmira. Vacaville is located about 30 miles southwest of the city of Sacramento, California.

2.2 Description

The property is located at an elevation of about 222 feet above mean sea level. The Site is generally flat with no discernable elevation changes across the property. Primary drainage is to the southeast.

The adjacent properties to the north, west and south are at elevations equal to or slightly below than the Site, and properties to the east at an elevations slightly above the subject site.

2.3 Physical Settings

2.3.1 Regional Geology

The City of Vacaville is located at the margin between the Great Valley geomorphic province of California and the Coast Ranges geomorphic province. The Great Valley province is underlain by an alluvial plain approximately 50 miles wide and 400 miles long, which is drained by the Sacramento and San Joaquin rivers (USGS, 2003). This region is typically underlain by sedimentary and meta-sedimentary alluvium which was formed by erosion of the two mountain ranges during the Mesozoic and Cenozoic eras. Mesozoic rocks include marine Cretaceous sandstone and shale, as well as metamorphosed clastic and volcanic rocks of the Franciscan assemblage. The Cenozoic rocks consist of strata of

continental and marine origin, and Pliocene-Pleistocene volcanic rocks (City of Vacaville, 1998).

The western portion of Solano County is dominated by mountains and valleys while the southern and eastern portions are dominated by flat broad valleys, marshes, sloughs, and low-lying hills. These low lands are associated with the Sacramento River Alluvial Fan (Solano County, 2008).

The Coast Ranges geomorphic province is characterized by northwest-southeast trending valleys and intervening mountain ranges that are structurally controlled by faulting and folding, the result of the collision of the Farallon and North American Plates, which is recorded by rocks of the Franciscan Complex of Cretaceous and Jurassic age (100 to 65 million years old). The subsequent right lateral shearing occurred between the Pacific and North American Plates and is recorded by the younger (Tertiary, 60 to 3 million years old) sedimentary and volcanic rocks of the Berkeley and Oakland Hills and marks a transition to the strike slip faulting that characterizes the present day movement of the San Andreas fault system.

To the east of the San Andreas Fault System lies a less well defined surface feature at the boundary of the Coast Ranges and the Central Valley also associated with seismicity. The Coast Ranges-Central Valley (CRCV) geomorphic boundary is formed by an active fold and thrust fault zone that generally does not break the surface. Although the bedrock record indicates a long history of deformation, the present day topography is controlled by movement of the San Andreas Fault zone and abrupt changes in the climate. The geology of the San Francisco and San Pablo Bay margins is controlled by the interactions of Quaternary-age (past 2 million years) climatological sea level fluctuations and the vertical tectonic deformation of the shorelines.

2.3.2 Local Geology

We reviewed the 2006 Geologic Map of the Fairfield North 7.5' Quadrangle (1:250,000), prepared by the California Department of Mines and Geology (CDMG).

The project site has an elevation of about 222 feet above mean sea level (msl) and is located near the western margin of the Sacramento Valley, slightly within the Coast Ranges. The hills directly to the north of the site are composed of Miocene-age sedimentary rocks (shales and sandstones) predominately of the Forbes Formation, the Guinda Formation, the Funks Formation and the Yolo Formation.

Local soil conditions are composed predominantly of the Yolo Series of soils consisting mostly of silty clay and the Brentwood clayey loam, based on the U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) survey of the area.

2.3.3 Faults and Seismicity

Based on the 1994 Fault Activity Map of California prepared by the Department of Mines and Geology, there are several known active faults in the vicinity of the project site. Active faults, as included in the Alquist-Priolo Earthquake Fault Zones, are characterized by displacement of Holocene deposits (soil or rock less than 11,000 years old), evidence of fault creep and/or well defined seismic activity on traces of known faults.

According to the United States Geological Survey (USGS) Earthquake Hazards Program (2007), the nearest fault is the potentially active Vaca-Kirby Hills Fault, which is a part of the Great Valley Fault Zone, located approximately 0.25 miles east of the project site. The Cordelia fault zone and the Green Valley fault, respectively 14 and 15 miles southwest of the project site, are the closest active faults to the site. Other potentially active faults include major active, strike-slip faults in the area such as the Rodgers Creek, West Napa, Hayward, Greenville, Green Valley-Concord, and the Calaveras faults.

In 1999, the Working Group on California Earthquake Probabilities of the United States Geological Survey compiled the earthquake fault research for the San Francisco Bay Area in order to estimate the probability of fault segment rupture. They have estimated that the overall probability of a Richter magnitude 6.7 or greater earthquake occurring within the next 30 years is 70 percent. The highest probabilities are assigned to the San Francisco Peninsula segment of the San Andreas Fault and the northern Hayward/Rodgers Creek Faults (21 and 32 percent, respectively). The Calaveras Fault was assigned a probability of 18 percent, and the Greenville and Concord-Green Valley faults were each assigned probabilities of 6 percent. According to the 2008 Seismic Motion Interpolator prepared by the California Division of Mines and Geology, there is a 10 percent probability that the site will experience a horizontal ground acceleration of 0.44g in the next 50 years. This is a relatively high level of ground shaking for California.

2.3.4 Groundwater

In general, groundwater flows in a similar direction to the contours of the surface. Groundwater is expect to flow east ward and southward towards the nearby lagoon located about ½ mile south of the site.

Based on the California Department of Water Resources (DWR) data, the Site is located within the Sacramento Valley Groundwater Basin. The DWR website did not indicate that monitored groundwater wells exist within one-half mile of the Site. The US Geologic Survey (California) database search shows 4 wells within 1 mile of the site. In general, groundwater is located between 10 to 15 feet below the ground surface.

3 RECORDS REVIEW

3.1 Review of State and Federal Records

We requested EDR to perform a state and federal database review by searching the following databases. A more complete list of databases searched can be viewed on pages 3 through 6 of their report in Appendix A.

- National Priority List (NPL)
- Delisted NPL
- Proposed NPL
- Comprehensive Environmental Response, Compensation, And Liability Information System (CERLCIS)
- Comprehensive Environmental Response, Compensation, And Liability Information System (CERC-NFRAP)
- Corrective Action Report (CORRACTS)
- Resource Conservation and Recovery Information System (RCRIS-TSD,
- Resource Conservation And Recovery Information System, Small Quantity Generator (RCRIS-SQG)
- Resource Conservation And Recovery Information System, Large Quantity Generator (RCRIS-LQG)
- Emergency Response Notification System (ERNS)
- AWP
- Cal-Sites
- Notify 65
- Toxic Pits
- State Landfill (SWF/LF)
- WMUDS (WMUDS/SWAT)
- Hazardous Substance Storage Container Database (UST)
- California Bond Exp. Plan (Ca. BEP)
- California FID (Ca. FID)
- Superfund Consent Decrees (CONSENT)
- Records Of Decision (ROD)
- Facility Index System/Facility Identification Initiative Program Summary Report (FINDS)
- Hazardous Materials Information Reporting System (HMIRS)
- Material Licensing Tracking System (MLTS)
- Mines Master Index File (MINES)
- NPL Liens
- PCB Activity Database System (PADS)
- RCRA Administrative Action Tracking System (RAATS)
- Toxic Chemical Release Inventory System (TRIS)
- Toxic Substances Control Act (TSCA)
- Aboveground Petroleum Storage Tank Facilities (AST)
- California Waste Discharge System (Ca. WDS)
- California SLIC Regions (CA SLIC)

- California Master List of Facilities (CA MS)
- Former Manufactured Gas Sites (Coal Gas)
- California Hazardous Material Incident Report System (CHMIRS)
- CORTESE
- Leaking Underground Storage Tank Incident Reports (LUST)
- HAZNET

The subject Site's address of 5920 Cherry Glen Road, Vacaville, California, is not listed on any of the federal, state and local databases we reviewed within the EDR report.

The EDR report presents color overview maps that indicate the location of potentially hazardous nearby sites. Within ¼-mile of the subject site there are a total of 3 sites identified on the potentially hazardous materials operations database lists; however, some of these sites have multiple entries. There are 4 reported sites within a 1/4-mile radius of the subject property, no additional sites within a 1-mile radius of the subject Site.

Pages 1-9 of the EDR report's Executive Summary (Appendix A) lists the recorded sites and the databases that describe the potentially hazardous sites. The locations of these recorded sites are shown on the "Overview" and "Details" maps, "Summary" pages 1 through 7. Further details of these sites are described further on in the EDR report, pages 1 through 9. Please note that some sites have multiple entries on the environmental databases, effecting the total number of sites discussed in the following section.

The following summarizes the EDR findings, the federal or state databases (in parentheses) that list the site and the potential hazardous conditions at that site. We have limited our detailed review to listed sites that are located within 1 mile of the subject property.

Listed properties range from 1) low hazard levels, e.g former underground storage tanks (USTs) sites without environmental violations such as leaking tanks, to 2) sites with low hazardous levels, e.g. businesses that may generate small quantities of hazardous wastes with no violations:

Site A1 Gran Prix Raceways – property address is 4670 Pena Adobe Raod, Vacaville, California. There is a reported underground storage tank(s) at the site (CA FID UST). No violations are indicated. The site is located about 805 feet south-southeast of the subject property.

Site A2 Blue Lagoon Waterslide Park - this site has a listed address of 4670 Pena Adobe Road. The site has one reported UST (Hist UST, SWEEPS UST). There are no reported violations. Property is located about 822 feet south-southeast of the subject Site.

Site A3 Blue Lagoon Associates - this site has a listed address of 201 Pena Adobe Road. The site has one reported UST (Hist UST, SWEEPS UST), the tank is considered inactive. There are no reported

violations. Property is located about 974 feet south-southeast of the subject Site.

3.2 Historical Aerial Photograph Review

We reviewed historical aerial photographs from 1937, 1947, 1952, 1968, 1974, 1982, 1984, 1993, 2006, 2009, 2012 and 2016, to gain information on historical land uses at and around the subject site. The scale of the photos has been uniformly set at 500 feet = 1 inch.

The site is undeveloped at the time of the 1937 air photo, in use for agricultural purposes comprising orchards; based on the name of the adjacent road, presumably cherry trees. The greater majority of land use around the site is also agricultural; predominantly as orchards but also as rangeland. Adobe Creek is clearly adjacent to the property to the west, next to Cherry Glen Road. The precursor to Interstate 80 (I-80) is shown as a two lane highway adjacent to the east-southeast property line; this is presumably I-40. A few rural farm houses are exhibited on the map, mostly to the west and southwest, with one located south southeast on the other side of I-40. There are few changes to the general area around the site, and none to the site, by 1947.

By 1952, the site itself remains relatively unchanged; however, adjacent I-40 has become a 4-lane undivided highway, with a likely name change to I-80. Surrounding land uses remain nearly unchanged from the previous orchard uses.

By 1968, I-80 has become a divided, 6-lane highway next to the subject property. The Site's orchards appear to have gone fallow, based on the number of trees that have died and the overgrowth of non-orchard type trees. A rural farmhouse has been constructed on the adjacent property to the south, and a new overpass and interchange has been constructed from Cherry Glen Road over I-80. Other orchards in the general vicinity also appear to have gone fallow, based on several large acreages wherein the orchard trees have been removed. There is no discernable changes to the subject site or surrounding land uses between 1968 and 1974, except for the construction of a large, white water tank located about 1,000 feet east of the Site.

By 1982, the subject site still appears as fallow farmland. A second water tank has been added to the original. A new "Waterpark and go-cart racing" facility has been constructed on the opposite side of I-80. Also worth noting, some re-grading of ag land has occurred to the southeast of the site; bay of water is shown on the map, and is presumably a part of a newly constructed reservoir or lagoon.

The most noteworthy land use changes observed between the 1982 and 1993 air photos are that the majority of the orchards have been removed from the farm properties around the subject site. By 2006, some minor additional commercial structures and improvements are noted on properties to the south of the subject site, on the opposite side of the freeway. By 2009, it appears that I-80 has been widened to 8-lanes of traffic. However, the subject site remains unchanged, with mature trees and cut grassland the predominant feature; several small rectangular-

shaped items are noted on the Site. It cannot be discerned from the air photos if these are abandoned vehicles or very small temporary outbuildings.

By 2012, the existing improvements at the adjacent properties to the north and south are constructed. These include the New Life Church and surround asphalt-concrete parking area and the Pottery Paradise retail facility to the north. In general, the aerial photographs indicate that the Site and the surrounding land uses are unchanged from 2012 to the present, based on current aerial views (Google Maps, 2018) and our recent visit to the Site.

3.3 Historical Topographic Map Review

We reviewed topographic maps from 1902, 1942, 1947, 1951, 1953, 1968, 1973, 1980 and 2012 to gain additional information on historical land uses at and around the subject property.

Based on the latest elevation benchmarks located to the north and south of the subject site, and on contour lines to the east, the Site elevation is at about 220 feet above Mean Sea Level (MSL). Based on our review of the topographic maps and our site walk, we have no reason to suspect significant grade changes or land filling on the property.

The 1902 topographic map shows the subject site accessed by a dirt road at approximately the current alignment of Cherry Glen Road. The nearby Laguna Creek appears at about the same alignment as where it currently resides adjacent to the northwest boundary of the Site, flowing to the northeast prior to entering another drainage that then flows due south towards a lagoon.

The 1942 and 1947 maps shows the subject site as open, undeveloped land bordered by orchards to the northwest. The map also exhibits Cherry Glen Road as a paved road.do not show the subject site. Interstate I-40 has been constructed adjacent to the subject site. Several rural homes are present near what is probably an interchange to I-40, at about the same location where the future I-80 interchange will be built.

The 1951/53 maps are combined, and show the site used as an orchard. A 220-ft elevation contour line runs through the Site, a line which was not exhibited on any of the previous topographic maps. Orchards predominate land use in the Lagoon Valley area, mostly to the northwest if the alignment of I-40. The town of Vacaville has expanded westward, and is exhibited in the northeast corner of the map.

The site is still in use as an orchard at the time of the 1968 map. I-80 has been built over the previous I-40 alignment, and includes the previously described Cherry Glen Rd interchange. More residential construction has occurred along the west side of Vacaville. A small airfield is present adjacent to I-80, about 0.65 miles due south of the subject site. No noteworthy changes are observed between the 1968 and 1973 topographic maps.

By 1980, residential development continues on the west and southwest side of Vacaville. The orchards are now removed from the subject site. The 2012 map shows the site as undeveloped, as are the two adjacent sites north and south.

3.4 Review of Tax, Environmental Lien, Building Permit, Title Documents, City Directory and Sanborn Maps

We reviewed Tax and Environmental Lien reports for the subject site; environmental liens or "Activity and Use Limitations" (AULs) were not found. The County Recorder's Office documents the site with an APN recorded as 0127-04-140 (2008).

The City Directory database exhibits list of property owners in the vicinity of the Site. The majority of addresses listed appear to be for residential homes, with a few business names such as the New Life Church. The subject property's address of 5920 Cherry Glen Road is not listed in City directory (2014).

A building permit search for the subject Site was not recorded in the database for Building permits. Building permits were recorded for nearby properties along Cherry Glen Road; however, none appeared to be associated with potentially hazardous materials operations (USTs, ASTs, dry cleaners, etc.). Based on the records, it appears a building permit for a 21,300 sq ft New Life Church was obtained ion 2011.

4 RECONNAISSANCE AND INTERVIEW INFORMATION

4.1 Subject Property Reconnaissance

We visited the site on May 22, 2018 to perform our site reconnaissance. We traversed the perimeter of the approximately 5-acre property. The property is currently flat, vacant-appearing land. Improvements are limited to site grading and mowing of weeds and grasses, plus electrical utilities along Cherry Glen Road. There is an RV, single wide trailer, and a fruit stand type structure appear on the property, located about 150 feet southeast of where the property borders Cherry Glen Road. These structures appear to be in a poor, dilapidated condition. There is also remnants of a destroyed well that was exhumed and placed in the southeast corner of the site. We were not able to locate the original well location. Otherwise, the site is in the majority covered with short, dry mowed grass with many mature oak trees along the property perimeter and some in the interior. A fence is present between I-80 and the subject site.

Obvious indications of hazardous materials, soil staining or other deleterious materials were not observed on the subject site. Vent pipes, fill connections, or saw cuts in paved areas connections or disturbances that would indicate the potential for USTs installation at the Site were not observed. We did observed overhead electrical power poles on the property and indications of underground utilities (water, storm drain, etc.) around the perimeter of the Site. We did not see water-wells on the subject site.

Adjacent sites north and south consist of the church property and the retail pottery place. Laguna Creek is adjacent to the paved road, and l open land to the northwest is in use as orchards, most with new plantings.

4.2 Current and Past Uses of the subject Property and Adjoining Properties

Based on the air photos, topographic maps, and records review we infer that the subject site was intermittently used as an orchard until about the late 1950s, after which it became fallow and received no further improvements. Pesticides and herbicides may have likely been used on the site while in use as an orchard. Currently, the site is maintained by regular mowing of grasses and weeds each year. Based on the current appearance of the site (the trailers, etc.), squatters may occupy a portion of the property.

The adjoining property to the south is the New Life Church, which has a large 22,000 sq ft commercial building and an AC parking area. To the north is the Pottery Paradise business, selling large and small gardening pots. Other land uses adjacent include farming (orchards) and Interstate 80 (I-80), an 8 lane freeway. Nearby property uses are rural residential and a recreational facility located across the freeway and about 1,000 ft south of the site about.

4.3 Prior Environmental Investigations

Gularte & Associates were not provided with or are aware of a previous Phase I site assessment for the subject site.

4.4 Interview with Property Owner

Gularte & Associates did not conduct an interview with any of the principals that currently own the property.

4.5 Data Gaps

The time intervals between the topographic maps, aerial photographs, City Directory listings, and other historical sources sometimes exceeds the ASTM minimum five-year standard. Our review of the data shows that the use of the Site appears unchanged within the time gaps. Therefore, it is G&A's opinion that additional research of the Site use during the time gaps is not required by the ASTM Standard, because no significant data gaps were identified during the preparation of this report.

5 FINDINGS AND CONCLUSIONS

We found no indications of past hazardous materials impacts to the project site, based on our review of the environmental databases. Based on our experience conducting environmental reviews of agricultural land, residual pesticides and herbicides are considered a very low environmental hazard concern. The Site does not have a historical recognized environmental condition as defined by ASTM 1527-13.

5.1 Hazardous Materials/Hazardous Materials Handling

No indications of hazardous materials use, handling or storage were noted on the Site at the time of our field reconnaissance. Worth noting is the proximity of I-80 to the property, which borders on the Site on the southeast. I-80, aka Highway 40, was present when tetra-ethyl lead was an additive in gasoline. Aerially deposited lead (ADL) is a potential contaminant on and within soils located within 50 feet of older, major roadways. If present, ADL is typically limited to shallow soil impacts (less than 5 feet below grade) located within 10 to 50-feet of the edge of pavement.

5.2 Storage Tanks and Hazardous Substance Containers

Based on our site reconnaissance, database review, aerial photo review, and review of previous site investigations, we found no evidence of underground storage tanks (USTs) or above ground storage tanks (ASTs) on the subject site. Containers that might contain hazardous materials were not observed on the subject site at the time of our reconnaissance.

5.3 Conclusion

We have performed this Phase I Environmental Site Assessment in general conformance with ASTM Standard of Practice E1527-13 for the subject property. In general, our assessment of the subject property did not indicate hazardous materials impacts to the site. Based on our review of the various regulatory databases, there does not appear to be evidence of potentially deleterious environmental conditions affecting the subject property. This assessment has revealed no evidence of recognized environmental conditions affecting the subject property.

5.4 Recommendations

Based on our results of this Phase I Site Assessment, Gularte & Associates believe that the client should consider conducting discretionary soil sampling and environmental analyses if earthwork is conducted adjacent to the freeway. For health and safety purposes, we recommend shallow soil sampling and testing for total lead. Lead testing should be limited to that portion of the property located within 50 linear feet of I-80.

5.5 Environmental Professional's Statement

Gularte & Associates have the specific qualifications based on experience, training, and education to assess a property of the nature, history, and setting of

the subject site. We have developed and performed the "all appropriate inquires" in conformance with the practices and standards set forth in 40 CFR part 312.

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. I have the specific qualifications based on education, training, and experience to assess a property of the nature, history, and setting of the Project.

Alfred P. Worcester, C.E.G
Senior Environmental Consultant

Greg Gularte, P.E.
Technical Report Reviewer

6 LIMITATIONS

The accompanying report summarizes the findings and opinions of Gularte and Associates, Inc. (G&A), with regard to the potential for hazardous materials to be present on the property at concentrations likely to warrant mitigation under current statutes and guidelines. Our findings and opinions are based on information obtained on given dates or provided by specified individuals, through records review, site review, and related activities. Our information is only as good as the information provided to us. Conditions can change after we have made our observations. We cannot warrant or guarantee that hazardous materials do not exist at the site.

This report was prepared for the specific use of our client and applies only to the subject property. We are not responsible for interpretations by others of data presented in this report. This report is not a legal opinion. No warranty is expressed or implied. We base our conclusions in this report on information obtained, judgment, and experience. We performed this work in accordance with generally accepted standards of practice existing in northern California at the time of the assessment.

This report has been prepared in general accordance with the standard practice for environmental site assessments, as described in ASTM E1527-13; to permit the user to satisfy the requirements of "Innocent Landowner" protection of CERCLA liability. Environmental issues not specifically addressed in the proposal or in this report are beyond the scope of services, and are not included in our evaluation. This report is based upon various selected information sources available to us at the time of our investigation. These sources may not have accurate or complete information. Our conclusions and recommendations are based on the information available and our interpretation of this information.

The scope of our investigation did not include determining the presence of radon, lead-based paint, or asbestos-containing materials. Identifying endangered species, archeological sites, or ecologically sensitive areas are also beyond the scope of this report.

The governmental records portion of this report is derived from public records and is updated on a continual basis. Also, conditions at the site can and will change over time. We can be contracted to update this report to reflect new information upon request.

Review of historical aerial photographs included those photographs and maps that were readily available to us. Our interpretation of structures and/or activities on the site was made in those years for which photographs and/or maps were readily available. Other structures may have been present or activities may have occurred during years for which photographs or maps were not available or obtained.

Our communications with selected agency personnel are limited to the information kept on file at the various offices we contacted. Some agencies may not maintain accurate or complete records. Many agencies have only recently developed

hazardous materials programs and so historical information may be incomplete. We did not contact property renters or operators. Our on-site study was limited to a general observation of the property and use. There may, therefore, be evidence of hazardous material use or misuse, which was not observed during our site visit.

If there are differences in the physical settings description between the body of this report and the EDR report in Appendix A, the information in the body of this report is deemed more accurate.

FIGURES

Figure 1 – Vicinity Map

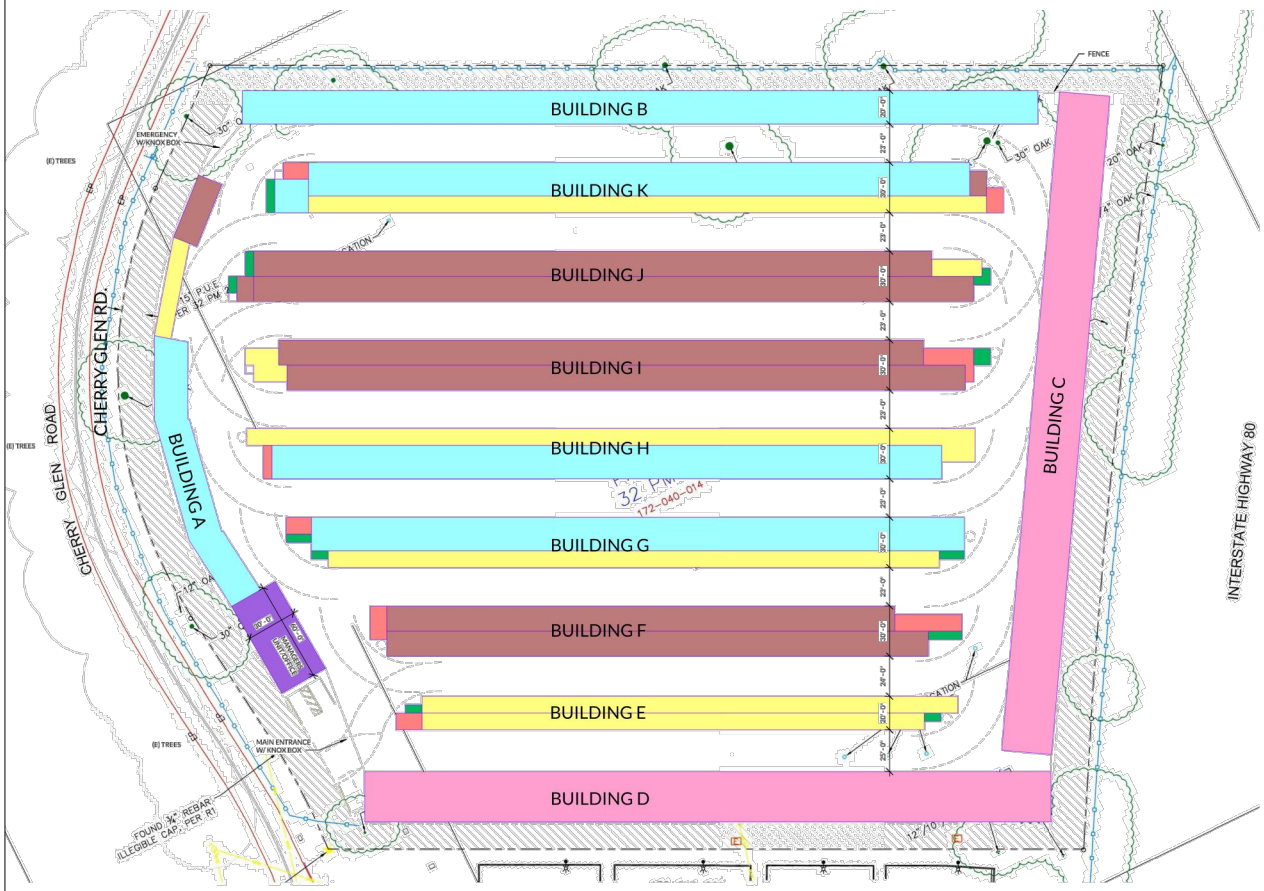
Figure 2 – Site Plan

Vicinity Map

Cherry Glen Road (APN 127-04-0140)

Gularte & ASSOCIATES INC. Geotechnical Consultants

May 2018	Job No. 4277	Figure 1



REFERENCE:

SITEPLAN

CHERRY GLEN RD (APN 127-04-0140)

Gularte

SCALE : NTS

FILE NO: 4277

REV. DATE: MAY 29, 2018

Figure 2

APPENDIX A

EDR State and Federal Records Check

Cherry Glen Rd
5920 Cherry Glen Road
Vacaville, CA 95688

Inquiry Number: 5316228.2s
May 30, 2018

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.

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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

5920 CHERRY GLEN ROAD
VACAVILLE, CA 95688

COORDINATES

Latitude (North):	38.3381460 - 38° 20' 17.32''
Longitude (West):	122.0171400 - 122° 1' 1.70''
Universal Tranverse Mercator:	Zone 10
UTM X (Meters):	585897.9
UTM Y (Meters):	4243584.5
Elevation:	223 ft. above sea level

USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property Map:	5602112 FAIRFIELD NORTH, CA
Version Date:	2012
East Map:	5619708 ELMIRA, CA
Version Date:	2012

AERIAL PHOTOGRAPHY IN THIS REPORT

Portions of Photo from:	20140606, 20140608
Source:	USDA

MAPPED SITES SUMMARY

Target Property Address:
5920 CHERRY GLEN ROAD
VACAVILLE, CA 95688

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION
A1	GRAN PRIX RACEWAYS	4670 PENA ADOBE RD	CA FID UST	Lower	597, 0.113, SE
A2	BLUE LAGOON WATERSLI	4670 PENA ADOBE RD	SWEEPS UST, HIST UST	Lower	618, 0.117, SE
A3	BLUE LAGOON ASSOCIAT	201 PENA ADOBE RD	UST	Lower	718, 0.136, SSE

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 - equivalent CERCLIS

ENVIROSTOR ---------- EnviroStor Database

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
AST ---------- Aboveground Petroleum Storage Tank Facilities
INDIAN UST ---------- Underground Storage Tanks on Indian Land

State and tribal voluntary cleanup sites

INDIAN VCP ---------- Voluntary Cleanup Priority Listing
VCP ---------- Voluntary Cleanup Program Properties

State and tribal Brownfields sites

BROWNFIELDS ---------- Considered Brownfieds Sites Listing

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS ---------- A Listing of Brownfields Sites

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

EXECUTIVE SUMMARY

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

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

RCRA NonGen / NLR	RCRA - Non Generators / No Longer Regulated
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
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
DRYCLEANERS - Cleaner Facilities
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
WASTEWATER PITS - Oil Wastewater Pits Listing
WDS - Waste Discharge System
WIP - Well Investigation Program Case List
PROD WATER PONDS - PROD WATER PONDS (GEOTRACKER)
PROJECT - PROJECT (GEOTRACKER)
UIC GEO - UIC GEO (GEOTRACKER)
OTHER OIL GAS - OTHER OIL & GAS (GEOTRACKER)
WELL STIM PROJ - Well Stimulation Project (GEOTRACKER)
SAMPLING POINT - SAMPLING POINT (GEOTRACKER)
CIWQS - California Integrated Water Quality System
NON-CASE INFO - NON-CASE INFO (GEOTRACKER)
MILITARY PRIV SITES - MILITARY PRIV SITES (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

EXECUTIVE SUMMARY

RGA LUST---------- Recovered Government Archive Leaking Underground Storage Tank

SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified in the following databases.

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 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.

Lower Elevation	Address	Direction / Distance	Map ID	Page
BLUE LAGOON ASSOCIAT	201 PENA ADOBE RD	SSE 1/8 - 1/4 (0.136 mi.)	A3	9
Database: SOLANO CO. UST, Date of Government Version: 03/08/2018 Facility Id: 80066 Facility Status: I				

ADDITIONAL ENVIRONMENTAL RECORDS

Local Lists of Registered Storage Tanks

SWEEPS UST: 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.

A review of the SWEEPS UST list, as provided by EDR, and dated 06/01/1994 has revealed that there is 1 SWEEPS UST site within approximately 0.25 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
BLUE LAGOON WATERSLI	***4670 PENA ADOBE RD***	***SE 0 - 1/8 (0.117 mi.)***	***A2***	***8***
Status: A Comp Number: 80066				

HIST UST: Historical UST Registered Database.

A review of the HIST UST list, as provided by EDR, and dated 10/15/1990 has revealed that there is 1 HIST UST site within approximately 0.25 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
BLUE LAGOON WATERSLI Facility Id: 00000011327	***4670 PENA ADOBE RD***	***SE 0 - 1/8 (0.117 mi.)***	***A2***	***8***

CA FID UST: The Facility Inventory Database contains active and inactive underground storage tank locations. The source is the State Water Resource Control Board.

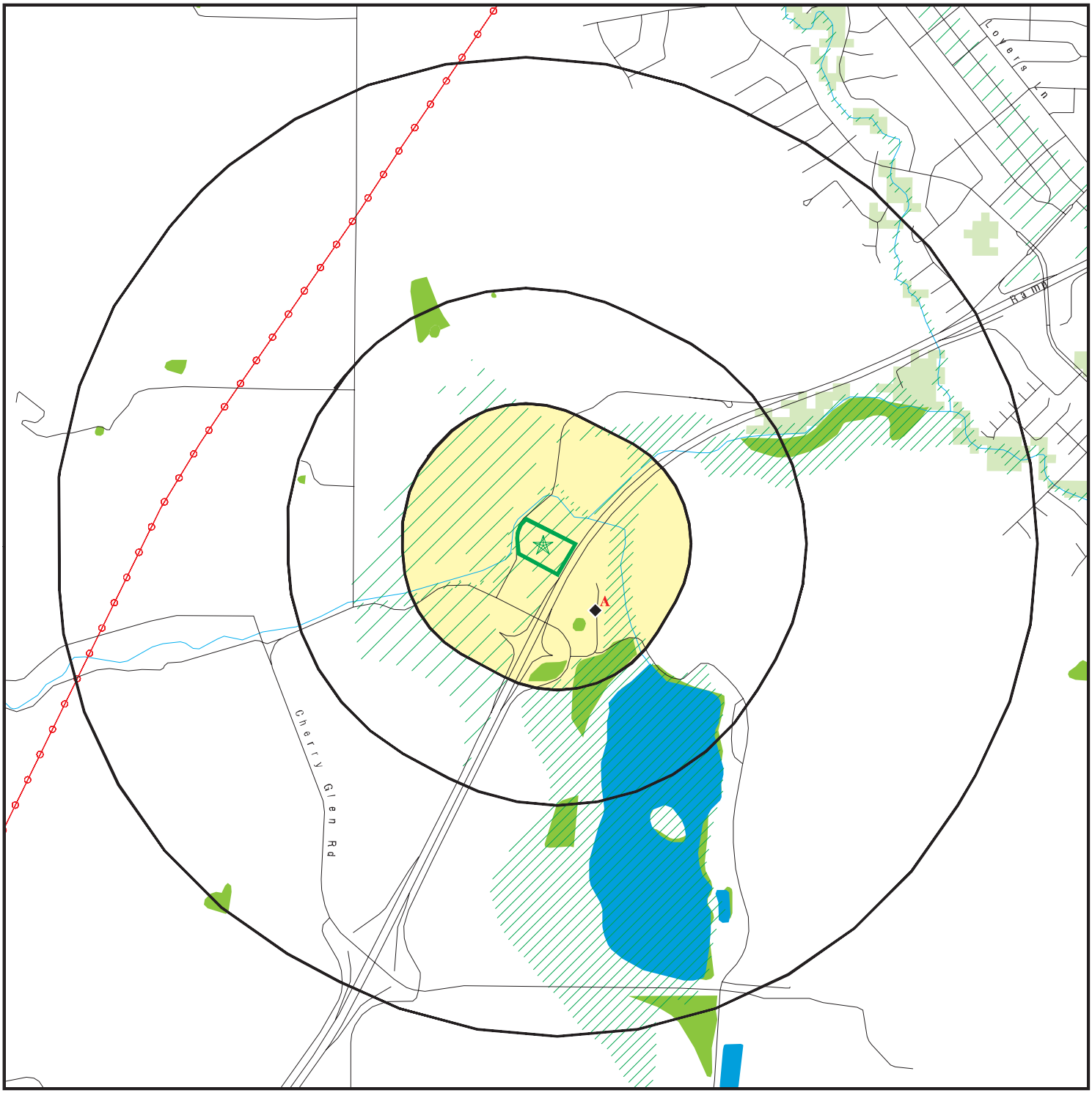
A review of the CA FID UST list, as provided by EDR, and dated 10/31/1994 has revealed that there is 1 CA FID UST site within approximately 0.25 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
GRAN PRIX RACEWAYS Facility Id: 48002282 Status: A	4670 PENA ADOBE RD	SE 0 - 1/8 (0.113 mi.)	A1	8

EXECUTIVE SUMMARY

There were no unmapped sites in this report.

OVERVIEW MAP - 5316228.2S



- 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
- Power transmission lines
- 100-year flood zone
- 500-year flood zone
- National Wetland Inventory
- State Wetlands
- Upgradient Area
- 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:	Cherry Glen Rd	CLIENT:	Gularte & Associates, Inc.
ADDRESS:	5920 Cherry Glen Road Vacaville CA 95688	CONTACT:	Rory Taylor
LAT/LONG:	38.338146 / 122.01714	INQUIRY #:	5316228.2s
		DATE:	May 30, 2018 2:30 pm

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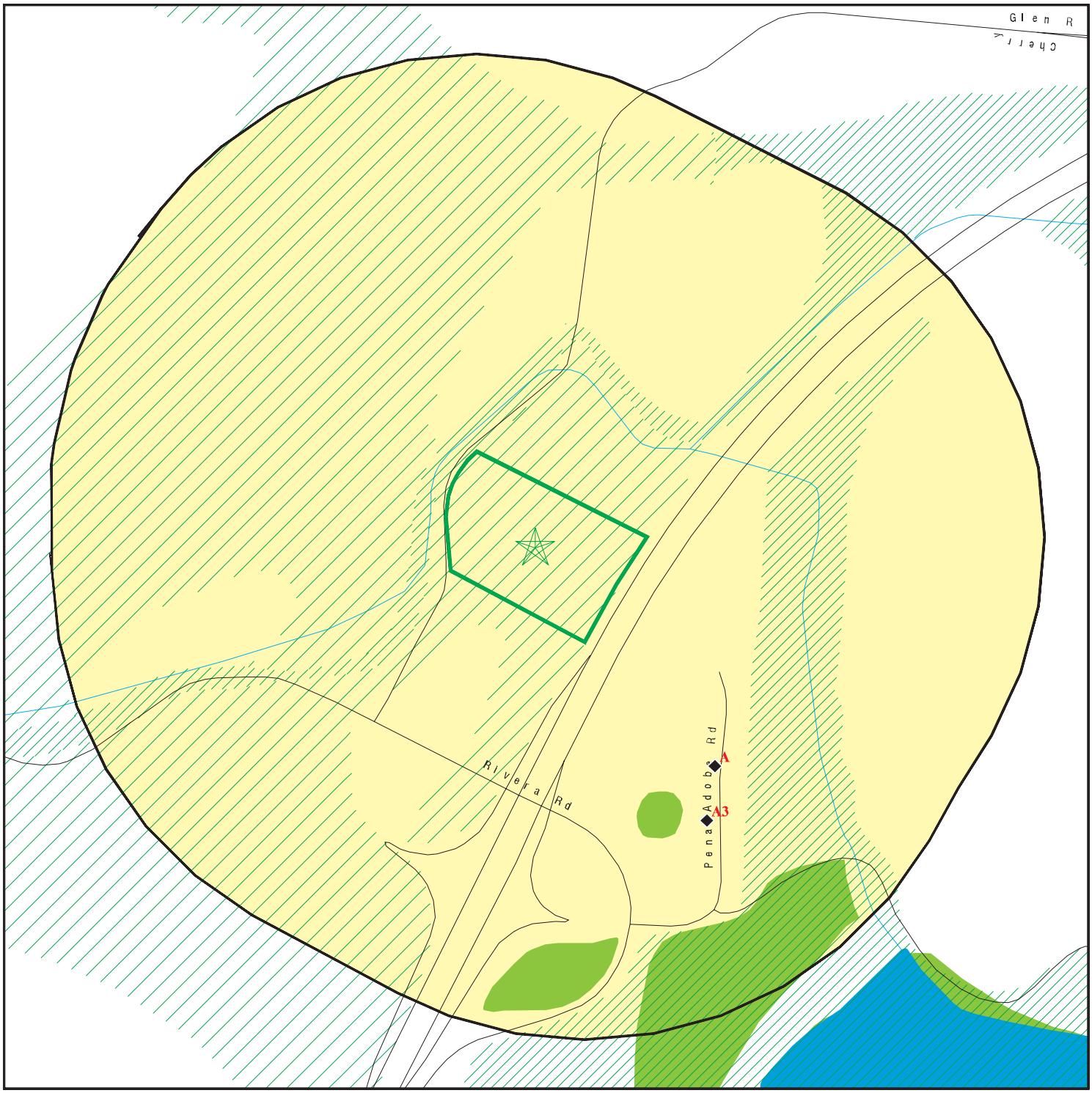
DETAIL MAP - 5316228.2S



0 1/16 1/8 1/4 Miles

- 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
- 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.

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ADDRESS:	5920 Cherry Glen Road Vacaville CA 95688	CONTACT:	Rory Taylor
LAT/LONG:	38.338146 / 122.01714	INQUIRY #:	5316228.2s
		DATE:	May 30, 2018 2:31 pm

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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		0	0	0	0	NR	0
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	0	NR	NR	NR	0
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		0	0	0	NR	NR	0
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	0	NR	NR	0
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
Toxic Pits	1.000		0	0	0	0	NR	0
US CDL	0.001		0	NR	NR	NR	NR	0
Local Lists of Registered Storage Tanks								
SWEEPS UST	0.250		1	0	NR	NR	NR	1
HIST UST	0.250		1	0	NR	NR	NR	1
CA FID UST	0.250		1	0	NR	NR	NR	1
Local Land Records								
LIENS	0.001		0	NR	NR	NR	NR	0
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

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
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	0	NR	NR	NR	0
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
DRYCLEANERS	0.250		0	0	NR	NR	NR	0
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

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
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
UIC	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
WIP	0.250		0	0	NR	NR	NR	0
PROD WATER PONDS	0.001		0	NR	NR	NR	NR	0
PROJECT	0.001		0	NR	NR	NR	NR	0
UIC GEO	0.001		0	NR	NR	NR	NR	0
OTHER OIL GAS	0.001		0	NR	NR	NR	NR	0
WELL STIM PROJ	0.001		0	NR	NR	NR	NR	0
SAMPLING POINT	0.001		0	NR	NR	NR	NR	0
CIWQS	0.001		0	NR	NR	NR	NR	0
NON-CASE INFO	0.001		0	NR	NR	NR	NR	0
MILITARY PRIV SITES	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	3	1	0	0	0	4

NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

A1 **GRAN PRIX RACEWAYS** **CA FID UST** **S101628035**
SE **4670 PENA ADOBE RD** **N/A**
< 1/8 **VACAVILLE, CA 95688**
0.113 mi.
597 ft. **Site 1 of 3 in cluster A**

Relative: **Lower**

Actual: **217 ft.**

CA FID UST:

Facility ID:	48002282
Regulated By:	UTNKA
Regulated ID:	00011327
Cortese Code:	Not reported
SIC Code:	Not reported
Facility Phone:	4157535120
Mail To:	Not reported
Mailing Address:	4670 PENA ADOBE RD
Mailing Address 2:	Not reported
Mailing City,St,Zip:	VACAVILLE 95688
Contact:	Not reported
Contact Phone:	Not reported
DUNs Number:	Not reported
NPDES Number:	Not reported
EPA ID:	Not reported
Comments:	Not reported
Status:	Active

A2 **BLUE LAGOON WATERSLIDE PARK** **SWEEPS UST** **U001614052**
SE **4670 PENA ADOBE RD** **HIST UST** **N/A**
< 1/8 **VACAVILLE, CA 95687**
0.117 mi.
618 ft. **Site 2 of 3 in cluster A**

Relative: **Lower**

Actual: **217 ft.**

SWEEPS UST:

Status:	Not reported
Comp Number:	80066
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:	48-000-080066-000001
Tank Status:	Not reported
Capacity:	550
Active Date:	Not reported
Tank Use:	M.V. FUEL
STG:	PRODUCT
Content:	REG UNLEADED
Number Of Tanks:	1

Status:	Active
Comp Number:	80066
Number:	9
Board Of Equalization:	Not reported
Referral Date:	12-28-93
Action Date:	12-28-93
Created Date:	02-29-88
Owner Tank Id:	Not reported
SWRCB Tank Id:	Not reported
Tank Status:	Not reported
Capacity:	Not reported

BLUE LAGOON WATERSLIDE PARK (Continued) **U001614052**

Active Date: Not reported
Tank Use: Not reported
STG: Not reported
Content: Not reported
Number Of Tanks: Not reported

HIST UST:
File Number: 000212A0
URL: http://geotracker.waterboards.ca.gov/ustpdfs/pdf/000212A0.pdf
Region: STATE
Facility ID: 00000011327
Facility Type: Other
Other Type: GO CART TRACK
Contact Name: ROBERT PRICE
Telephone: 4157535120
Owner Name: GRAN PRIX RACEWAYS VENTURE I
Owner Address: 4670 PENA ADOBE RD
Owner City,St,Zip: VACAVILLE, CA 95688
Total Tanks: 0001

Tank Num: 001
Container Num: #J063549
Year Installed: 1983
Tank Capacity: 00000515
Tank Used for: PRODUCT
Type of Fuel: REGULAR
Container Construction Thickness: 12
Leak Detection: None

Click here for Geo Tracker PDF:

A3 **BLUE LAGOON ASSOCIATES** **UST** **U004189604**
SSE **201 PENA ADOBE RD** **N/A**
1/8-1/4 **VACAVILLE, CA 95687**
0.136 mi.
718 ft. **Site 3 of 3 in cluster A**

Relative: SOLANO CO. UST:
Lower
Facility Id: 80066
Actual: Facility Status: Inactive
216 ft. Decode for Facility Status: Closed
Facility Phone: Not reported

Inventory Number: 1
Inventory Type: Underground Storage Tank (1)
Inventory Description: Not reported
Permit Expire/Last Service: Not reported
Last Service Date: Not reported
District: SUP-DIST NO 3031
Inspector: Ambrose, Chris S

Count: 0 records. ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
		NO SITES FOUND			

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: 12/11/2017
Date Data Arrived at EDR: 12/22/2017
Date Made Active in Reports: 01/05/2018
Number of Days to Update: 14

Source: EPA
Telephone: N/A
Last EDR Contact: 04/27/2018
Next Scheduled EDR Contact: 07/16/2018
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: 12/11/2017
Date Data Arrived at EDR: 12/22/2017
Date Made Active in Reports: 01/05/2018
Number of Days to Update: 14

Source: EPA
Telephone: N/A
Last EDR Contact: 04/27/2018
Next Scheduled EDR Contact: 07/16/2018
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

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

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: 12/11/2017
Date Data Arrived at EDR: 12/22/2017
Date Made Active in Reports: 01/05/2018
Number of Days to Update: 14

Source: EPA
Telephone: N/A
Last EDR Contact: 04/27/2018
Next Scheduled EDR Contact: 07/16/2018
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: 04/06/2018
Next Scheduled EDR Contact: 07/16/2018
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: 01/09/2018
Date Data Arrived at EDR: 02/06/2018
Date Made Active in Reports: 04/13/2018
Number of Days to Update: 66

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 04/27/2018
Next Scheduled EDR Contact: 07/30/2018
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: 01/09/2018
Date Data Arrived at EDR: 02/06/2018
Date Made Active in Reports: 04/13/2018
Number of Days to Update: 66

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 04/27/2018
Next Scheduled EDR Contact: 07/30/2018
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: 12/11/2017
Date Data Arrived at EDR: 12/26/2017
Date Made Active in Reports: 02/09/2018
Number of Days to Update: 45

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 03/28/2018
Next Scheduled EDR Contact: 07/09/2018
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: 12/11/2017
Date Data Arrived at EDR: 12/26/2017
Date Made Active in Reports: 02/09/2018
Number of Days to Update: 45

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 03/28/2018
Next Scheduled EDR Contact: 07/09/2018
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: 12/11/2017
Date Data Arrived at EDR: 12/26/2017
Date Made Active in Reports: 02/09/2018
Number of Days to Update: 45

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 03/28/2018
Next Scheduled EDR Contact: 07/09/2018
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: 12/11/2017
Date Data Arrived at EDR: 12/26/2017
Date Made Active in Reports: 02/09/2018
Number of Days to Update: 45

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 03/28/2018
Next Scheduled EDR Contact: 07/09/2018
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: 12/11/2017
Date Data Arrived at EDR: 12/26/2017
Date Made Active in Reports: 02/09/2018
Number of Days to Update: 45

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 03/28/2018
Next Scheduled EDR Contact: 07/09/2018
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: 02/16/2018
Date Data Arrived at EDR: 02/22/2018
Date Made Active in Reports: 05/11/2018
Number of Days to Update: 78

Source: Department of the Navy
Telephone: 843-820-7326
Last EDR Contact: 05/09/2018
Next Scheduled EDR Contact: 08/27/2018
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: 02/13/2018
Date Data Arrived at EDR: 02/27/2018
Date Made Active in Reports: 05/11/2018
Number of Days to Update: 73

Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 05/29/2018
Next Scheduled EDR Contact: 09/10/2018
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: 02/13/2018
Date Data Arrived at EDR: 02/27/2018
Date Made Active in Reports: 05/11/2018
Number of Days to Update: 73

Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 05/29/2018
Next Scheduled EDR Contact: 09/10/2018
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: 01/16/2018
Date Data Arrived at EDR: 01/19/2018
Date Made Active in Reports: 03/23/2018
Number of Days to Update: 63

Source: National Response Center, United States Coast Guard
Telephone: 202-267-2180
Last EDR Contact: 03/27/2018
Next Scheduled EDR Contact: 07/09/2018
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: 01/30/2018
Date Data Arrived at EDR: 01/31/2018
Date Made Active in Reports: 03/19/2018
Number of Days to Update: 47

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 05/02/2018
Next Scheduled EDR Contact: 08/13/2018
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: 01/30/2018
Date Data Arrived at EDR: 01/31/2018
Date Made Active in Reports: 03/19/2018
Number of Days to Update: 47

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 05/02/2018
Next Scheduled EDR Contact: 08/13/2018
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: 02/12/2018
Date Data Arrived at EDR: 02/14/2018
Date Made Active in Reports: 04/03/2018
Number of Days to Update: 48

Source: Department of Resources Recycling and Recovery
Telephone: 916-341-6320
Last EDR Contact: 05/16/2018
Next Scheduled EDR Contact: 08/27/2018
Data Release Frequency: Quarterly

State and tribal leaking storage tank lists

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: 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: 03/12/2018
Date Data Arrived at EDR: 03/14/2018
Date Made Active in Reports: 03/21/2018
Number of Days to Update: 7

Source: State Water Resources Control Board
Telephone: see region list
Last EDR Contact: 03/14/2018
Next Scheduled EDR Contact: 06/25/2018
Data Release Frequency: Quarterly

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

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 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 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 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 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

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: 10/12/2017
Date Data Arrived at EDR: 01/23/2018
Date Made Active in Reports: 04/13/2018
Number of Days to Update: 80

Source: EPA Region 8
Telephone: 303-312-6271
Last EDR Contact: 05/18/2018
Next Scheduled EDR Contact: 08/06/2018
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: 09/30/2017
Date Data Arrived at EDR: 01/23/2018
Date Made Active in Reports: 04/13/2018
Number of Days to Update: 80

Source: Environmental Protection Agency
Telephone: 415-972-3372
Last EDR Contact: 05/18/2018
Next Scheduled EDR Contact: 08/06/2018
Data Release Frequency: Varies

INDIAN LUST R10: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Alaska, Idaho, Oregon and Washington.

Date of Government Version: 10/24/2017
Date Data Arrived at EDR: 01/23/2018
Date Made Active in Reports: 04/13/2018
Number of Days to Update: 80
Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 05/18/2018
Next Scheduled EDR Contact: 08/06/2018
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: 10/14/2017
Date Data Arrived at EDR: 01/23/2018
Date Made Active in Reports: 04/13/2018
Number of Days to Update: 80
Source: EPA Region 1
Telephone: 617-918-1313
Last EDR Contact: 05/18/2018
Next Scheduled EDR Contact: 08/06/2018
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: 10/14/2017
Date Data Arrived at EDR: 01/23/2018
Date Made Active in Reports: 04/13/2018
Number of Days to Update: 80
Source: EPA Region 4
Telephone: 404-562-8677
Last EDR Contact: 05/16/2018
Next Scheduled EDR Contact: 08/06/2018
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: 01/06/2018
Date Data Arrived at EDR: 01/23/2018
Date Made Active in Reports: 04/13/2018
Number of Days to Update: 80
Source: EPA Region 6
Telephone: 214-665-6597
Last EDR Contact: 05/18/2018
Next Scheduled EDR Contact: 08/06/2018
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: 10/16/2017
Date Data Arrived at EDR: 01/23/2018
Date Made Active in Reports: 04/13/2018
Number of Days to Update: 80
Source: EPA, Region 5
Telephone: 312-886-7439
Last EDR Contact: 05/18/2018
Next Scheduled EDR Contact: 08/06/2018
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: 10/12/2017
Date Data Arrived at EDR: 01/23/2018
Date Made Active in Reports: 04/13/2018
Number of Days to Update: 80
Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 05/18/2018
Next Scheduled EDR Contact: 08/06/2018
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: 03/12/2018
Date Data Arrived at EDR: 03/14/2018
Date Made Active in Reports: 03/21/2018
Number of Days to Update: 7
Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 12/12/2018
Next Scheduled EDR Contact: 06/25/2018
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: 04/13/2018
Next Scheduled EDR Contact: 07/23/2018
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: 03/08/2018
Date Data Arrived at EDR: 03/14/2018
Date Made Active in Reports: 05/04/2018
Number of Days to Update: 51
Source: State Water Resources Control Board
Telephone: 916-327-7844
Last EDR Contact: 03/14/2018
Next Scheduled EDR Contact: 06/25/2018
Data Release Frequency: Varies

MILITARY UST SITES: Military UST Sites (GEOTRACKER)
Military ust sites

Date of Government Version: 03/12/2018
Date Data Arrived at EDR: 03/14/2018
Date Made Active in Reports: 05/04/2018
Number of Days to Update: 51
Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 12/12/2018
Next Scheduled EDR Contact: 06/25/2018
Data Release Frequency: Varies

UST: Active UST Facilities
Active UST facilities gathered from the local regulatory agencies

Date of Government Version: 03/12/2018
Date Data Arrived at EDR: 03/14/2018
Date Made Active in Reports: 03/29/2018
Number of Days to Update: 15
Source: SWRCB
Telephone: 916-341-5851
Last EDR Contact: 03/14/2018
Next Scheduled EDR Contact: 06/25/2018
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: 03/21/2018
Next Scheduled EDR Contact: 07/09/2018
Data Release Frequency: Quarterly

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: 10/14/2017
Date Data Arrived at EDR: 01/23/2018
Date Made Active in Reports: 04/13/2018
Number of Days to Update: 80
Source: EPA, Region 1
Telephone: 617-918-1313
Last EDR Contact: 05/18/2018
Next Scheduled EDR Contact: 08/06/2018
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: 10/12/2017
Date Data Arrived at EDR: 01/23/2018
Date Made Active in Reports: 04/13/2018
Number of Days to Update: 80
Source: EPA Region 8
Telephone: 303-312-6137
Last EDR Contact: 05/18/2018
Next Scheduled EDR Contact: 08/06/2018
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: 01/13/2018
Date Data Arrived at EDR: 01/23/2018
Date Made Active in Reports: 04/13/2018
Number of Days to Update: 80
Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 05/18/2018
Next Scheduled EDR Contact: 08/06/2018
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: 04/24/2017
Date Data Arrived at EDR: 07/27/2017
Date Made Active in Reports: 12/08/2017
Number of Days to Update: 134

Source: EPA Region 6
Telephone: 214-665-7591
Last EDR Contact: 05/18/2018
Next Scheduled EDR Contact: 08/06/2018
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: 09/30/2017
Date Data Arrived at EDR: 01/23/2018
Date Made Active in Reports: 04/13/2018
Number of Days to Update: 80

Source: EPA Region 9
Telephone: 415-972-3368
Last EDR Contact: 05/18/2018
Next Scheduled EDR Contact: 08/06/2018
Data Release Frequency: Varies

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: 10/24/2017
Date Data Arrived at EDR: 01/23/2018
Date Made Active in Reports: 04/13/2018
Number of Days to Update: 80

Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 05/18/2018
Next Scheduled EDR Contact: 08/06/2018
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: 10/14/2017
Date Data Arrived at EDR: 01/23/2018
Date Made Active in Reports: 04/13/2018
Number of Days to Update: 80

Source: EPA Region 4
Telephone: 404-562-9424
Last EDR Contact: 05/16/2018
Next Scheduled EDR Contact: 08/06/2018
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: 10/16/2017
Date Data Arrived at EDR: 01/23/2018
Date Made Active in Reports: 04/13/2018
Number of Days to Update: 80

Source: EPA Region 5
Telephone: 312-886-6136
Last EDR Contact: 05/18/2018
Next Scheduled EDR Contact: 08/06/2018
Data Release Frequency: Varies

State and tribal voluntary cleanup sites

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

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: 03/21/2018
Next Scheduled EDR Contact: 07/09/2018
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: 01/30/2018
Date Data Arrived at EDR: 01/31/2018
Date Made Active in Reports: 03/19/2018
Number of Days to Update: 47
Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 05/02/2018
Next Scheduled EDR Contact: 08/13/2018
Data Release Frequency: Quarterly

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: 03/26/2018
Date Data Arrived at EDR: 03/27/2018
Date Made Active in Reports: 05/04/2018
Number of Days to Update: 38
Source: State Water Resources Control Board
Telephone: 916-323-7905
Last EDR Contact: 03/27/2018
Next Scheduled EDR Contact: 07/09/2018
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: 01/19/2018
Date Data Arrived at EDR: 01/19/2018
Date Made Active in Reports: 02/09/2018
Number of Days to Update: 21
Source: Environmental Protection Agency
Telephone: 202-566-2777
Last EDR Contact: 03/21/2018
Next Scheduled EDR Contact: 07/02/2018
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: 05/03/2018
Next Scheduled EDR Contact: 08/13/2018
Data Release Frequency: No Update Planned

SWRCY: Recycler Database
A listing of recycling facilities in California.

Date of Government Version: 03/12/2018
Date Data Arrived at EDR: 03/14/2018
Date Made Active in Reports: 05/04/2018
Number of Days to Update: 51

Source: Department of Conservation
Telephone: 916-323-3836
Last EDR Contact: 03/14/2018
Next Scheduled EDR Contact: 06/25/2018
Data Release Frequency: Quarterly

HAULERS: Registered Waste Tire Haulers Listing
A listing of registered waste tire haulers.

Date of Government Version: 02/08/2018
Date Data Arrived at EDR: 02/09/2018
Date Made Active in Reports: 03/20/2018
Number of Days to Update: 39

Source: Integrated Waste Management Board
Telephone: 916-341-6422
Last EDR Contact: 05/22/2018
Next Scheduled EDR Contact: 08/27/2018
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: 01/30/2018
Next Scheduled EDR Contact: 05/14/2018
Data Release Frequency: Varies

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: 04/18/2018
Next Scheduled EDR Contact: 08/06/2018
Data Release Frequency: No Update Planned

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

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: 05/04/2018
Next Scheduled EDR Contact: 08/13/2018
Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

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: 02/22/2018
Date Data Arrived at EDR: 03/01/2018
Date Made Active in Reports: 05/11/2018
Number of Days to Update: 71

Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 02/27/2018
Next Scheduled EDR Contact: 06/11/2018
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: 01/30/2018
Date Data Arrived at EDR: 01/31/2018
Date Made Active in Reports: 03/19/2018
Number of Days to Update: 47

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 05/02/2018
Next Scheduled EDR Contact: 08/13/2018
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: 06/30/2017
Date Data Arrived at EDR: 08/18/2017
Date Made Active in Reports: 09/21/2017
Number of Days to Update: 34

Source: Department of Toxic Substances Control
Telephone: 916-255-6504
Last EDR Contact: 05/24/2018
Next Scheduled EDR Contact: 07/23/2018
Data Release Frequency: Varies

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: 02/22/2018
Date Data Arrived at EDR: 03/01/2018
Date Made Active in Reports: 05/11/2018
Number of Days to Update: 71

Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 02/27/2018
Next Scheduled EDR Contact: 06/11/2018
Data Release Frequency: Quarterly

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: 02/28/2018
Date Data Arrived at EDR: 03/01/2018
Date Made Active in Reports: 03/28/2018
Number of Days to Update: 27

Source: Department of Public Health
Telephone: 707-463-4466
Last EDR Contact: 05/22/2018
Next Scheduled EDR Contact: 09/10/2018
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: 04/19/2018
Date Data Arrived at EDR: 04/24/2018
Date Made Active in Reports: 05/04/2018
Number of Days to Update: 10

Source: San Francisco County Department of Public Health
Telephone: 415-252-3896
Last EDR Contact: 05/02/2018
Next Scheduled EDR Contact: 08/20/2018
Data Release Frequency: Varies

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: 01/28/2018
Date Data Arrived at EDR: 03/01/2018
Date Made Active in Reports: 04/16/2018
Number of Days to Update: 46

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 02/28/2018
Next Scheduled EDR Contact: 06/18/2018
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: 01/09/2018
Date Data Arrived at EDR: 02/06/2018
Date Made Active in Reports: 05/11/2018
Number of Days to Update: 94

Source: Environmental Protection Agency
Telephone: 202-564-6023
Last EDR Contact: 04/27/2018
Next Scheduled EDR Contact: 08/06/2018
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: 02/08/2018
Date Data Arrived at EDR: 02/08/2018
Date Made Active in Reports: 02/08/2018
Number of Days to Update: 0

Source: DTSC and SWRCB
Telephone: 916-323-3400
Last EDR Contact: 03/06/2018
Next Scheduled EDR Contact: 06/18/2018
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: 01/19/2018
Date Data Arrived at EDR: 01/19/2018
Date Made Active in Reports: 03/23/2018
Number of Days to Update: 63

Source: U.S. Department of Transportation
Telephone: 202-366-4555
Last EDR Contact: 03/27/2018
Next Scheduled EDR Contact: 07/09/2018
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: 02/15/2018
Date Data Arrived at EDR: 02/20/2018
Date Made Active in Reports: 04/03/2018
Number of Days to Update: 42

Source: Office of Emergency Services
Telephone: 916-845-8400
Last EDR Contact: 04/24/2018
Next Scheduled EDR Contact: 08/06/2018
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: 03/12/2018
Date Data Arrived at EDR: 03/14/2018
Date Made Active in Reports: 05/04/2018
Number of Days to Update: 51

Source: State Water Qualilty Control Board
Telephone: 866-480-1028
Last EDR Contact: 12/12/2018
Next Scheduled EDR Contact: 06/25/2018
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: 03/12/2018
Date Data Arrived at EDR: 03/14/2018
Date Made Active in Reports: 03/21/2018
Number of Days to Update: 7

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 12/12/2018
Next Scheduled EDR Contact: 06/25/2018
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: 12/11/2017
Date Data Arrived at EDR: 12/26/2017
Date Made Active in Reports: 02/09/2018
Number of Days to Update: 45

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 03/28/2018
Next Scheduled EDR Contact: 07/09/2018
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: 05/25/2018
Next Scheduled EDR Contact: 09/03/2018
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: 04/13/2018
Next Scheduled EDR Contact: 07/23/2018
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: 04/11/2018
Next Scheduled EDR Contact: 07/23/2018
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: 05/15/2018
Next Scheduled EDR Contact: 08/27/2018
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: 01/11/2018
Date Data Arrived at EDR: 01/19/2018
Date Made Active in Reports: 03/02/2018
Number of Days to Update: 42

Source: Environmental Protection Agency
Telephone: 202-566-1917
Last EDR Contact: 03/27/2018
Next Scheduled EDR Contact: 07/09/2018
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: 05/07/2018
Next Scheduled EDR Contact: 08/20/2018
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: 04/22/2013
Date Data Arrived at EDR: 03/03/2015
Date Made Active in Reports: 03/09/2015
Number of Days to Update: 6

Source: Environmental Protection Agency
Telephone: 703-308-4044
Last EDR Contact: 05/08/2018
Next Scheduled EDR Contact: 08/20/2018
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: 03/23/2018
Next Scheduled EDR Contact: 07/02/2018
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: 05/25/2018
Next Scheduled EDR Contact: 09/03/2018
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: 04/09/2018
Next Scheduled EDR Contact: 08/06/2018
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: 01/09/2018
Date Data Arrived at EDR: 02/06/2018
Date Made Active in Reports: 05/11/2018
Number of Days to Update: 94

Source: EPA
Telephone: 703-416-0223
Last EDR Contact: 04/27/2018
Next Scheduled EDR Contact: 06/18/2018
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: 11/02/2017
Date Data Arrived at EDR: 11/17/2017
Date Made Active in Reports: 12/08/2017
Number of Days to Update: 21

Source: Environmental Protection Agency
Telephone: 202-564-8600
Last EDR Contact: 04/20/2018
Next Scheduled EDR Contact: 08/06/2018
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: 10/25/2013
Date Data Arrived at EDR: 10/17/2014
Date Made Active in Reports: 10/20/2014
Number of Days to Update: 3

Source: EPA
Telephone: 202-564-6023
Last EDR Contact: 04/27/2018
Next Scheduled EDR Contact: 08/20/2018
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: 06/01/2017
Date Data Arrived at EDR: 06/09/2017
Date Made Active in Reports: 10/13/2017
Number of Days to Update: 126

Source: EPA
Telephone: 202-566-0500
Last EDR Contact: 04/13/2018
Next Scheduled EDR Contact: 07/23/2018
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: 04/09/2018
Next Scheduled EDR Contact: 07/23/2018
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: 05/03/2018
Next Scheduled EDR Contact: 08/20/2018
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: 03/09/2018
Next Scheduled EDR Contact: 06/18/2018
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: 03/06/2018
Next Scheduled EDR Contact: 06/18/2018
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: 04/27/2018
Next Scheduled EDR Contact: 08/06/2018
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: 01/03/2018
Date Data Arrived at EDR: 01/04/2018
Date Made Active in Reports: 04/13/2018
Number of Days to Update: 99

Source: Environmental Protection Agency
Telephone: 202-343-9775
Last EDR Contact: 04/05/2018
Next Scheduled EDR Contact: 07/16/2018
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: 07/31/2012
Date Data Arrived at EDR: 08/07/2012
Date Made Active in Reports: 09/18/2012
Number of Days to Update: 42

Source: Department of Transporation, Office of Pipeline Safety
Telephone: 202-366-4595
Last EDR Contact: 05/03/2018
Next Scheduled EDR Contact: 08/13/2018
Data Release Frequency: Varies

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: 12/31/2017
Date Data Arrived at EDR: 01/24/2018
Date Made Active in Reports: 04/13/2018
Number of Days to Update: 79

Source: Department of Justice, Consent Decree Library
Telephone: Varies
Last EDR Contact: 04/06/2018
Next Scheduled EDR Contact: 07/02/2018
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: 05/25/2018
Next Scheduled EDR Contact: 09/03/2018
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: 04/11/2018
Next Scheduled EDR Contact: 07/23/2018
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: 12/23/2016
Date Data Arrived at EDR: 12/27/2016
Date Made Active in Reports: 02/17/2017
Number of Days to Update: 52

Source: Department of Energy
Telephone: 202-586-3559
Last EDR Contact: 05/07/2018
Next Scheduled EDR Contact: 08/20/2018
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: 05/18/2018
Next Scheduled EDR Contact: 09/03/2018
Data Release Frequency: Varies

LEAD SMELTER 1: Lead Smelter Sites

A listing of former lead smelter site locations.

Date of Government Version: 01/09/2018
Date Data Arrived at EDR: 02/06/2018
Date Made Active in Reports: 03/02/2018
Number of Days to Update: 24

Source: Environmental Protection Agency
Telephone: 703-603-8787
Last EDR Contact: 04/27/2018
Next Scheduled EDR Contact: 07/16/2018
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: 01/25/2018
Date Data Arrived at EDR: 02/28/2018
Date Made Active in Reports: 05/11/2018
Number of Days to Update: 72

Source: Department of Labor, Mine Safety and Health Administration
Telephone: 303-231-5959
Last EDR Contact: 02/28/2018
Next Scheduled EDR Contact: 06/11/2018
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: 03/02/2018
Next Scheduled EDR Contact: 06/11/2018
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: 03/02/2018
Next Scheduled EDR Contact: 06/11/2018
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: 12/20/2017
Date Data Arrived at EDR: 12/21/2017
Date Made Active in Reports: 03/23/2018
Number of Days to Update: 92

Source: Department of Interior
Telephone: 202-208-2609
Last EDR Contact: 03/07/2018
Next Scheduled EDR Contact: 06/25/2018
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: 02/21/2018
Date Data Arrived at EDR: 02/23/2018
Date Made Active in Reports: 03/23/2018
Number of Days to Update: 28

Source: EPA
Telephone: (415) 947-8000
Last EDR Contact: 02/23/2018
Next Scheduled EDR Contact: 06/18/2018
Data Release Frequency: Quarterly

UXO: Unexploded Ordnance Sites

A listing of unexploded ordnance site locations

Date of Government Version: 09/30/2016
Date Data Arrived at EDR: 10/31/2017
Date Made Active in Reports: 01/12/2018
Number of Days to Update: 73

Source: Department of Defense
Telephone: 703-704-1564
Last EDR Contact: 04/13/2018
Next Scheduled EDR Contact: 07/30/2018
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: 01/13/2018
Date Data Arrived at EDR: 01/19/2018
Date Made Active in Reports: 03/02/2018
Number of Days to Update: 42

Source: Environmental Protection Agency
Telephone: 202-564-2280
Last EDR Contact: 03/07/2018
Next Scheduled EDR Contact: 06/18/2018
Data Release Frequency: Quarterly

DOCKET HWC: Hazardous Waste Compliance Docket Listing

A complete list of the Federal Agency Hazardous Waste Compliance Docket Facilities.

Date of Government Version: 01/04/2018
Date Data Arrived at EDR: 01/19/2018
Date Made Active in Reports: 04/13/2018
Number of Days to Update: 84

Source: Environmental Protection Agency
Telephone: 202-564-0527
Last EDR Contact: 03/02/2018
Next Scheduled EDR Contact: 06/11/2018
Data Release Frequency: Varies

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: 02/20/2018
Date Data Arrived at EDR: 02/21/2018
Date Made Active in Reports: 03/23/2018
Number of Days to Update: 30

Source: EPA
Telephone: 800-385-6164
Last EDR Contact: 05/23/2018
Next Scheduled EDR Contact: 09/03/2018
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: 03/26/2018
Date Data Arrived at EDR: 03/27/2018
Date Made Active in Reports: 05/04/2018
Number of Days to Update: 38
Source: CAL EPA/Office of Emergency Information
Telephone: 916-323-3400
Last EDR Contact: 03/27/2018
Next Scheduled EDR Contact: 07/09/2018
Data Release Frequency: Quarterly

CUPA LIVERMORE-PLEASANTON: CUPA LIVERMORE-PLEASANTON
list of facilities associated with the various CUPA programs in Livermore-Pleasanton

Date of Government Version: 02/28/2018
Date Data Arrived at EDR: 03/01/2018
Date Made Active in Reports: 05/04/2018
Number of Days to Update: 64
Source: Livermore-Pleasanton Fire Department
Telephone: 925-454-2361
Last EDR Contact: 05/07/2018
Next Scheduled EDR Contact: 08/27/2018
Data Release Frequency: Varies

CUPA SAN FRANCISCO CO: CUPA SAN FRANCISCO CO
Cupa facilities

Date of Government Version: 04/20/2018
Date Data Arrived at EDR: 04/24/2018
Date Made Active in Reports: 05/04/2018
Number of Days to Update: 10
Source: San Francisco County Department of Environmental Health
Telephone: 415-252-3896
Last EDR Contact: 05/02/2018
Next Scheduled EDR Contact: 08/20/2018
Data Release Frequency: Varies

DRYCLEAN AVAQMD: DRYCLEAN AVAQMD
A listing of dry cleaners in the Antelope Valley Air Quality Management District.

Date of Government Version: 03/08/2018
Date Data Arrived at EDR: 03/13/2018
Date Made Active in Reports: 05/04/2018
Number of Days to Update: 52
Source: Antelope Valley Air Quality Management District
Telephone: 661-723-8070
Last EDR Contact: 02/28/2018
Next Scheduled EDR Contact: 06/11/2018
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: 03/27/2018
Date Data Arrived at EDR: 03/29/2018
Date Made Active in Reports: 05/04/2018
Number of Days to Update: 36
Source: Department of Toxic Substance Control
Telephone: 916-327-4498
Last EDR Contact: 02/28/2018
Next Scheduled EDR Contact: 06/18/2018
Data Release Frequency: Annually

DRYCLEAN SOUTH COAST: DRYCLEAN SOUTH COAST
A listing of dry cleaners in the South Coast Air Quality Management District

Date of Government Version: 03/16/2018
Date Data Arrived at EDR: 03/20/2018
Date Made Active in Reports: 05/04/2018
Number of Days to Update: 45
Source: South Coast Air Quality Management District
Telephone: 909-396-3211
Last EDR Contact: 05/22/2018
Next Scheduled EDR Contact: 09/10/2018
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: 12/31/2015
Date Data Arrived at EDR: 03/21/2017
Date Made Active in Reports: 08/15/2017
Number of Days to Update: 147

Source: California Air Resources Board
Telephone: 916-322-2990
Last EDR Contact: 03/23/2018
Next Scheduled EDR Contact: 07/02/2018
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: 01/22/2018
Date Data Arrived at EDR: 01/24/2018
Date Made Active in Reports: 03/19/2018
Number of Days to Update: 54

Source: State Water Resoruces Control Board
Telephone: 916-445-9379
Last EDR Contact: 04/18/2018
Next Scheduled EDR Contact: 08/06/2018
Data Release Frequency: Varies

Financial Assurance 1: Financial Assurance Information Listing

Financial Assurance information

Date of Government Version: 01/22/2018
Date Data Arrived at EDR: 01/24/2018
Date Made Active in Reports: 03/20/2018
Number of Days to Update: 55

Source: Department of Toxic Substances Control
Telephone: 916-255-3628
Last EDR Contact: 04/18/2018
Next Scheduled EDR Contact: 08/06/2018
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: 02/14/2018
Date Data Arrived at EDR: 02/16/2018
Date Made Active in Reports: 04/03/2018
Number of Days to Update: 46

Source: California Integrated Waste Management Board
Telephone: 916-341-6066
Last EDR Contact: 05/09/2018
Next Scheduled EDR Contact: 08/27/2018
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: 12/31/2016
Date Data Arrived at EDR: 07/12/2017
Date Made Active in Reports: 10/17/2017
Number of Days to Update: 97

Source: California Environmental Protection Agency
Telephone: 916-255-1136
Last EDR Contact: 04/12/2018
Next Scheduled EDR Contact: 07/23/2018
Data Release Frequency: Annually

ICE: ICE

Contains data pertaining to the Permitted Facilities with Inspections / Enforcements sites tracked in Envirostor.

Date of Government Version: 02/20/2018
Date Data Arrived at EDR: 02/21/2018
Date Made Active in Reports: 04/03/2018
Number of Days to Update: 41

Source: Department of Toxic Subsances Control
Telephone: 877-786-9427
Last EDR Contact: 05/23/2018
Next Scheduled EDR Contact: 09/03/2018
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: 02/20/2018
Date Data Arrived at EDR: 02/21/2018
Date Made Active in Reports: 04/03/2018
Number of Days to Update: 41

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 05/23/2018
Next Scheduled EDR Contact: 09/03/2018
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: 01/08/2018
Date Data Arrived at EDR: 01/09/2018
Date Made Active in Reports: 02/06/2018
Number of Days to Update: 28

Source: Department of Toxic Substances Control
Telephone: 916-440-7145
Last EDR Contact: 04/11/2018
Next Scheduled EDR Contact: 07/23/2018
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: 03/12/2018
Date Data Arrived at EDR: 03/14/2018
Date Made Active in Reports: 05/04/2018
Number of Days to Update: 51

Source: Department of Conservation
Telephone: 916-322-1080
Last EDR Contact: 03/14/2018
Next Scheduled EDR Contact: 06/25/2018
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: 02/27/2018
Date Data Arrived at EDR: 03/05/2018
Date Made Active in Reports: 04/16/2018
Number of Days to Update: 42

Source: Department of Public Health
Telephone: 916-558-1784
Last EDR Contact: 03/06/2018
Next Scheduled EDR Contact: 06/18/2018
Data Release Frequency: Varies

NPDES: NPDES Permits Listing

A listing of NPDES permits, including stormwater.

Date of Government Version: 03/14/2018
Date Data Arrived at EDR: 03/14/2018
Date Made Active in Reports: 05/04/2018
Number of Days to Update: 51

Source: State Water Resources Control Board
Telephone: 916-445-9379
Last EDR Contact: 05/16/2018
Next Scheduled EDR Contact: 08/27/2018
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: 03/05/2018
Date Data Arrived at EDR: 03/05/2018
Date Made Active in Reports: 04/19/2018
Number of Days to Update: 45

Source: Department of Pesticide Regulation
Telephone: 916-445-4038
Last EDR Contact: 03/05/2018
Next Scheduled EDR Contact: 06/18/2018
Data Release Frequency: Quarterly

PROC: Certified Processors Database

A listing of certified processors.

Date of Government Version: 03/12/2018
Date Data Arrived at EDR: 03/14/2018
Date Made Active in Reports: 05/04/2018
Number of Days to Update: 51

Source: Department of Conservation
Telephone: 916-323-3836
Last EDR Contact: 03/14/2018
Next Scheduled EDR Contact: 06/25/2018
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: 03/23/2018
Date Data Arrived at EDR: 03/27/2018
Date Made Active in Reports: 05/04/2018
Number of Days to Update: 38

Source: State Water Resources Control Board
Telephone: 916-445-3846
Last EDR Contact: 03/14/2018
Next Scheduled EDR Contact: 07/02/2018
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: 03/12/2018
Date Data Arrived at EDR: 03/14/2018
Date Made Active in Reports: 05/04/2018
Number of Days to Update: 51

Source: Deaprtment of Conservation
Telephone: 916-445-2408
Last EDR Contact: 03/14/2018
Next Scheduled EDR Contact: 06/25/2018
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 board?s review found that more than one-third of the region?s active disposal pits are operating without permission.

Date of Government Version: 04/15/2015
Date Data Arrived at EDR: 04/17/2015
Date Made Active in Reports: 06/23/2015
Number of Days to Update: 67

Source: RWQCB, Central Valley Region
Telephone: 559-445-5577
Last EDR Contact: 04/13/2018
Next Scheduled EDR Contact: 07/23/2018
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: 05/16/2018
Next Scheduled EDR Contact: 09/03/2018
Data Release Frequency: Quarterly

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: 03/21/2018
Next Scheduled EDR Contact: 07/09/2018
Data Release Frequency: Varies

MILITARY PRIV SITES: Military Privatized Sites (GEOTRACKER)
Military privatized sites

Date of Government Version: 03/12/2018
Date Data Arrived at EDR: 03/14/2018
Date Made Active in Reports: 05/04/2018
Number of Days to Update: 51

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 12/12/2018
Next Scheduled EDR Contact: 06/25/2018
Data Release Frequency: Varies

OTHER OIL GAS: OTHER OIL & GAS (GEOTRACKER)
Other Oil & Gas Projects sites

Date of Government Version: 03/12/2018
Date Data Arrived at EDR: 03/14/2018
Date Made Active in Reports: 05/04/2018
Number of Days to Update: 51

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 12/12/2018
Next Scheduled EDR Contact: 06/25/2018
Data Release Frequency: Varies

PROD WATER PONDS: PROD WATER PONDS (GEOTRACKER)
Produced water ponds sites

Date of Government Version: 03/12/2018
Date Data Arrived at EDR: 03/14/2018
Date Made Active in Reports: 05/04/2018
Number of Days to Update: 51

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 12/12/2018
Next Scheduled EDR Contact: 06/25/2018
Data Release Frequency: Varies

PROJECT: PROJECT (GEOTRACKER)
Projects sites

Date of Government Version: 03/12/2018
Date Data Arrived at EDR: 03/14/2018
Date Made Active in Reports: 05/04/2018
Number of Days to Update: 51

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 12/12/2018
Next Scheduled EDR Contact: 06/25/2018
Data Release Frequency: Varies

NON-CASE INFO: NON-CASE INFO (GEOTRACKER)
Non-Case Information sites

Date of Government Version: 03/12/2018
Date Data Arrived at EDR: 03/14/2018
Date Made Active in Reports: 05/04/2018
Number of Days to Update: 51

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 12/12/2018
Next Scheduled EDR Contact: 06/25/2018
Data Release Frequency: Varies

SAMPLING POINT: SAMPLING POINT (GEOTRACKER)
Sampling point - public sites

Date of Government Version: 03/12/2018
Date Data Arrived at EDR: 03/14/2018
Date Made Active in Reports: 05/04/2018
Number of Days to Update: 51

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 12/12/2018
Next Scheduled EDR Contact: 06/25/2018
Data Release Frequency: Varies

WELL STIM PROJ: WELL SAMP PROJ (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: 03/12/2018
Date Data Arrived at EDR: 03/14/2018
Date Made Active in Reports: 05/04/2018
Number of Days to Update: 51

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 12/12/2018
Next Scheduled EDR Contact: 06/25/2018
Data Release Frequency: Varies

CIWQS: The 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: 03/05/2018
Date Data Arrived at EDR: 03/05/2018
Date Made Active in Reports: 05/04/2018
Number of Days to Update: 60

Source: State Water Resources Control Board
Telephone: 866-794-4977
Last EDR Contact: 03/06/2018
Next Scheduled EDR Contact: 06/18/2018
Data Release Frequency: Varies

UIC GEO: UIC GEO (GEOTRACKER)

Underground control injection sites

Date of Government Version: 03/12/2018
Date Data Arrived at EDR: 03/14/2018
Date Made Active in Reports: 05/04/2018
Number of Days to Update: 51

Source: State Water Resource Control Board
Telephone: 866-480-1028
Last EDR Contact: 12/12/2018
Next Scheduled EDR Contact: 06/25/2018
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:

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: 01/09/2018
Date Data Arrived at EDR: 01/11/2018
Date Made Active in Reports: 02/22/2018
Number of Days to Update: 42

Source: Alameda County Environmental Health Services
Telephone: 510-567-6700
Last EDR Contact: 04/05/2018
Next Scheduled EDR Contact: 07/23/2018
Data Release Frequency: Semi-Annually

Underground Tanks

Underground storage tank sites located in Alameda county.

Date of Government Version: 04/05/2018
Date Data Arrived at EDR: 04/10/2018
Date Made Active in Reports: 05/04/2018
Number of Days to Update: 24

Source: Alameda County Environmental Health Services
Telephone: 510-567-6700
Last EDR Contact: 04/05/2018
Next Scheduled EDR Contact: 04/24/2047
Data Release Frequency: Semi-Annually

AMADOR COUNTY:

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

CUPA Facility List
Cupa Facility List

Date of Government Version: 03/01/2018
Date Data Arrived at EDR: 03/05/2018
Date Made Active in Reports: 03/15/2018
Number of Days to Update: 10

Source: Amador County Environmental Health
Telephone: 209-223-6439
Last EDR Contact: 02/28/2018
Next Scheduled EDR Contact: 06/18/2018
Data Release Frequency: Varies

BUTTE COUNTY:

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: 04/05/2018
Next Scheduled EDR Contact: 07/23/2018
Data Release Frequency: No Update Planned

CALVERAS COUNTY:

CUPA Facility Listing
Cupa Facility Listing

Date of Government Version: 01/25/2018
Date Data Arrived at EDR: 01/26/2018
Date Made Active in Reports: 03/14/2018
Number of Days to Update: 47

Source: Calveras County Environmental Health
Telephone: 209-754-6399
Last EDR Contact: 03/26/2018
Next Scheduled EDR Contact: 07/09/2018
Data Release Frequency: Quarterly

COLUSA COUNTY:

CUPA Facility List
Cupa facility list.

Date of Government Version: 02/26/2018
Date Data Arrived at EDR: 03/01/2018
Date Made Active in Reports: 03/15/2018
Number of Days to Update: 14

Source: Health & Human Services
Telephone: 530-458-0396
Last EDR Contact: 05/16/2018
Next Scheduled EDR Contact: 08/20/2018
Data Release Frequency: Semi-Annually

CONTRA COSTA COUNTY:

Site List
List includes sites from the underground tank, hazardous waste generator and business plan/2185 programs.

Date of Government Version: 02/22/2018
Date Data Arrived at EDR: 02/27/2018
Date Made Active in Reports: 04/16/2018
Number of Days to Update: 48

Source: Contra Costa Health Services Department
Telephone: 925-646-2286
Last EDR Contact: 04/30/2018
Next Scheduled EDR Contact: 08/13/2018
Data Release Frequency: Semi-Annually

DEL NORTE COUNTY:

CUPA Facility List
Cupa Facility list

Date of Government Version: 01/05/2018
Date Data Arrived at EDR: 02/02/2018
Date Made Active in Reports: 03/14/2018
Number of Days to Update: 40

Source: Del Norte County Environmental Health Division
Telephone: 707-465-0426
Last EDR Contact: 04/25/2018
Next Scheduled EDR Contact: 08/13/2018
Data Release Frequency: Varies

EL DORADO COUNTY:

CUPA Facility List
CUPA facility list.

Date of Government Version: 03/05/2018
Date Data Arrived at EDR: 03/08/2018
Date Made Active in Reports: 04/16/2018
Number of Days to Update: 39

Source: El Dorado County Environmental Management Department
Telephone: 530-621-6623
Last EDR Contact: 04/30/2018
Next Scheduled EDR Contact: 08/13/2018
Data Release Frequency: Varies

FRESNO COUNTY:

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: 03/01/2018
Date Data Arrived at EDR: 03/05/2018
Date Made Active in Reports: 03/14/2018
Number of Days to Update: 9

Source: Dept. of Community Health
Telephone: 559-445-3271
Last EDR Contact: 03/06/2018
Next Scheduled EDR Contact: 07/16/2018
Data Release Frequency: Semi-Annually

GLENN COUNTY:

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: 04/18/2018
Next Scheduled EDR Contact: 08/06/2018
Data Release Frequency: Varies

HUMBOLDT COUNTY:

CUPA Facility List
CUPA facility list.

Date of Government Version: 03/05/2018
Date Data Arrived at EDR: 03/08/2018
Date Made Active in Reports: 04/30/2018
Number of Days to Update: 53

Source: Humboldt County Environmental Health
Telephone: N/A
Last EDR Contact: 05/21/2018
Next Scheduled EDR Contact: 09/03/2018
Data Release Frequency: Semi-Annually

IMPERIAL COUNTY:

CUPA Facility List
Cupa facility list.

Date of Government Version: 01/22/2018
Date Data Arrived at EDR: 01/26/2018
Date Made Active in Reports: 03/14/2018
Number of Days to Update: 47

Source: San Diego Border Field Office
Telephone: 760-339-2777
Last EDR Contact: 04/18/2018
Next Scheduled EDR Contact: 08/06/2018
Data Release Frequency: Varies

INYO COUNTY:

CUPA Facility List
Cupa facility list.

Date of Government Version: 06/08/2017
Date Data Arrived at EDR: 06/09/2017
Date Made Active in Reports: 08/04/2017
Number of Days to Update: 56

Source: Inyo County Environmental Health Services
Telephone: 760-878-0238
Last EDR Contact: 05/16/2018
Next Scheduled EDR Contact: 09/03/2018
Data Release Frequency: Varies

KERN COUNTY:

Underground Storage Tank Sites & Tank Listing
Kern County Sites and Tanks Listing.

Date of Government Version: 02/02/2018
Date Data Arrived at EDR: 02/02/2018
Date Made Active in Reports: 03/28/2018
Number of Days to Update: 54

Source: Kern County Environment Health Services Department
Telephone: 661-862-8700
Last EDR Contact: 05/02/2018
Next Scheduled EDR Contact: 08/20/2018
Data Release Frequency: Quarterly

KINGS COUNTY:

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: 11/14/2017
Date Data Arrived at EDR: 11/17/2017
Date Made Active in Reports: 12/15/2017
Number of Days to Update: 28

Source: Kings County Department of Public Health
Telephone: 559-584-1411
Last EDR Contact: 05/16/2018
Next Scheduled EDR Contact: 09/03/2018
Data Release Frequency: Varies

LAKE COUNTY:

CUPA Facility List
Cupa facility list

Date of Government Version: 02/06/2018
Date Data Arrived at EDR: 02/09/2018
Date Made Active in Reports: 03/14/2018
Number of Days to Update: 33

Source: Lake County Environmental Health
Telephone: 707-263-1164
Last EDR Contact: 04/16/2018
Next Scheduled EDR Contact: 07/30/2018
Data Release Frequency: Varies

LASSEN COUNTY:

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: Lassen County Environmental Health
Telephone: 530-251-8528
Last EDR Contact: 04/18/2018
Next Scheduled EDR Contact: 08/06/2018
Data Release Frequency: Varies

LOS ANGELES COUNTY:

San Gabriel Valley Areas of Concern
San Gabriel Valley areas where VOC contamination is at or above the MCL as designated by region 9 EPA office.

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: EPA Region 9
Telephone: 415-972-3178
Last EDR Contact: 03/14/2018
Next Scheduled EDR Contact: 07/02/2018
Data Release Frequency: No Update Planned

HMS: Street Number List
Industrial Waste and Underground Storage Tank Sites.

Date of Government Version: 01/16/2018
Date Data Arrived at EDR: 01/23/2018
Date Made Active in Reports: 03/20/2018
Number of Days to Update: 56

Source: Department of Public Works
Telephone: 626-458-3517
Last EDR Contact: 04/05/2018
Next Scheduled EDR Contact: 07/23/2018
Data Release Frequency: Semi-Annually

List of Solid Waste Facilities
Solid Waste Facilities in Los Angeles County.

Date of Government Version: 01/16/2018
Date Data Arrived at EDR: 01/16/2018
Date Made Active in Reports: 02/14/2018
Number of Days to Update: 29

Source: La County Department of Public Works
Telephone: 818-458-5185
Last EDR Contact: 04/17/2018
Next Scheduled EDR Contact: 07/30/2018
Data Release Frequency: Varies

City of Los Angeles Landfills
Landfills owned and maintained by the City of Los Angeles.

Date of Government Version: 01/01/2018
Date Data Arrived at EDR: 05/01/2018
Date Made Active in Reports: 05/14/2018
Number of Days to Update: 13

Source: Engineering & Construction Division
Telephone: 213-473-7869
Last EDR Contact: 04/11/2018
Next Scheduled EDR Contact: 07/30/2018
Data Release Frequency: Varies

Site Mitigation List
Industrial sites that have had some sort of spill or complaint.

Date of Government Version: 01/01/2018
Date Data Arrived at EDR: 01/17/2018
Date Made Active in Reports: 02/14/2018
Number of Days to Update: 28

Source: Community Health Services
Telephone: 323-890-7806
Last EDR Contact: 04/17/2018
Next Scheduled EDR Contact: 07/30/2018
Data Release Frequency: Annually

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: 04/11/2018
Next Scheduled EDR Contact: 07/30/2018
Data Release Frequency: Semi-Annually

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: 04/18/2018
Next Scheduled EDR Contact: 08/06/2018
Data Release Frequency: Annually

City of Torrance Underground Storage Tank

Underground storage tank sites located in the city of Torrance.

Date of Government Version: 01/04/2018
Date Data Arrived at EDR: 01/05/2018
Date Made Active in Reports: 01/18/2018
Number of Days to Update: 13

Source: City of Torrance Fire Department
Telephone: 310-618-2973
Last EDR Contact: 04/05/2018
Next Scheduled EDR Contact: 07/23/2018
Data Release Frequency: Semi-Annually

MADERA COUNTY:

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: 02/21/2018
Date Data Arrived at EDR: 02/22/2018
Date Made Active in Reports: 04/03/2018
Number of Days to Update: 40

Source: Madera County Environmental Health
Telephone: 559-675-7823
Last EDR Contact: 05/16/2018
Next Scheduled EDR Contact: 09/03/2018
Data Release Frequency: Varies

MARIN COUNTY:

Underground Storage Tank Sites

Currently permitted USTs in Marin County.

Date of Government Version: 03/30/2018
Date Data Arrived at EDR: 04/06/2018
Date Made Active in Reports: 05/04/2018
Number of Days to Update: 28

Source: Public Works Department Waste Management
Telephone: 415-473-6647
Last EDR Contact: 03/29/2018
Next Scheduled EDR Contact: 07/16/2018
Data Release Frequency: Semi-Annually

MERCED COUNTY:

CUPA Facility List

CUPA facility list.

Date of Government Version: 01/11/2018
Date Data Arrived at EDR: 01/12/2018
Date Made Active in Reports: 02/08/2018
Number of Days to Update: 27

Source: Merced County Environmental Health
Telephone: 209-381-1094
Last EDR Contact: 05/16/2018
Next Scheduled EDR Contact: 09/03/2018
Data Release Frequency: Varies

MONO COUNTY:

CUPA Facility List
CUPA Facility List

Date of Government Version: 02/22/2018
Date Data Arrived at EDR: 02/27/2018
Date Made Active in Reports: 03/14/2018
Number of Days to Update: 15

Source: Mono County Health Department
Telephone: 760-932-5580
Last EDR Contact: 05/22/2018
Next Scheduled EDR Contact: 09/10/2018
Data Release Frequency: Varies

MONTEREY COUNTY:

CUPA Facility Listing
CUPA Program listing from the Environmental Health Division.

Date of Government Version: 03/27/2018
Date Data Arrived at EDR: 03/29/2018
Date Made Active in Reports: 04/16/2018
Number of Days to Update: 18

Source: Monterey County Health Department
Telephone: 831-796-1297
Last EDR Contact: 05/21/2018
Next Scheduled EDR Contact: 09/03/2018
Data Release Frequency: Varies

NAPA COUNTY:

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: 05/22/2018
Next Scheduled EDR Contact: 09/10/2018
Data Release Frequency: No Update Planned

Closed and Operating Underground Storage Tank Sites
Underground storage tank sites located in Napa county.

Date of Government Version: 02/22/2018
Date Data Arrived at EDR: 02/27/2018
Date Made Active in Reports: 03/29/2018
Number of Days to Update: 30

Source: Napa County Department of Environmental Management
Telephone: 707-253-4269
Last EDR Contact: 05/22/2018
Next Scheduled EDR Contact: 09/10/2018
Data Release Frequency: No Update Planned

NEVADA COUNTY:

CUPA Facility List
CUPA facility list.

Date of Government Version: 01/31/2018
Date Data Arrived at EDR: 02/01/2018
Date Made Active in Reports: 03/14/2018
Number of Days to Update: 41

Source: Community Development Agency
Telephone: 530-265-1467
Last EDR Contact: 04/25/2018
Next Scheduled EDR Contact: 08/13/2018
Data Release Frequency: Varies

ORANGE COUNTY:

List of Industrial Site Cleanups
Petroleum and non-petroleum spills.

Date of Government Version: 02/05/2018
Date Data Arrived at EDR: 02/13/2018
Date Made Active in Reports: 04/03/2018
Number of Days to Update: 49

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 05/07/2018
Next Scheduled EDR Contact: 08/20/2018
Data Release Frequency: Annually

List of Underground Storage Tank Cleanups
Orange County Underground Storage Tank Cleanups (LUST).

Date of Government Version: 02/05/2018
Date Data Arrived at EDR: 02/13/2018
Date Made Active in Reports: 03/20/2018
Number of Days to Update: 35

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 05/07/2018
Next Scheduled EDR Contact: 08/20/2018
Data Release Frequency: Quarterly

List of Underground Storage Tank Facilities
Orange County Underground Storage Tank Facilities (UST).

Date of Government Version: 01/02/2018
Date Data Arrived at EDR: 02/07/2018
Date Made Active in Reports: 03/28/2018
Number of Days to Update: 49

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 05/08/2018
Next Scheduled EDR Contact: 08/20/2018
Data Release Frequency: Quarterly

PLACER COUNTY:

Master List of Facilities
List includes aboveground tanks, underground tanks and cleanup sites.

Date of Government Version: 03/15/2018
Date Data Arrived at EDR: 03/19/2018
Date Made Active in Reports: 05/04/2018
Number of Days to Update: 46

Source: Placer County Health and Human Services
Telephone: 530-745-2363
Last EDR Contact: 03/15/2018
Next Scheduled EDR Contact: 06/18/2018
Data Release Frequency: Semi-Annually

PLUMAS COUNTY:

CUPA Facility List
Plumas County CUPA Program facilities.

Date of Government Version: 01/22/2018
Date Data Arrived at EDR: 01/24/2018
Date Made Active in Reports: 03/15/2018
Number of Days to Update: 50

Source: Plumas County Environmental Health
Telephone: 530-283-6355
Last EDR Contact: 04/18/2018
Next Scheduled EDR Contact: 08/06/2018
Data Release Frequency: Varies

RIVERSIDE COUNTY:

Listing of Underground Tank Cleanup Sites
Riverside County Underground Storage Tank Cleanup Sites (LUST).

Date of Government Version: 04/05/2018
Date Data Arrived at EDR: 04/10/2018
Date Made Active in Reports: 05/04/2018
Number of Days to Update: 24

Source: Department of Environmental Health
Telephone: 951-358-5055
Last EDR Contact: 03/19/2018
Next Scheduled EDR Contact: 07/02/2018
Data Release Frequency: Quarterly

Underground Storage Tank Tank List
Underground storage tank sites located in Riverside county.

Date of Government Version: 04/05/2018
Date Data Arrived at EDR: 04/10/2018
Date Made Active in Reports: 05/04/2018
Number of Days to Update: 24

Source: Department of Environmental Health
Telephone: 951-358-5055
Last EDR Contact: 03/19/2018
Next Scheduled EDR Contact: 07/02/2018
Data Release Frequency: Quarterly

SACRAMENTO COUNTY:

Toxic Site Clean-Up List
List of sites where unauthorized releases of potentially hazardous materials have occurred.

Date of Government Version: 11/02/2017
Date Data Arrived at EDR: 01/03/2018
Date Made Active in Reports: 02/05/2018
Number of Days to Update: 33

Source: Sacramento County Environmental Management
Telephone: 916-875-8406
Last EDR Contact: 04/04/2018
Next Scheduled EDR Contact: 07/16/2018
Data Release Frequency: Quarterly

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: 11/02/2017
Date Data Arrived at EDR: 01/03/2018
Date Made Active in Reports: 02/14/2018
Number of Days to Update: 42

Source: Sacramento County Environmental Management
Telephone: 916-875-8406
Last EDR Contact: 04/04/2018
Next Scheduled EDR Contact: 07/16/2018
Data Release Frequency: Quarterly

SAN BENITO COUNTY:

CUPA Facility List
Cupa facility list

Date of Government Version: 11/01/2017
Date Data Arrived at EDR: 11/03/2017
Date Made Active in Reports: 11/17/2017
Number of Days to Update: 14

Source: San Benito County Environmental Health
Telephone: N/A
Last EDR Contact: 05/16/2018
Next Scheduled EDR Contact: 08/20/2018
Data Release Frequency: Varies

SAN BERNARDINO COUNTY:

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: 11/30/2017
Date Data Arrived at EDR: 12/01/2017
Date Made Active in Reports: 01/16/2018
Number of Days to Update: 46

Source: San Bernardino County Fire Department Hazardous Materials Division
Telephone: 909-387-3041
Last EDR Contact: 04/06/2018
Next Scheduled EDR Contact: 08/20/2018
Data Release Frequency: Quarterly

SAN DIEGO COUNTY:

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: 03/05/2018
Date Data Arrived at EDR: 03/07/2018
Date Made Active in Reports: 04/16/2018
Number of Days to Update: 40

Source: Hazardous Materials Management Division
Telephone: 619-338-2268
Last EDR Contact: 03/07/2018
Next Scheduled EDR Contact: 06/18/2018
Data Release Frequency: Quarterly

Solid Waste Facilities

San Diego County Solid Waste Facilities.

Date of Government Version: 10/31/2015
Date Data Arrived at EDR: 11/07/2015
Date Made Active in Reports: 01/04/2016
Number of Days to Update: 58

Source: Department of Health Services
Telephone: 619-338-2209
Last EDR Contact: 04/18/2018
Next Scheduled EDR Contact: 08/06/2018
Data Release Frequency: Varies

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: 04/18/2018
Date Data Arrived at EDR: 04/23/2018
Date Made Active in Reports: 05/04/2018
Number of Days to Update: 11

Source: Department of Environmental Health
Telephone: 858-505-6874
Last EDR Contact: 04/18/2018
Next Scheduled EDR Contact: 08/06/2018
Data Release Frequency: Varies

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: 02/28/2018
Next Scheduled EDR Contact: 06/18/2018
Data Release Frequency: No Update Planned

SAN FRANCISCO COUNTY:

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: 05/02/2018
Next Scheduled EDR Contact: 08/20/2018
Data Release Frequency: Quarterly

Underground Storage Tank Information

Underground storage tank sites located in San Francisco county.

Date of Government Version: 11/02/2017
Date Data Arrived at EDR: 11/07/2017
Date Made Active in Reports: 12/19/2017
Number of Days to Update: 42

Source: Department of Public Health
Telephone: 415-252-3920
Last EDR Contact: 05/02/2018
Next Scheduled EDR Contact: 08/20/2018
Data Release Frequency: Quarterly

SAN JOAQUIN COUNTY:

San Joaquin Co. UST
A listing of underground storage tank locations in San Joaquin county.

Date of Government Version: 03/20/2018
Date Data Arrived at EDR: 03/22/2018
Date Made Active in Reports: 05/04/2018
Number of Days to Update: 43

Source: Environmental Health Department
Telephone: N/A
Last EDR Contact: 03/14/2018
Next Scheduled EDR Contact: 07/02/2018
Data Release Frequency: Semi-Annually

SAN LUIS OBISPO COUNTY:

CUPA Facility List
Cupa Facility List.

Date of Government Version: 11/16/2017
Date Data Arrived at EDR: 11/17/2017
Date Made Active in Reports: 12/18/2017
Number of Days to Update: 31

Source: San Luis Obispo County Public Health Department
Telephone: 805-781-5596
Last EDR Contact: 05/16/2018
Next Scheduled EDR Contact: 09/03/2018
Data Release Frequency: Varies

SAN MATEO COUNTY:

Business Inventory
List includes Hazardous Materials Business Plan, hazardous waste generators, and underground storage tanks.

Date of Government Version: 03/14/2018
Date Data Arrived at EDR: 03/20/2018
Date Made Active in Reports: 05/04/2018
Number of Days to Update: 45

Source: San Mateo County Environmental Health Services Division
Telephone: 650-363-1921
Last EDR Contact: 03/07/2018
Next Scheduled EDR Contact: 06/25/2018
Data Release Frequency: Annually

Fuel Leak List
A listing of leaking underground storage tank sites located in San Mateo county.

Date of Government Version: 03/15/2018
Date Data Arrived at EDR: 03/20/2018
Date Made Active in Reports: 05/04/2018
Number of Days to Update: 45

Source: San Mateo County Environmental Health Services Division
Telephone: 650-363-1921
Last EDR Contact: 03/07/2018
Next Scheduled EDR Contact: 06/25/2018
Data Release Frequency: Semi-Annually

SANTA BARBARA COUNTY:

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: 05/16/2018
Next Scheduled EDR Contact: 09/03/2018
Data Release Frequency: Varies

SANTA CLARA COUNTY:

Cupa Facility List
Cupa facility list

Date of Government Version: 02/20/2018
Date Data Arrived at EDR: 02/20/2018
Date Made Active in Reports: 03/19/2018
Number of Days to Update: 27

Source: Department of Environmental Health
Telephone: 408-918-1973
Last EDR Contact: 05/16/2018
Next Scheduled EDR Contact: 09/03/2018
Data Release Frequency: Varies

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

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: 05/22/2018
Next Scheduled EDR Contact: 09/10/2018
Data Release Frequency: Annually

Hazardous Material Facilities
Hazardous material facilities, including underground storage tank sites.

Date of Government Version: 02/04/2018
Date Data Arrived at EDR: 02/06/2018
Date Made Active in Reports: 03/20/2018
Number of Days to Update: 42

Source: City of San Jose Fire Department
Telephone: 408-535-7694
Last EDR Contact: 05/16/2018
Next Scheduled EDR Contact: 08/20/2018
Data Release Frequency: Annually

SANTA CRUZ COUNTY:

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: 05/16/2018
Next Scheduled EDR Contact: 09/03/2018
Data Release Frequency: Varies

SHASTA COUNTY:

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: 05/16/2018
Next Scheduled EDR Contact: 09/03/2018
Data Release Frequency: Varies

SOLANO COUNTY:

Leaking Underground Storage Tanks
A listing of leaking underground storage tank sites located in Solano county.

Date of Government Version: 03/08/2018
Date Data Arrived at EDR: 03/13/2018
Date Made Active in Reports: 05/04/2018
Number of Days to Update: 52

Source: Solano County Department of Environmental Management
Telephone: 707-784-6770
Last EDR Contact: 02/28/2018
Next Scheduled EDR Contact: 06/18/2018
Data Release Frequency: Quarterly

Underground Storage Tanks
Underground storage tank sites located in Solano county.

Date of Government Version: 03/08/2018
Date Data Arrived at EDR: 03/13/2018
Date Made Active in Reports: 03/29/2018
Number of Days to Update: 16

Source: Solano County Department of Environmental Management
Telephone: 707-784-6770
Last EDR Contact: 02/28/2018
Next Scheduled EDR Contact: 06/18/2018
Data Release Frequency: Quarterly

SONOMA COUNTY:

Cupa Facility List
Cupa Facility list

Date of Government Version: 03/01/2018
Date Data Arrived at EDR: 03/27/2018
Date Made Active in Reports: 04/16/2018
Number of Days to Update: 20

Source: County of Sonoma Fire & Emergency Services Department
Telephone: 707-565-1174
Last EDR Contact: 03/22/2018
Next Scheduled EDR Contact: 07/09/2018
Data Release Frequency: Varies

Leaking Underground Storage Tank Sites
A listing of leaking underground storage tank sites located in Sonoma county.

Date of Government Version: 04/03/2018
Date Data Arrived at EDR: 04/06/2018
Date Made Active in Reports: 05/09/2018
Number of Days to Update: 33

Source: Department of Health Services
Telephone: 707-565-6565
Last EDR Contact: 03/22/2018
Next Scheduled EDR Contact: 07/09/2018
Data Release Frequency: Quarterly

STANISLAUS COUNTY:

CUPA Facility List
Cupa facility list

Date of Government Version: 02/06/2018
Date Data Arrived at EDR: 02/07/2018
Date Made Active in Reports: 03/16/2018
Number of Days to Update: 37

Source: Stanislaus County Department of Ennvironmental Protection
Telephone: 209-525-6751
Last EDR Contact: 04/16/2018
Next Scheduled EDR Contact: 07/30/2018
Data Release Frequency: Varies

SUTTER COUNTY:

Underground Storage Tanks
Underground storage tank sites located in Sutter county.

Date of Government Version: 01/08/2018
Date Data Arrived at EDR: 03/01/2018
Date Made Active in Reports: 03/30/2018
Number of Days to Update: 29

Source: Sutter County Department of Agriculture
Telephone: 530-822-7500
Last EDR Contact: 02/28/2018
Next Scheduled EDR Contact: 06/18/2018
Data Release Frequency: Semi-Annually

TEHAMA COUNTY:

CUPA Facility List
Cupa facilities

Date of Government Version: 01/26/2018
Date Data Arrived at EDR: 02/02/2018
Date Made Active in Reports: 03/21/2018
Number of Days to Update: 47

Source: Tehama County Department of Environmental Health
Telephone: 530-527-8020
Last EDR Contact: 05/03/2018
Next Scheduled EDR Contact: 08/20/2018
Data Release Frequency: Varies

TRINITY COUNTY:

CUPA Facility List
Cupa facility list

Date of Government Version: 01/22/2018
Date Data Arrived at EDR: 01/25/2018
Date Made Active in Reports: 03/19/2018
Number of Days to Update: 53

Source: Department of Toxic Substances Control
Telephone: 760-352-0381
Last EDR Contact: 04/18/2018
Next Scheduled EDR Contact: 08/06/2018
Data Release Frequency: Varies

TULARE COUNTY:

CUPA Facility List
Cupa program facilities

Date of Government Version: 03/19/2018
Date Data Arrived at EDR: 03/22/2018
Date Made Active in Reports: 04/17/2018
Number of Days to Update: 26

Source: Tulare County Environmental Health Services Division
Telephone: 559-624-7400
Last EDR Contact: 05/16/2018
Next Scheduled EDR Contact: 08/20/2018
Data Release Frequency: Varies

TUOLUMNE COUNTY:

CUPA Facility List
Cupa facility list

Date of Government Version: 01/22/2018
Date Data Arrived at EDR: 01/25/2018
Date Made Active in Reports: 03/16/2018
Number of Days to Update: 50

Source: Divison of Environmental Health
Telephone: 209-533-5633
Last EDR Contact: 04/18/2018
Next Scheduled EDR Contact: 08/06/2018
Data Release Frequency: Varies

VENTURA COUNTY:

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: 12/26/2017
Date Data Arrived at EDR: 01/25/2018
Date Made Active in Reports: 03/14/2018
Number of Days to Update: 48

Source: Ventura County Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 04/23/2018
Next Scheduled EDR Contact: 08/06/2018
Data Release Frequency: Quarterly

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: 03/29/2018
Next Scheduled EDR Contact: 07/16/2018
Data Release Frequency: Annually

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: 05/09/2018
Next Scheduled EDR Contact: 08/27/2018
Data Release Frequency: Quarterly

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: 12/26/2017
Date Data Arrived at EDR: 01/25/2018
Date Made Active in Reports: 03/20/2018
Number of Days to Update: 54

Source: Ventura County Resource Management Agency
Telephone: 805-654-2813
Last EDR Contact: 04/23/2018
Next Scheduled EDR Contact: 08/06/2018
Data Release Frequency: Quarterly

Underground Tank Closed Sites List

Ventura County Operating Underground Storage Tank Sites (UST)/Underground Tank Closed Sites List.

Date of Government Version: 02/28/2018
Date Data Arrived at EDR: 03/14/2018
Date Made Active in Reports: 03/30/2018
Number of Days to Update: 16

Source: Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 03/14/2018
Next Scheduled EDR Contact: 06/25/2018
Data Release Frequency: Quarterly

YOLO COUNTY:

Underground Storage Tank Comprehensive Facility Report

Underground storage tank sites located in Yolo county.

Date of Government Version: 03/27/2018
Date Data Arrived at EDR: 04/03/2018
Date Made Active in Reports: 05/04/2018
Number of Days to Update: 31

Source: Yolo County Department of Health
Telephone: 530-666-8646
Last EDR Contact: 03/29/2018
Next Scheduled EDR Contact: 07/16/2018
Data Release Frequency: Annually

YUBA COUNTY:

CUPA Facility List

CUPA facility listing for Yuba County.

Date of Government Version: 02/01/2018
Date Data Arrived at EDR: 02/02/2018
Date Made Active in Reports: 03/21/2018
Number of Days to Update: 47

Source: Yuba County Environmental Health Department
Telephone: 530-749-7523
Last EDR Contact: 04/25/2018
Next Scheduled EDR Contact: 08/13/2018
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: 01/03/2018
Date Data Arrived at EDR: 02/14/2018
Date Made Active in Reports: 03/22/2018
Number of Days to Update: 36

Source: Department of Energy & Environmental Protection
Telephone: 860-424-3375
Last EDR Contact: 05/18/2018
Next Scheduled EDR Contact: 08/27/2018
Data Release Frequency: No Update Planned

NJ MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 12/31/2016
Date Data Arrived at EDR: 04/11/2017
Date Made Active in Reports: 07/27/2017
Number of Days to Update: 107

Source: Department of Environmental Protection
Telephone: N/A
Last EDR Contact: 04/23/2018
Next Scheduled EDR Contact: 07/23/2018
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: 12/31/2017
Date Data Arrived at EDR: 01/31/2018
Date Made Active in Reports: 03/09/2018
Number of Days to Update: 37

Source: Department of Environmental Conservation
Telephone: 518-402-8651
Last EDR Contact: 05/03/2018
Next Scheduled EDR Contact: 08/13/2018
Data Release Frequency: Quarterly

PA MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 12/31/2016
Date Data Arrived at EDR: 07/25/2017
Date Made Active in Reports: 09/25/2017
Number of Days to Update: 62

Source: Department of Environmental Protection
Telephone: 717-783-8990
Last EDR Contact: 04/12/2018
Next Scheduled EDR Contact: 07/30/2018
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: 05/21/2018
Next Scheduled EDR Contact: 09/03/2018
Data Release Frequency: Annually

WI MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 12/31/2016
Date Data Arrived at EDR: 04/13/2017
Date Made Active in Reports: 07/14/2017
Number of Days to Update: 92

Source: Department of Natural Resources
Telephone: N/A
Last EDR Contact: 03/08/2018
Next Scheduled EDR Contact: 06/25/2018
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 & Game
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

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GEOCHECK ®- PHYSICAL SETTING SOURCE ADDENDUM

TARGET PROPERTY ADDRESS

CHERRY GLEN RD
5920 CHERRY GLEN ROAD
VACAVILLE, CA 95688

TARGET PROPERTY COORDINATES

Latitude (North):	38.338146 - 38° 20' 17.33''
Longitude (West):	122.01714 - 122° 1' 1.70''
Universal Tranverse Mercator:	Zone 10
UTM X (Meters):	585897.9
UTM Y (Meters):	4243584.5
Elevation:	223 ft. above sea level

USGS TOPOGRAPHIC MAP

Target Property Map:	5602112 FAIRFIELD NORTH, CA
Version Date:	2012
East Map:	5619708 ELMIRA, 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 principal 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).

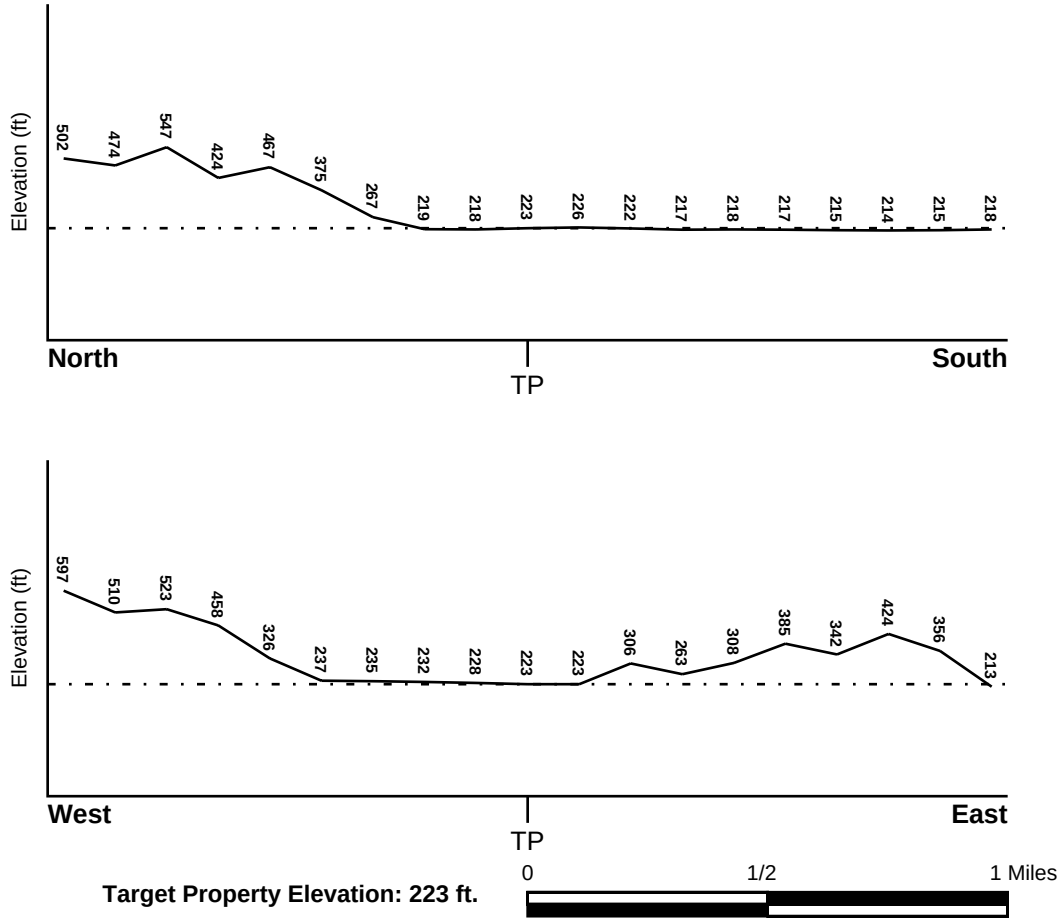
TOPOGRAPHIC INFORMATION

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 West

SURROUNDING TOPOGRAPHY: ELEVATION PROFILES



Target Property Elevation: 223 ft.

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
06055C0575E	FEMA FIRM Flood data

Additional Panels in search area:	FEMA Source Type
06095C0257E	FEMA FIRM Flood data
06095C0278E	FEMA FIRM Flood data

NATIONAL WETLAND INVENTORY

NWI Quad at Target Property	NWI Electronic Data Coverage
FAIRFIELD NORTH	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		

* ©1996 Site−specific hydrogeological data gathered by CERCLIS Alerts, Inc., Bainbridge Island, WA. All rights reserved. All of the information and opinions presented are those of the cited EPA report(s), which were completed under a Comprehensive Environmental Response Compensation and Liability Information System (CERCLIS) investigation.

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

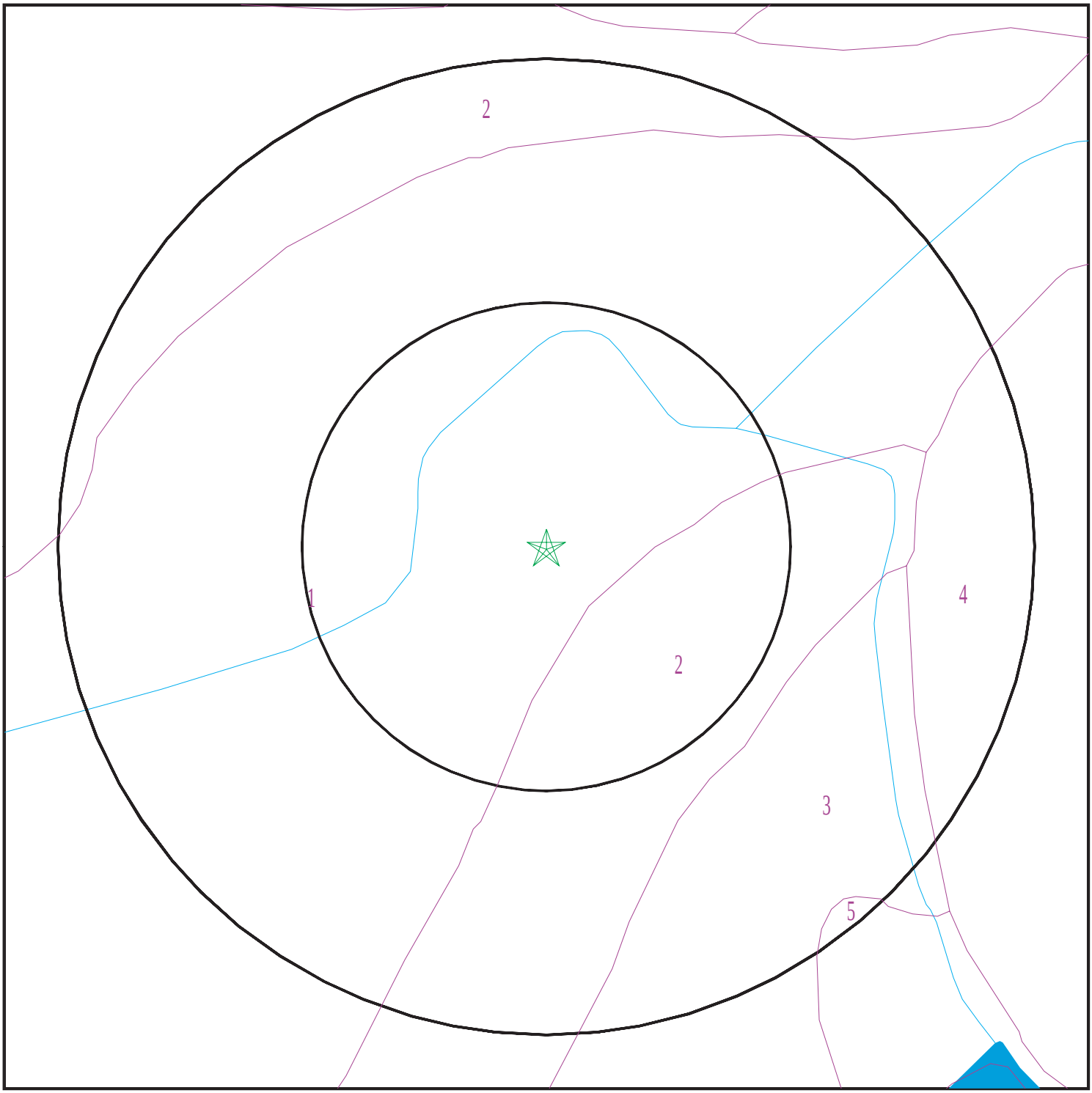
Era:	Mesozoic
System:	Cretaceous
Series:	Upper Cretaceous
Code:	uK *(decoded above as Era, System & Series)*

GEOLOGIC AGE IDENTIFICATION

Category: Stratified 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 - 5316228.2s



SITE NAME:	Cherry Glen Rd	CLIENT:	Gularte & Associates, Inc.
ADDRESS:	5920 Cherry Glen Road Vacaville CA 95688	CONTACT:	Rory Taylor
		INQUIRY #:	5316228.2s
LAT/LONG:	38.338146 / 122.01714	DATE:	May 30, 2018 2:31 pm

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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: Yolo

Soil Surface Texture: silty clay loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Low

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	27 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: 14 Min: 4	Max: 7.3 Min: 6.1
2	27 inches	59 inches	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: 14 Min: 4	Max: 8.4 Min: 6.6

Soil Map ID: 2

Soil Component Name: Brentwood

Soil Surface Texture: clay loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Well drained

Hydric Status: Not 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	5 inches	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: 4 Min: 1.4	Max: 7.8 Min: 6.1
2	5 inches	33 inches	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: 4 Min: 1.4	Max: 8.4 Min: 6.1
3	33 inches	59 inches	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: 4 Min: 1.4	Max: 8.4 Min: 6.6

Soil Map ID: 3

Soil Component Name: Clear Lake

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: Poorly drained

Hydric Status: Partially hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 138 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	44 inches	clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Fat Clay.	Max: 1.4 Min: 0.42	Max: 8.4 Min: 6.1
2	44 inches	59 inches	clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Fat Clay.	Max: 1.4 Min: 0.42	Max: 8.4 Min: 7.4

Soil Map ID: 4

Soil Component Name: Dibble

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: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

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	3 inches	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: 4 Min: 1.4	Max: 6.5 Min: 5.6

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
2	3 inches	20 inches	clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Fat Clay.	Max: 1.4 Min: 0.42	Max: 7.3 Min: 6.1
3	20 inches	24 inches	weathered bedrock	Not reported	Not reported	Max: 4 Min: 1.4	Max: Min:

Soil Map ID: 5

Soil Component Name: Pescadero

Soil Surface Texture: clay loam

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: Somewhat poorly drained

Hydric Status: Partially hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 153 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	3 inches	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: 4 Min: 1.4	Max: 6 Min: 5.1
2	3 inches	33 inches	clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Fat Clay.	Max: 0.42 Min: 0.01	Max: 9 Min: 7.9

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
3	33 inches	68 inches	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: 9 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.

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	USGS40000187880	1/8 - 1/4 Mile SE
2	USGS40000187877	1/2 - 1 Mile WSW
A4	USGS40000187906	1/2 - 1 Mile ENE
5	USGS40000187819	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

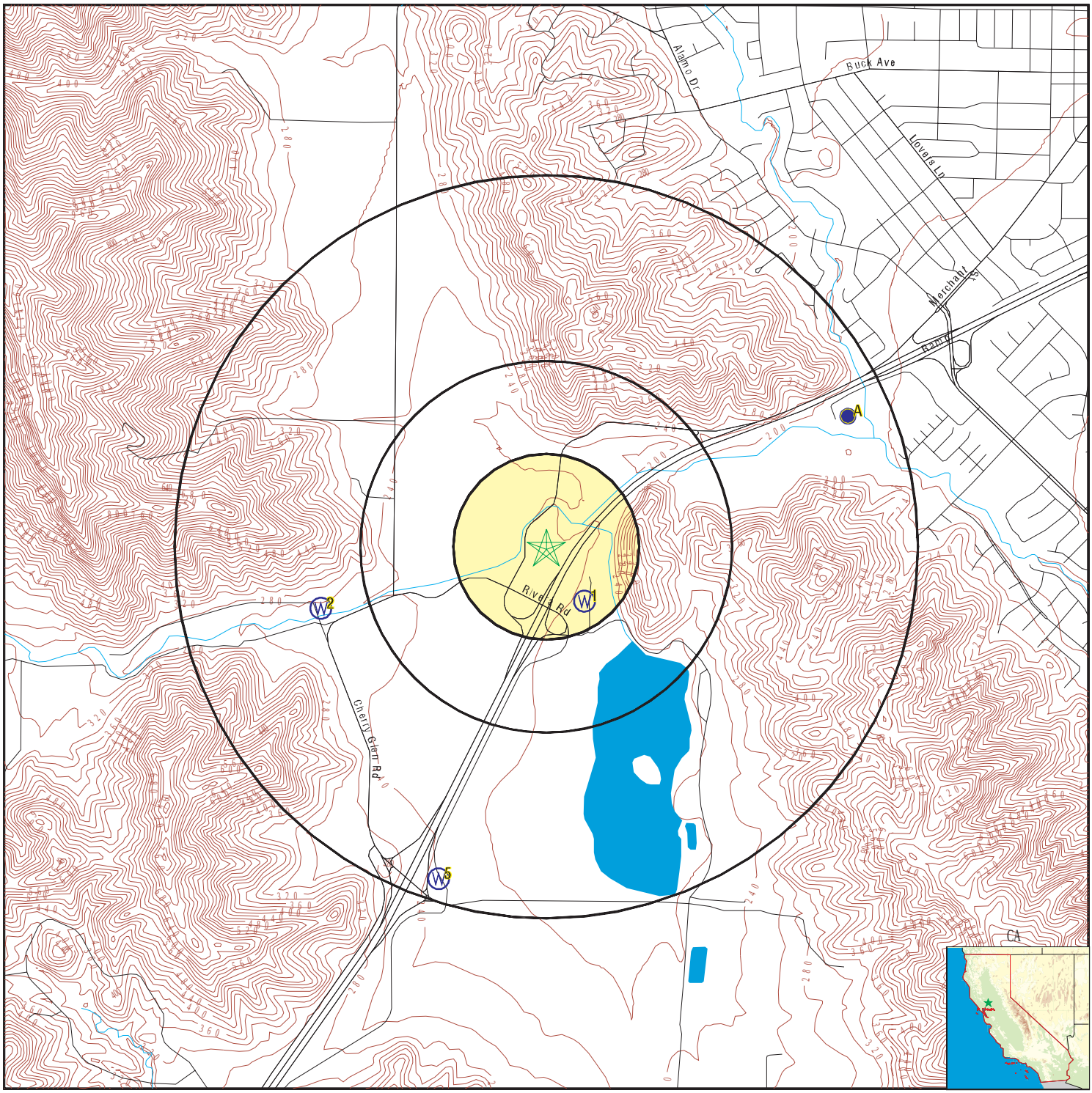
MAP ID	WELL ID	LOCATION FROM TP

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
A3	6504	1/2 - 1 Mile ENE

PHYSICAL SETTING SOURCE MAP - 5316228.2s



- 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
- Indeterminate Groundwater Flow at Location
- Groundwater Flow Varies at Location
- Closest Hydrogeological Data
- Oil, gas or related wells

SITE NAME:	Cherry Glen Rd	CLIENT:	Gularte & Associates, Inc.
ADDRESS:	5920 Cherry Glen Road Vacaville CA 95688	CONTACT:	Rory Taylor
LAT/LONG:	38.338146 / 122.01714	INQUIRY #:	5316228.2s
		DATE:	May 30, 2018 2:31 pm

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GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

1
SE **FED USGS** **USGS40000187880**
1/8 - 1/4 Mile
Lower

Org. Identifier:	USGS-CA		
Formal name:	USGS California Water Science Center		
Monloc Identifier:	USGS-382010122005101		
Monloc name:	006N001W30K001M		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	18020109	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	38.3360223
Longitude:	-122.0152448	Sourcemap scale:	24000
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	215
Vert measure units:	feet	Vertacc measure val:	10
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	NGVD29	Countrycode:	US
Aquifername:	Central Valley aquifer system		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	19660322	Welldepth:	90
Welldepth units:	ft	Wellholedepth:	95
Wellholedepth units:	ft		

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel
1966-03-22	10.00	

2
WSW **FED USGS** **USGS40000187877**
1/2 - 1 Mile
Higher

Org. Identifier:	USGS-CA		
Formal name:	USGS California Water Science Center		
Monloc Identifier:	USGS-382009122013801		
Monloc name:	006N002W25J001M		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	18020109	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	38.3357447
Longitude:	-122.0283007	Sourcemap scale:	24000
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	280
Vert measure units:	feet	Vertacc measure val:	10
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	NGVD29	Countrycode:	US
Aquifername:	Central Valley aquifer system		
Formation type:	Not Reported		

Aquifer type:	Not Reported		
Construction date:	19761128	Welldepth:	55
Welldepth units:	ft	Wellholedepth:	65
Wellholedepth units:	ft		

Ground-water levels, Number of Measurements: 2

Date	Feet below Surface	Feet to Sealevel	Date	Feet below Surface	Feet to Sealevel
1980-04-13	15.5		1976-11-28	34.00	

A3
ENE **CA WELLS** **6504**
1/2 - 1 Mile
Lower

Water System Information:

Prime Station Code:	06N/01W-29D01 M	User ID:	ENG
FRDS Number:	4800531001	County:	Solano
District Number:	04	Station Type:	WELL/AMBNT/MUN/INTAKE
Water Type:	Well/Groundwater	Well Status:	Active Raw
Source Lat/Long:	382035.0 1220005.0	Precision:	1,000 Feet (10 Seconds)
Source Name:	WELL 01		
System Number:	4800531		
System Name:	Vaca Villa Apartments		
Organization That Operates System:			
	1900 Vintage Lane Suisun, CA 94585		
Pop Served:	56	Connections:	40
Area Served:	Not Reported		
Sample Collected:	08-AUG-12	Findings:	0.69 MG/L
Chemical:	BROMIDE		
Sample Collected:	08-AUG-12	Findings:	55. UG/L
Chemical:	BROMATE		
Sample Collected:	12-FEB-13	Findings:	2.2 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	03-FEB-14	Findings:	3.1 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	04-AUG-14	Findings:	0.47 MG/L
Chemical:	BROMIDE		
Sample Collected:	04-NOV-14	Findings:	1400. US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	04-NOV-14	Findings:	6.7
Chemical:	PH, LABORATORY		
Sample Collected:	04-NOV-14	Findings:	300. MG/L
Chemical:	ALKALINITY (TOTAL) AS CACO3		
Sample Collected:	04-NOV-14	Findings:	300. MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	04-NOV-14	Findings:	410. MG/L
Chemical:	HARDNESS (TOTAL) AS CACO3		

Sample Collected:	04-NOV-14	Findings:	100. MG/L
Chemical:	CALCIUM		
Sample Collected:	04-NOV-14	Findings:	39. MG/L
Chemical:	MAGNESIUM		
Sample Collected:	04-NOV-14	Findings:	140. MG/L
Chemical:	SODIUM		
Sample Collected:	04-NOV-14	Findings:	230. MG/L
Chemical:	CHLORIDE		
Sample Collected:	04-NOV-14	Findings:	76. MG/L
Chemical:	SULFATE		
Sample Collected:	04-NOV-14	Findings:	0.36 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	04-NOV-14	Findings:	280. UG/L
Chemical:	BARIUM		
Sample Collected:	04-NOV-14	Findings:	820. MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	10-FEB-15	Findings:	3.2 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	10-FEB-15	Findings:	0.7 MG/L
Chemical:	NITRATE + NITRITE (AS N)		
Sample Collected:	23-FEB-16	Findings:	0.54 MG/L
Chemical:	NITRATE (AS N)		
Sample Collected:	22-NOV-16	Findings:	1.75 PCI/L
Chemical:	GROSS ALPHA COUNTING ERROR		
Sample Collected:	22-NOV-16	Findings:	2.14 PCI/L
Chemical:	GROSS ALPHA MDA95		
Sample Collected:	07-NOV-17	Findings:	1300. US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	07-NOV-17	Findings:	6.66
Chemical:	PH, LABORATORY		
Sample Collected:	07-NOV-17	Findings:	290. MG/L
Chemical:	ALKALINITY (TOTAL) AS CACO3		
Sample Collected:	07-NOV-17	Findings:	354. MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	07-NOV-17	Findings:	0.84 MG/L
Chemical:	NITRATE (AS N)		
Sample Collected:	07-NOV-17	Findings:	320. MG/L
Chemical:	HARDNESS (TOTAL) AS CACO3		
Sample Collected:	07-NOV-17	Findings:	81. MG/L
Chemical:	CALCIUM		
Sample Collected:	07-NOV-17	Findings:	28. MG/L
Chemical:	MAGNESIUM		
Sample Collected:	07-NOV-17	Findings:	120. MG/L
Chemical:	SODIUM		

Sample Collected:	07-NOV-17	Findings:	210. MG/L
Chemical:	CHLORIDE		
Sample Collected:	07-NOV-17	Findings:	74. MG/L
Chemical:	SULFATE		
Sample Collected:	07-NOV-17	Findings:	200. UG/L
Chemical:	BARIUM		
Sample Collected:	07-NOV-17	Findings:	1100. UG/L
Chemical:	BORON		
Sample Collected:	07-NOV-17	Findings:	600. MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	07-NOV-17	Findings:	0.82 UG/L
Chemical:	TOTAL TRIHALOMETHANES		
Sample Collected:	07-NOV-17	Findings:	0.98 MG/L
Chemical:	NITRATE + NITRITE (AS N)		
Sample Collected:	07-NOV-17	Findings:	1.2 UG/L
Chemical:	DIBROMOACETIC ACID (DBAA)		

A4
ENE **FED USGS** **USGS40000187906**
1/2 - 1 Mile
Lower

Org. Identifier:	USGS-CA		
Formal name:	USGS California Water Science Center		
Monloc Identifier:	USGS-382037122000301		
Monloc name:	006N001W29D003M		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	18020109	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	38.343522
Longitude:	-122.0019113	Sourcemap scale:	24000
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	178
Vert measure units:	feet	Vertacc measure val:	10
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	NGVD29	Countrycode:	US
Aquifername:	Central Valley aquifer system		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	19710613	Welldepth:	63
Welldepth units:	ft	Wellholedepth:	63
Wellholedepth units:	ft		

Ground-water levels, Number of Measurements: 0

5
SSW **FED USGS** **USGS40000187819**
1/2 - 1 Mile
Higher

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Org. Identifier:	USGS-CA		
Formal name:	USGS California Water Science Center		
Monloc Identifier:	USGS-381931122011701		
Monloc name:	006N001W31E001M		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	18020109	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	38.3251894
Longitude:	-122.022467	Sourcemap scale:	24000
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	230
Vert measure units:	feet	Vertacc measure val:	10
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	NGVD29	Countrycode:	US
Aquifername:	Central Valley aquifer system		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	19710612	Welldepth:	41
Welldepth units:	ft	Wellholedepth:	41
Wellholedepth units:	ft		

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel
1980-03-13	4.81	

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS
RADON

AREA RADON INFORMATION

State Database: CA Radon

Radon Test Results

Zipcode	Num Tests	> 4 pCi/L
95688	14	0

Federal EPA Radon Zone for SOLANO County: 3

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 Zip Code: 95688

Number of sites tested: 8

Area	Average Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
Living Area - 1st Floor	1.200 pCi/L	100%	0%	0%
Living Area - 2nd Floor	Not Reported	Not Reported	Not Reported	Not Reported
Basement	Not Reported	Not Reported	Not Reported	Not Reported

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 & Game
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.

RADON

State Database: CA Radon
Source: Department of Health Services
Telephone: 916-324-2208
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.

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.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

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

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APPENDIX B

Sanborn Map Report

Cherry Glen Rd

5920 Cherry Glen Road

Vacaville, CA 95688

Inquiry Number: 5316228.3

May 30, 2018

Certified Sanborn® Map Report

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

Certified Sanborn® Map Report

05/30/18

Site Name:

Cherry Glen Rd
5920 Cherry Glen Road
Vacaville, CA 95688
EDR Inquiry # 5316228.3

Client Name:

Gularte & Associates, Inc.
1049 Nichols Court
Rocklin, CA 95765
Contact: Rory Taylor

The Sanborn Library has been searched by EDR and maps covering the target property location as provided by Gularte & Associates, Inc. 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 # 5128-465F-B280

PO # 4177

Project Cherry Glen Road

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 #: 5128-465F-B280

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 C

Historical Topographic Maps

Cherry Glen Rd

5920 Cherry Glen Road

Vacaville, CA 95688

Inquiry Number: 5316228.4

May 30, 2018

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

05/30/18

Site Name:

Cherry Glen Rd
5920 Cherry Glen Road
Vacaville, CA 95688
EDR Inquiry # 5316228.4

Client Name:

Gularte & Associates, Inc.
1049 Nichols Court
Rocklin, CA 95765
Contact: Rory Taylor

EDR Topographic Map Library has been searched by EDR and maps covering the target property location as provided by Gularte & Associates, Inc. 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:

P.O.# 4177
Project: Cherry Glen Road

Coordinates:

Latitude:	38.338146 38° 20' 17" North
Longitude:	-122.01714 -122° 1' 2" West
UTM Zone:	Zone 10 North
UTM X Meters:	585895.72
UTM Y Meters:	4243791.13
Elevation:	222.00' above sea level

Maps Provided:

2012
1980
1973
1968
1951, 1953
1947
1942
1902

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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

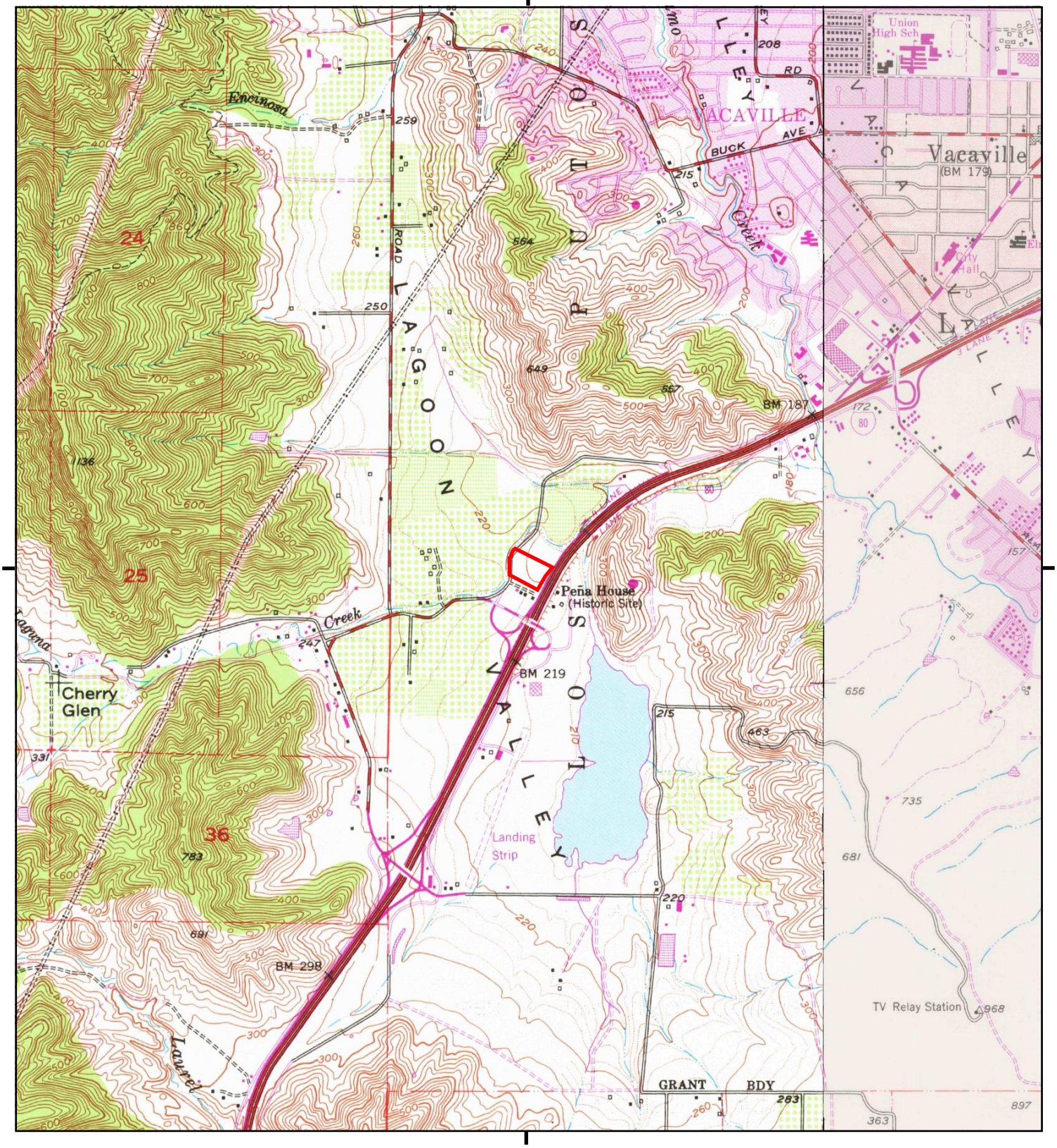
TP, Fairfield North, 2012, 7.5-minute
E, Elmira, 2012, 7.5-minute

SITE NAME: Cherry Glen Rd
ADDRESS: 5920 Cherry Glen Road
Vacaville, CA 95688
CLIENT: Gularte & Associates, Inc.

N

Historical Topo Map

1980



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

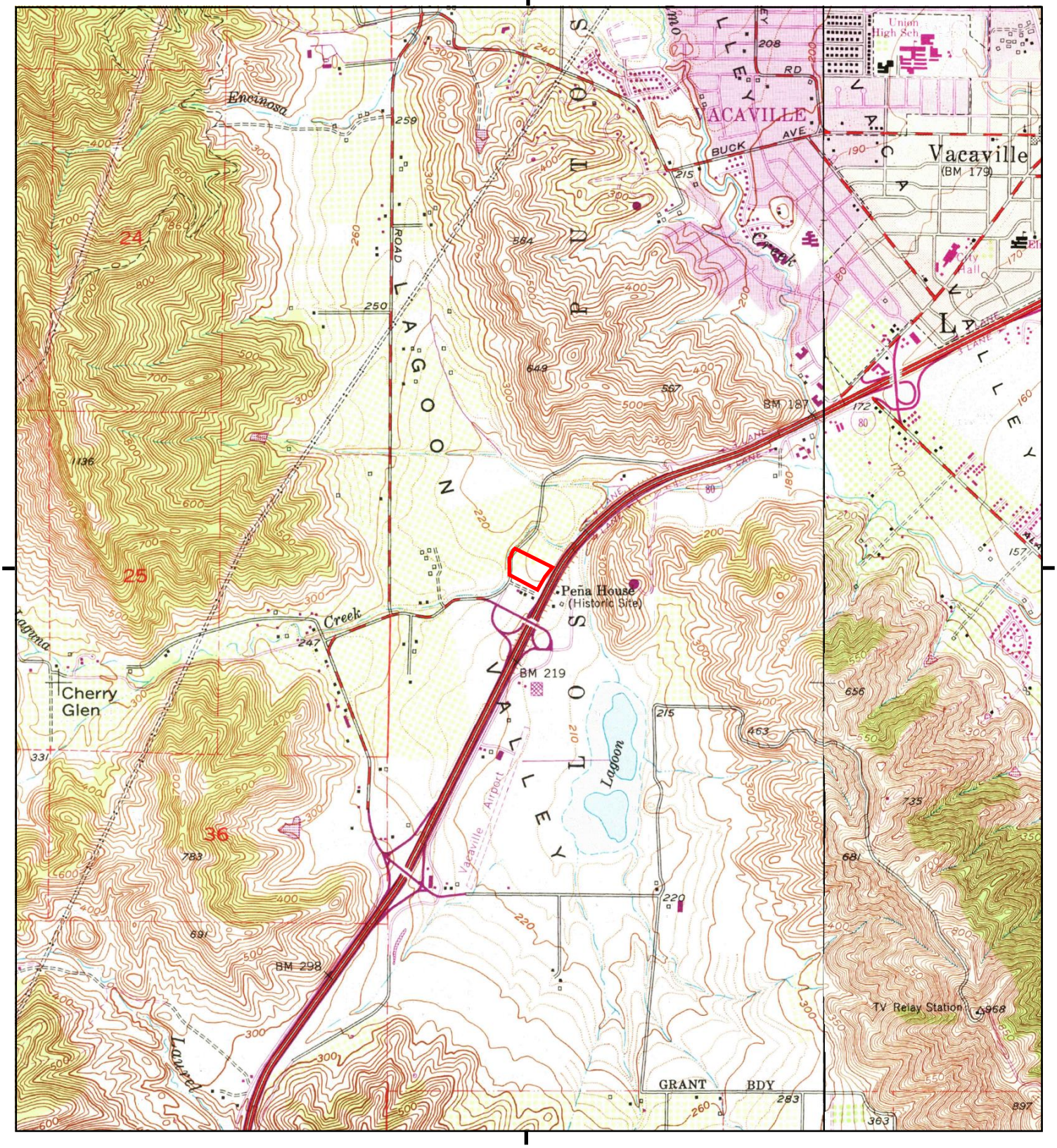
TP, Fairfield North, 1980, 7.5-minute
E, Elmira, 1980, 7.5-minute

SITE NAME: Cherry Glen Rd
ADDRESS: 5920 Cherry Glen Road
Vacaville, CA 95688
CLIENT: Gularte & Associates, Inc.

N

Historical Topo Map

1973



This report includes information from the following map sheet(s).

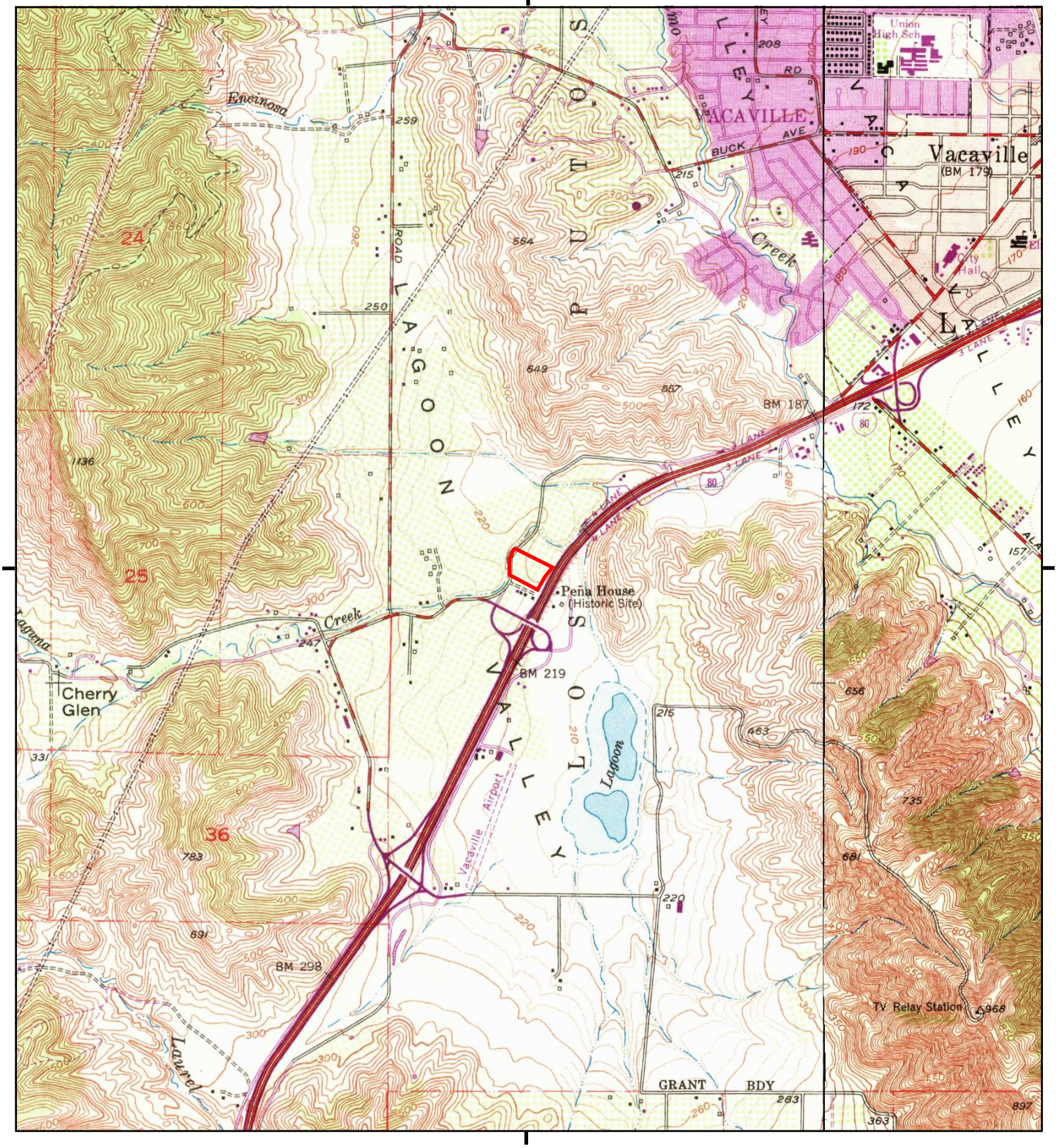
0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Fairfield North, 1973, 7.5-minute
E, Elmira, 1973, 7.5-minute

SITE NAME: Cherry Glen Rd
ADDRESS: 5920 Cherry Glen Road
Vacaville, CA 95688
CLIENT: Gularte & Associates, Inc.

N



This report includes information from the following map sheet(s).

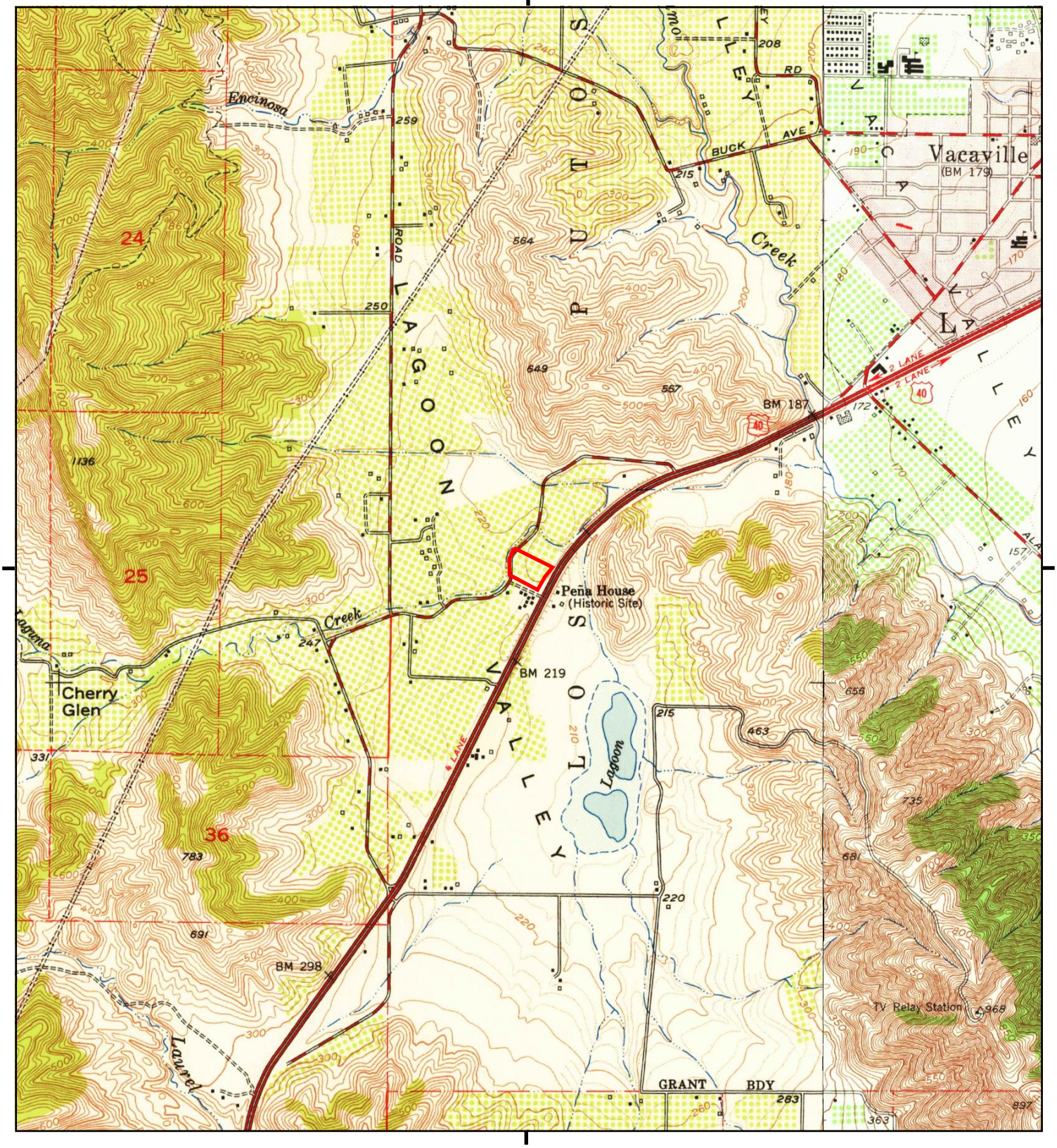
0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Fairfield North, 1968, 7.5-minute
E, Elmira, 1968, 7.5-minute

SITE NAME: Cherry Glen Rd
ADDRESS: 5920 Cherry Glen Road
Vacaville, CA 95688
CLIENT: Gularte & Associates, Inc.

N



This report includes information from the following map sheet(s).

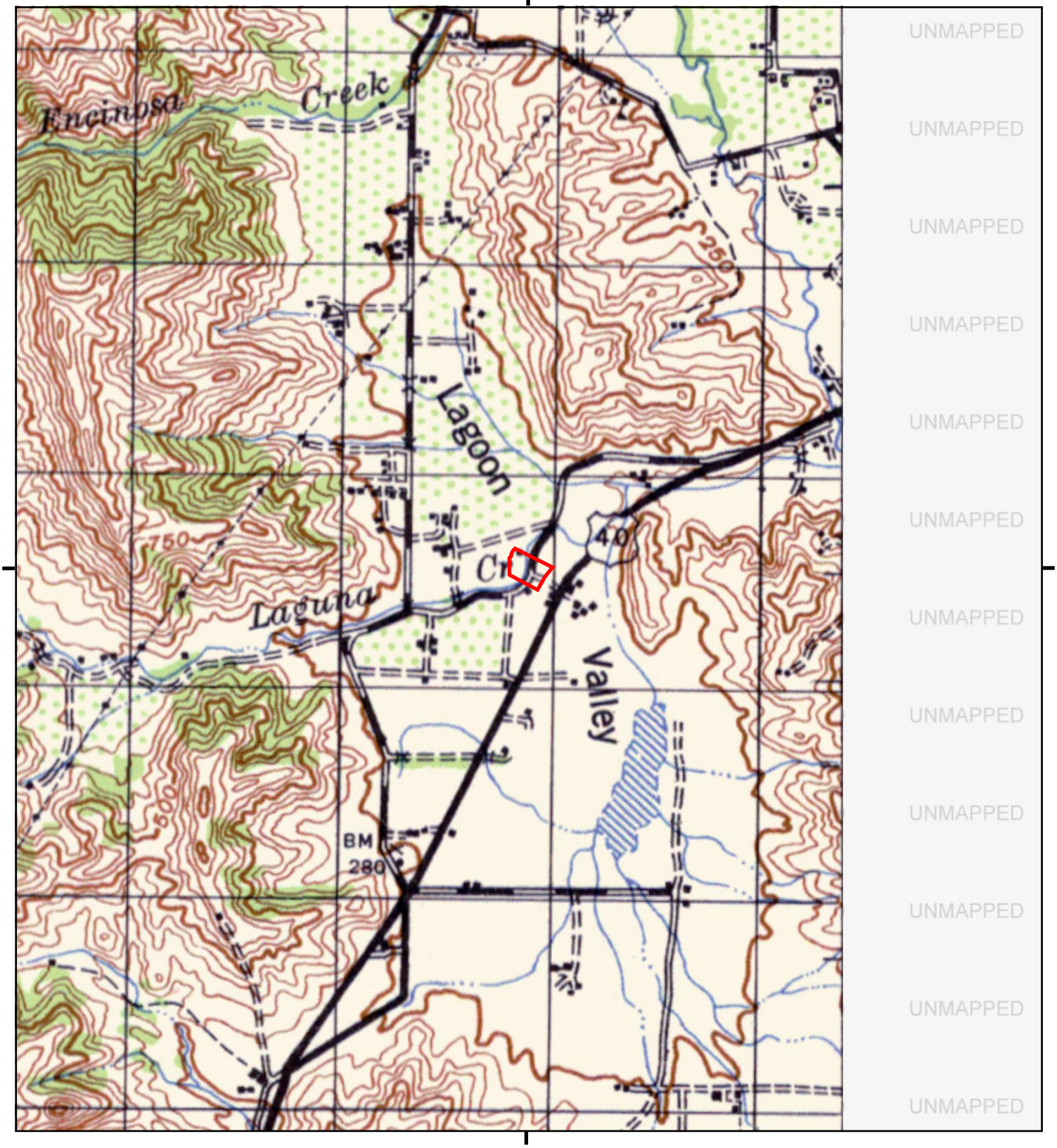
0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Fairfield North, 1951, 7.5-minute
E, Elmira, 1953, 7.5-minute

SITE NAME: Cherry Glen Rd
ADDRESS: 5920 Cherry Glen Road
Vacaville, CA 95688
CLIENT: Gularte & Associates, Inc.

N



This report includes information from the following map sheet(s).

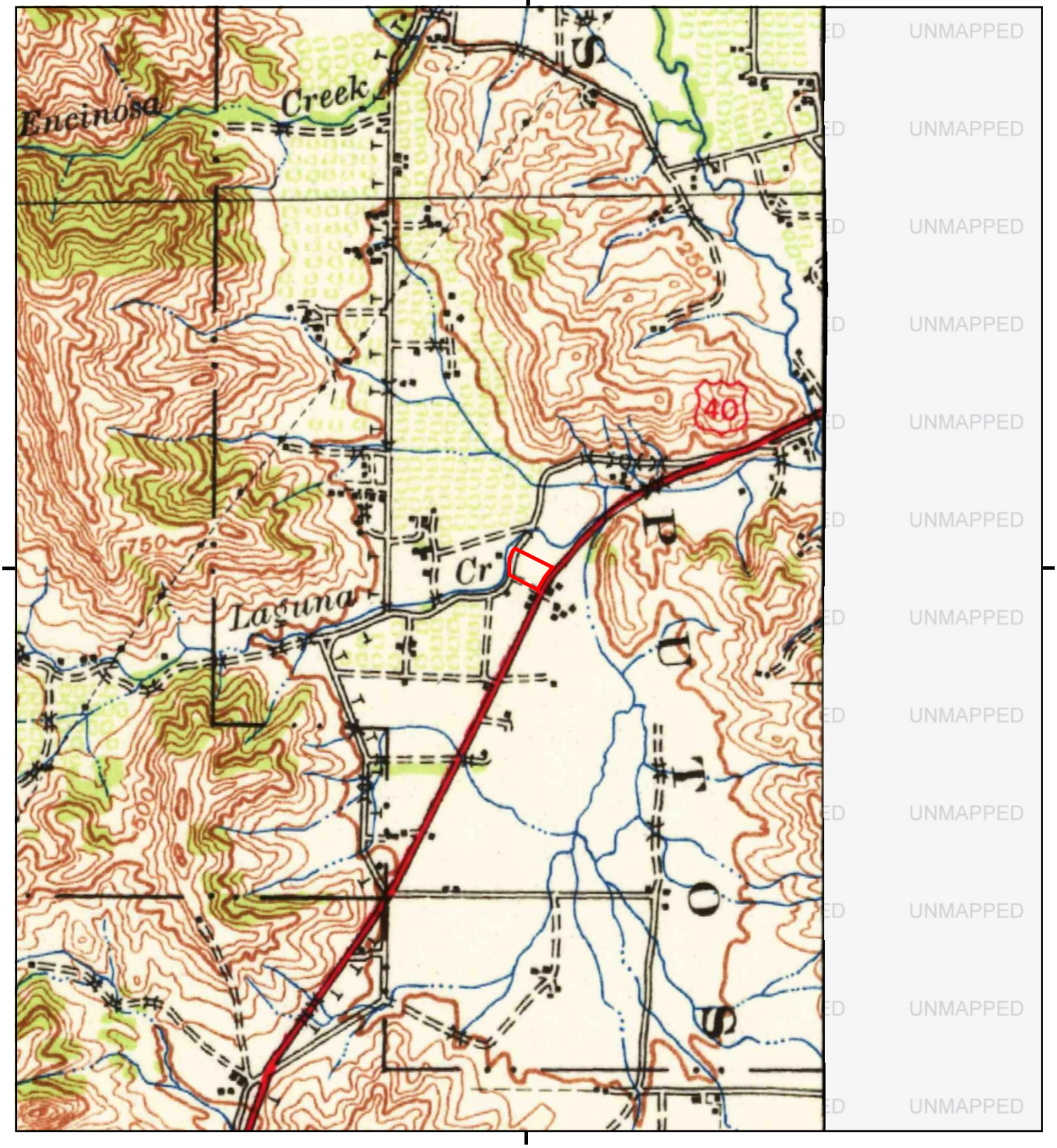
0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, MOUNT VACA, 1947, 15-minute

SITE NAME: Cherry Glen Rd
ADDRESS: 5920 Cherry Glen Road
Vacaville, CA 95688
CLIENT: Gularte & Associates, Inc.

N



This report includes information from the following map sheet(s).

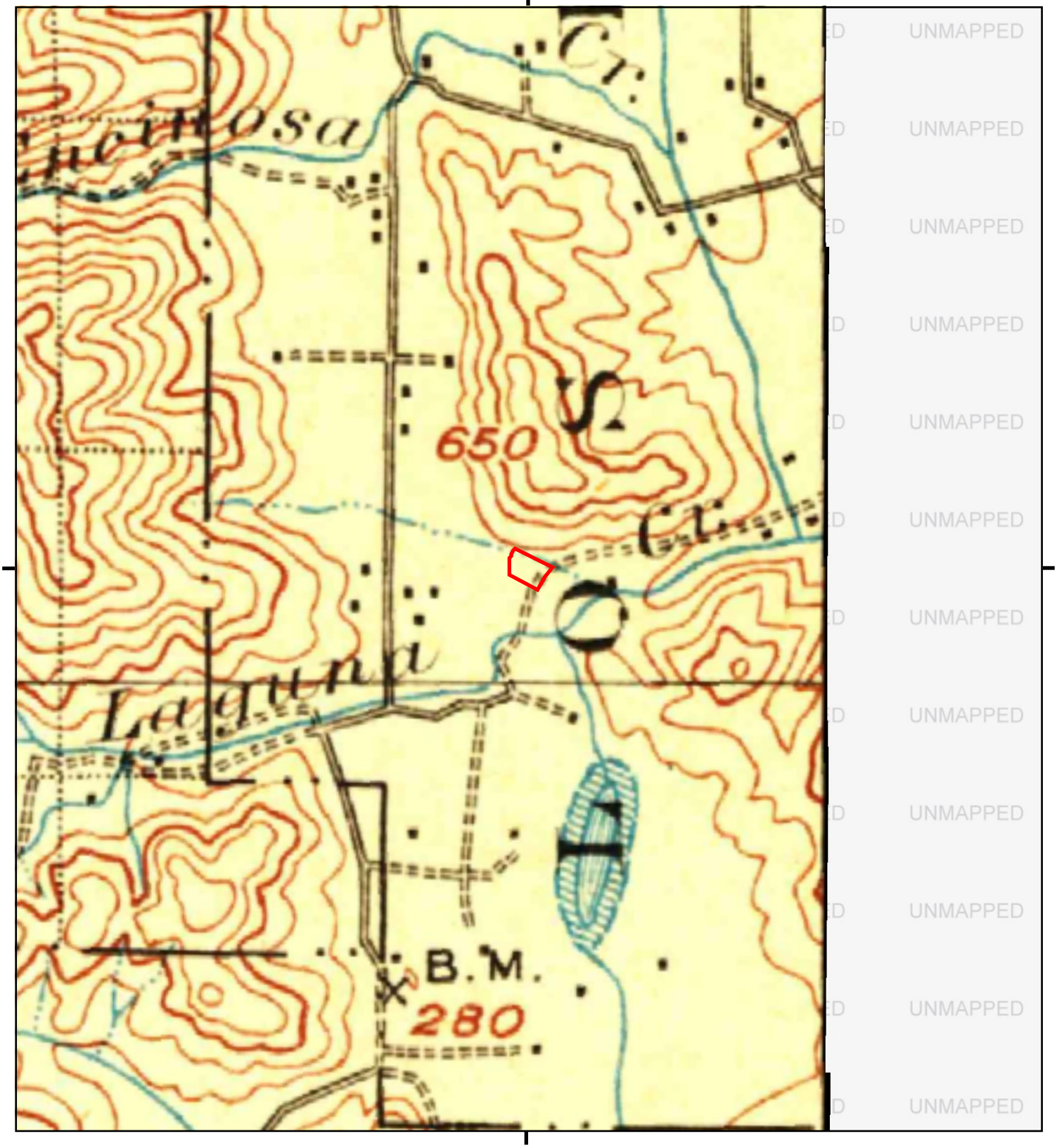
0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Mt. Vaca, 1942, 15-minute

SITE NAME: Cherry Glen Rd
ADDRESS: 5920 Cherry Glen Road
Vacaville, CA 95688
CLIENT: Gularte & Associates, Inc.

N



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, Napa, 1902, 30-minute

SITE NAME: Cherry Glen Rd
ADDRESS: 5920 Cherry Glen Road
Vacaville, CA 95688
CLIENT: Gularte & Associates, Inc.

N

APPENDIX D

Historical Aerial Photographs

Cherry Glen Rd

5920 Cherry Glen Road

Vacaville, CA 95688

Inquiry Number: 5316228.11

May 30, 2018

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

05/30/18

Site Name:

Cherry Glen Rd
5920 Cherry Glen Road
Vacaville, CA 95688
EDR Inquiry # 5316228.11

Client Name:

Gularte & Associates, Inc.
1049 Nichols Court
Rocklin, CA 95765
Contact: Rory Taylor

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
1993	1"=500'	Acquisition Date: June 16, 1993	USGS/DOQQ
1984	1"=500'	Flight Date: June 08, 1984	USDA
1982	1"=500'	Flight Date: July 08, 1982	USDA
1974	1"=500'	Flight Date: July 18, 1974	USGS
1968	1"=500'	Flight Date: April 22, 1968	USGS
1952	1"=500'	Flight Date: August 03, 1952	USDA
1947	1"=500'	Flight Date: March 01, 1947	USGS
1937	1"=500'	Flight Date: August 26, 1937	USDA

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YEAR: 2016
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INQUIRY #: 5316228.11

YEAR: 2012

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INQUIRY #: 5316228.11

YEAR: 2009

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INQUIRY #: 5316228.11

YEAR: 2006

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YEAR: 1984

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YEAR: 1968

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YEAR: 1952

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INQUIRY #: 5316228.11

YEAR: 1947

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INQUIRY #: 5316228.11

YEAR: 1937

= 500'

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APPENDIX E

Site Photographs

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VASQUEZ
Supervisor

APPENDIX H

GEOTECHNICAL REPORT

GEOTEC□NICAL REPORT

Lagoon Valley Self Storage

□920 C□erry Glen Road
□APN 12□-04-0140□
Vacaville, California

□□ne □, 201□
Pro□ect No. 42□□

Prepared for
Pra□is Properties, LLC
□y
G□larte & Associates, Inc.

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1 INTRODUCTION

Praxis Properties, LLC has retained Gularte & Associates, Inc. to perform a geotechnical report for the construction of a new self storage facility located at 5920 Cherry Glen Road (APN 127-04-0140) in Vacaville, California. To conduct our geotechnical report, we performed the following services:

- Reviewed the site geology and ground water conditions;
- Performed 4 exploratory borings to a maximum depth of 20 feet below existing grade to classify the soil and obtain samples for laboratory testing.
- Performed 8 moisture/density on in-situ tube samples obtained from our exploration.
- Performed and expansion index to identify expansion potential of the native soil.
- Performed 4 sieve washes over the #200 screen to further classify the native soil.
- Performed engineering analyses and used engineering judgment for earthwork and foundation recommendations in this report.
- Prepared this report with our findings, conclusions, and recommendations.

Structural plans were not available at the time of this report. We recommend that we be retained to review the project grading and structural plans at the 50 to 90 percent stage for compliance with our report. Additionally, we recommend that we be retained to perform soil compaction testing services for trench backfill, building pads and pavement areas.

2 LOCATION, DESCRIPTION, AND PHYSICAL SETTINGS

2.1 LOCATION

The site is generally flat and covered predominately by short grasses and weeds, with trees scattered throughout the property. Based on the appearance of the Site, some rough grading has occurred in the past, and based on its location between two developed properties to the north and south, some utilities are likely installed along the perimeter of the site where adjacent to Cherry Glen Rd. The site currently appears unused. The proposed site development consists of approximately 12 to 14 long slender buildings across the property.

The property is roughly square in shape, about 500 feet by 420 feet (~5 acres). The Site is bordered Pottery Paradise on the north, by Cherry Glen Rd on the east, by the New Life Church on the south and by Interstate 80 (I-80) on the west. Based partially on a Solano County's Recorders Office, the Site consists of one parcel: APN 0127-040-140. See Site Plan Figure 2.

Improvements appear to be limited to the adjacent road, possible above- and below-ground utilities and moderate grading to level the site.

Commercial development borders the site on the north and south, and consist of the previously described church and pottery buildings and associated development (parking, pavement, etc.); I-80 also borders the site. Residential development is located to the east in the city of Vacaville. The Site is located about 1.5 miles west of downtown Vacaville. Nearby towns include Fairfield, Bucktown and Elmira. Vacaville is located about 30 miles southwest of the city of Sacramento, California.

2.2 DESCRIPTION

The property is located at an elevation of about 222 feet above mean sea level. The Site is generally flat with no discernable elevation changes across the property. Primary drainage is to the southeast.

The adjacent properties to the north, west and south are at elevations equal to or slightly below than the Site, and properties to the east at an elevations slightly above the subject site.

Proposed site development is for a self storage facility, with several long narrow multi-unit structures, a manager's office, and asphalt drive aisles.

2.3 PHYSICAL SETTINGS

2.3.1 Regional Geology

The City of Vacaville is located at the margin between the Great Valley geomorphic province of California and the Coast Ranges geomorphic province. The Great Valley province is underlain by an alluvial plain approximately 50 miles wide and 400 miles long, which is drained by the Sacramento and San Joaquin rivers (USGS, 2003). This region is typically

underlain by sedimentary and meta-sedimentary alluvium which was formed by erosion of the two mountain ranges during the Mesozoic and Cenozoic eras. Mesozoic rocks include marine Cretaceous sandstone and shale, as well as metamorphosed clastic and volcanic rocks of the Franciscan assemblage. The Cenozoic rocks consist of strata of continental and marine origin, and Pliocene-Pleistocene volcanic rocks (City of Vacaville, 1998).

The western portion of Solano County is dominated by mountains and valleys while the southern and eastern portions are dominated by flat broad valleys, marshes, sloughs, and low-lying hills. These low lands are associated with the Sacramento River Alluvial Fan (Solano County, 2008).

The Coast Ranges geomorphic province is characterized by northwest-southeast trending valleys and intervening mountain ranges that are structurally controlled by faulting and folding, the result of the collision of the Farallon and North American Plates, which is recorded by rocks of the Franciscan Complex of Cretaceous and Jurassic age (100 to 65 million years old). The subsequent right lateral shearing occurred between the Pacific and North American Plates and is recorded by the younger (Tertiary, 60 to 3 million years old) sedimentary and volcanic rocks of the Berkeley and Oakland Hills and marks a transition to the strike slip faulting that characterizes the present day movement of the San Andreas fault system.

To the east of the San Andreas Fault System lies a less well defined surface feature at the boundary of the Coast Ranges and the Central Valley also associated with seismicity. The Coast Ranges-Central Valley (CRCV) geomorphic boundary is formed by an active fold and thrust fault zone that generally does not break the surface. Although the bedrock record indicates a long history of deformation, the present day topography is controlled by movement of the San Andreas Fault zone and abrupt changes in the climate. The geology of the San Francisco and San Pablo Bay margins is controlled by the interactions of Quaternary-age (past 2 million years) climatological sea level fluctuations and the vertical tectonic deformation of the shorelines.

2.3.2 Local Geology

We reviewed the 2006 Geologic Map of the Fairfield North 7.5' Quadrangle (1:250,000), prepared by the California Department of Mines and Geology (CDMG).

The project site has an elevation of about 222 feet above mean sea level (msl) and is located near the western margin of the Sacramento Valley, slightly within the Coast Ranges. The hills directly to the north of the site are composed of Miocene-age sedimentary rocks (shales and sandstones) predominately of the Forbes Formation, the Guinda Formation, the Funks Formation and the Yolo Formation.

Local soil conditions are composed predominantly of the Yolo Series of soils consisting mostly of silty clay and the Brentwood clayey loam, based on the

U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) survey of the area.

2.3.3 Faults And Seismicity

Based on the 2010 Fault Activity Map of California prepared by the Department of Mines and Geology, there are several known active faults in the vicinity of the project site. Active faults, as included in the Alquist-Priolo Earthquake Fault Zones, are characterized by displacement of Holocene deposits (soil or rock less than 11,000 years old), evidence of fault creep and/or well defined seismic activity on traces of known faults.

According to the United States Geological Survey (USGS) Earthquake Hazards Program (2007), the nearest fault is the potentially active Vaca-Kirby Hills Fault, which is a part of the Great Valley Fault Zone, located approximately 0.25 miles east of the project site. The Cordelia fault zone and the Green Valley fault, respectively 14 and 15 miles southwest of the project site, are the closest active faults to the site. Other potentially active faults include major active, strike-slip faults in the area such as the Rodgers Creek, West Napa, Hayward, Greenville, Green Valley-Concord, and the Calaveras faults.

In 1999, the Working Group on California Earthquake Probabilities of the United States Geological Survey compiled the earthquake fault research for the San Francisco Bay Area in order to estimate the probability of fault segment rupture. They have estimated that the overall probability of a Richter magnitude 6.7 or greater earthquake occurring within the next 30 years is 70 percent. The highest probabilities are assigned to the San Francisco Peninsula segment of the San Andreas Fault and the northern Hayward/Rodgers Creek Faults (21 and 32 percent, respectively). The Calaveras Fault was assigned a probability of 18 percent, and the Greenville and Concord-Green Valley faults were each assigned probabilities of 6 percent. According to the 2008 Seismic Motion Interpolator prepared by the California Division of Mines and Geology, there is a 10 percent probability that the site will experience a horizontal ground acceleration of 0.44g in the next 50 years. This is a relatively high level of ground shaking for California.

2.3.4 Geologic Hazards/Liquefaction Potential

Risk of lateral spreading from landslides and liquefaction is considered to be low. We did not encounter liquefiable soils at any point during our exploration. Due to the relatively flat topography at the site (approximately 2% grade or less), and fine-grained soils observed in our subsurface exploration, risk from landsliding and lateral spreading are considered to be insignificant.

2.3.5 Groundwater

Groundwater was encountered at a depth of 5 to 8 feet below ground surface in each boring during our geotechnical exploration for the subject

property. This is consistent with data obtained from the Department of Water Resources, which lists groundwater levels between 5 and 15 feet in nearby monitoring wells.

3 FINDINGS AND CONCLUSIONS

3.1 SUBSURFACE CONDITIONS

We performed four exploratory borings within the site to a maximum depth of 20 feet below ground surface to classify the soil type and obtain samples for laboratory testing.

In general, we observed low plasticity silts and clays throughout the boring profiles, soft to medium stiff. We also performed sieve washes over the #200 screen, which confirmed our field classification of fine-grained soils.

Boring locations are shown in Figure 2, the site plan. The boring logs are shown in detail in Appendix A.

3.2 LABORATORY TESTING/EXPANSION POTENTIAL

To evaluate the expansion potential of the native soil, we performed an Expansion Index (EI) test. The Expansion Index test resulted in an EI of 36 for a soil sample obtained from the upper 2 feet of Boring B3. This indicates a low expansion potential.

Moisture/density tests were performed on 2.5" brass tube samples obtained in the field. The results of these tests are shown in the table below.

Boring	Depth (feet)	Moisture Content (%)	Dry Density (pcf)
B1	2.5	14	95
B1	10	18	105
B2	2.5	16	93
B2	10	17	105
B2	20	14	110
B3	2.5	13	95
B4	2.5	13	99
B4	10	16	103

Table 1 – Moisture Density Tests

3.3 EXISTING FILL

We did not observe significant existing fill during our subsurface exploration.

3.4 EXCAVATION EFFORT

Based upon our boring logs, conventional grading equipment should be able to excavate the onsite soil with reasonable expectations.

3.5 SUITABILITY FOR CONSTRUCTION

From an earthwork, pavement, and foundations viewpoint, the soils at this site are considered suitable for support of the anticipated loads provided our recommendations are followed properly. The primary concern is the relatively shallow groundwater depth. Deeper utility trench excavations likely will require dewatering.

4 EARTHWORK RECOMMENDATIONS

4.1 NATIVE AND IMPORT FILL MATERIAL

On-site soil (less debris and organic materials) are considered suitable as fill material. Imported fill materials should have a plasticity index less than 12 and a maximum particle size of 3 inches. Allow Gularte & Associates 48 hours to sample and test proposed import fill materials prior to delivery at the site.

4.2 CLEARING AND GRUBBING

The site is currently covered in short, dry grass. This material should be stripped and hauled off site or placed in landscape areas. Once this has been performed, mass grading may commence per our recommendations below.

4.3 FILL COMPACTION/PAD PREPARATION

Once the vegetation has been stripped from structural areas, scarify the original grade to prepare for structural fill. Scarification should include ripping and moisture conditioning of the upper 12 inches of the site prior to compacting. The soil should be moisture conditioned to within 0 to +4 percent of optimum moisture content. Once compaction testing has been performed on original grade, fill placement may commence.

Fill should be moisture conditioned to within 0 to +4 percent of optimum water content. Compact fills for structural areas such as pavements and building pads to a minimum of 90 percent relative compaction per ASTM D1557. Compaction should be done with dedicated compaction equipment. Cut building pads require scarification and recompaction as well.

Compact the upper 6 inches of pavement subgrade and aggregate baserock to at least 95 percent relative compaction per ASTM D1557. The existing asphalt and aggregate baserock can be recycled into baserock, if desired as a cost savings measure or green alternative.

Due to the soft clays encountered throughout the site, mass grading during fall through spring may not be feasible. If construction is planned during rainy seasons, we recommend the site be lime-treated. Please contact our office for specific recommendations. We can provide revised pavement sections based on a lime-treated R-Value to reduce the baserock section to help offset the cost of lime-treating the site.

We strongly recommend that you retain our firm to check that existing grade has been prepared properly, and test fill placement every 12 to 18 inches to check that the soil has been compacted adequately during the grading operation.

4.4 TRENCH BACKFILL

The contractor is responsible for conducting all trenching and shoring in accordance with CALOSHA requirements. Place and compact trench backfill as follows:

- Trench backfill should have a maximum particle size of 2 inches;
- Moisture condition trench backfill to within 0 to +4 percent of optimum water content; moisture condition backfill outside the trench.
- Place fill in loose lifts not exceeding 12 inches for backhoes and 18 inches for large excavators.
- Compact fill to 90 percent relative compaction per ASTM D1557.
- Jetting of trench backfill is not acceptable except in joint utility trenches where damage to conduits makes mechanical compaction methods impractical.

4.5 SLOPES

Construct final slope gradients to 2:1 (horizontal:vertical) or flatter. Slope faces should be compacted and vegetated to reduce the effects of rutting from rainfall and overland water flow. Construct a keyway at the toe of the fill slope and at least 18 inches deep on the downhill side of the key. The keyway should be a minimum of 8 feet wide and sloped back into the slope at a minimum 5% slope. In order to remove loose soil/rock, excavate benches into competent material after engineered fill has been placed in the keyway per our recommendations. Benches should be cut into the existing slope as filling proceeds every 2 to 4 feet vertically and 4 to 8 feet wide into the slope, to remove loose soil/rock. We recommend that buildings have a minimum setback of 5 feet from ascending slopes and 10 feet from descending slopes, or as outlined in section 1808A.7 of the 2016 California Building Code. The setback is measured from the outermost footing line closest to the toe/hinge point of slope. Gularte & Associates, Inc. should be retained to check footing dimensions, and their orientation to nearby slopes for conformance with the recommendations contained in this report.

4.6 SITE DRAINAGE

Surface drainage design should include the following:

1. Slope concrete pavement areas at least ½ percent and asphalt concrete pavements at least ½ and preferably 1 percent to extend pavement life. Do not allow water to pond on pavement areas.
2. If soil surrounds the building, discharge roof down spouts to storm drain system. Where soil surrounds the building, provide a 5 percent slope away from building exteriors for a distance of at least 3 feet.

3. Direct sprinklers away from buildings. Use drip irrigation near the structure and pavements. Excess watering increases to risk of premature pavement failure and shrink/swell underneath the structure.

5 FOUNDATION RECOMMENDATIONS

5.1 FOUNDATIONS

The proposed structures can be supported on continuous or isolated spread footings bearing in competent native soil or compacted fill per our recommendations in Section 4. Continuous footings should be at least 12 inches wide and at least 18 inches deep below adjacent pad grade. Spread footings should be at least 24 inches wide and 18 inches deep below finished pad grade (not including crushed rock or pavement).

Table 4 below provides maximum allowable bearing capacity for dead plus live loads. These bearing capacities may be increased by one-third for the short-term effects of wind or seismic loading.

Minimum Footing Dimensions	Allowable Bearing Capacity (PSF)
Strip Footings 12” W x 18” Deep	2,000
Spread Footing 24” W x 18” Deep	2,400

Table 2 –Footing Parameters

Provide minimum steel reinforcing in strip footings of two #4 bars top and two #4 bars bottom.

Lateral loads may be resisted by friction along the base of footings and by passive pressure along the face of footings. The passive pressure is based on an equivalent fluid pressure in pounds per cubic foot (pcf). We recommend a passive lateral pressure of 280 pcf and a coefficient of friction equal to 0.30 for design. If passive resistance and friction are combined to resist lateral loads, we recommend that the passive pressure be reduced by 33 percent.

Provided our recommendations are followed, total settlement beneath the footings should be no more than 1-inch, with an estimated maximum differential settlement of ½-inch over a distance of 60 feet.

Utility excavations parallel to footing lines should be clear of a 1:1 (horizontal:vertical) plane projected downward from the base of footings. Where utility lines cross footings, they should be sleeved and footings deepened as appropriate.

5.2 SLAB ON GRADE

We recommend the following for slabs-on-grade:

1. 1-inch of clean sand (less than 5 percent passing the U. S. Standard No. 200 Sieve) or 3/8-inch pea gravel directly under the slab, underlain with,
2. Vapor barrier membrane consisting of 10-mil polyethylene "plastic" sheeting, properly sealed at penetrations and edges, underlain with
3. Four inches of clean crushed rock on the building pad. Crushed rock should have 100 percent passing the ¾-inch sieve and less than 5 percent passing the No. 4 Sieve.
4. Provide a minimum concrete thickness of 5 inches.
5. Reinforce slabs with No. 4 reinforcing bars placed on 24-inch centers each way. Place dobies per ACI; we recommend a maximum dobie spacing of 6' on center, each way.
6. Use a concrete water-cement ratio of 0.50 or less.
7. Use higher strength concrete, minimum 3,000 psi.

Slab thickness and reinforcing steel requirements above are provided for purposes of resisting soil expansion potential. The structural engineer may increase these parameters based on building loads or anticipated building use. The structural engineer should provide final design thickness and additional reinforcement, if necessary, for the intended structural loads.

Exterior Flatwork: Exterior flatwork includes items such as concrete sidewalks, steps, and outdoor courtyards exposed to foot traffic only. Provide a minimum concrete flatwork thickness of 4 inches.

5.3 RETAINING WALL PARAMETERS

Provided that adequate drainage is included, we recommend that walls subjected to active soil pressure be designed to resist an equivalent fluid pressure of 45 pounds per cubic foot (pcf). For at-rest conditions, we recommend an at-rest fluid pressure of 63 pcf with level backfill conditions. Retaining wall backfill should be predominantly granular, non-expansive backfill. Generally, we expect horizontal movements for retaining walls under active pressure conditions to rotate laterally an amount equal to 1% of the height of the wall.

The above lateral earth pressures assume sufficient drainage behind the walls to prevent any build-up of hydrostatic pressures (i.e. sump) from surface water infiltration and/or a rise in the ground water level. Drainage of the walls may be accomplished by one of the following methods:

1. Clean drain rock wrapped in Mirafi 140N non-woven filter fabric or equivalent as approved by our office. Drain rock should be ¾ to 1-1/2 inch in size and should have less than 5% passing the No. 200 sieve.

Rock can be crushed or rounded. Drain rock should be 12 inches wide and extend to within 12 inches of subgrade.

2. Caltrans Class II Permeable material placed 12 inches wide and extended to within 12 inches of subgrade. The Caltrans Class II Permeable is self filtering; and as such a geotextile filter fabric is not necessary.

3. Geocomposite drainage can be used in lieu of crushed rock. We commonly recommend American Wick Drain Sitedrain96 geocomposite drainage board, or equivalent. The product should be installed per the manufacturer's directions. We recommend the wider drainage board be placed in the lower 2 feet of the wall. It is important that the proper transition pieces are used to transition from the geocomposite to 4-inch tight pipe for outletting purposes.

In either of the above cases, we recommend waterproofing of the walls with a product such as MasterSeal HLM 5000-R or equivalent as reviewed and approved by our office in writing. Waterproofing should be applied per the manufacturer's instructions.

Water collected at the bottom of the drain system should be transmitted away from the wall by a perforated pipe or weep holes. The pipe should be at least four inches in diameter with the perforations placed down (lettering typically on top). The pipe should daylight to a lower grade or connect to a sump, storm drain, or other suitable disposal facility. If adequate drainage is not provided, we recommend that an additional equivalent fluid pressure of 40 pcf be added to the values recommended above.

5.4 2016 CBC SEISMIC PARAMETERS

We provide the 2016 California Building Code parameters in the table below. See also, Figure 3 for the peak ground acceleration as a function of probability of exceedance in 50 years. Based on the ground motion interpolator by the California Geological Survey, the site has a peak ground acceleration of 0.443g and 0.737g for 10% and 2% probability of exceedance in 50 years, respectively.

Categorization	Design Value
Site Latitude	38.33896 ° N
Site Longitude	122.01778° W
Site Class	D
Mapped Acceleration Parameter (S_S)	0.1.955 g
Mapped Acceleration Parameter (S_1)	0.662 g
Spectral Response Acceleration (S_{MS})	1.955 g
Spectral Response Acceleration (S_{M1})	0.993 g
Design Spectral Response Acceleration (S_{DS})	1.303 g
Design Spectral Response Acceleration (S_{D1})	0.662 g

Table 3 – CBC Seismic Parameters

5.5 PAVEMENT DESIGN

5.5.1 Asphalt Concrete Pavement

We prepared several different asphalt pavement sections as shown in the table below. Our design was based on an R-value of 15 and Procedure 608 of the Caltrans Highway Design Manual.

	Traffic Index			
	4	4.5	5	6
Asphalt Concrete (in)	2.5	2.5	3	3.5
Aggregate Base (in)	6	8	8	11

Table 4 – Pavement Sections

5.5.2 Concrete Pavement

For onsite concrete pavement design, please contact our firm.

5.6 SPECIAL INSPECTIONS

We recommend the following minimum special inspections as part of the grading and foundation portions of the project. The project architect, governing agency, or structural engineer may require other inspections.

- Compaction testing during grading and trench backfill.
- Observation of out structure demolition and testing of backfill.
- Observation of footing excavations prior to reinforcing placement.

- Observation of slab reinforcing steel for foundations and slabs.
- Observation, sampling, and testing of concrete.

6 LIMITATIONS

The scope of this evaluation was limited to an evaluation of the load-carrying capabilities and stability of the subsoils. Oil, hazardous waste, radioactivity, irritants, pollutants, molds, or other dangerous substance and conditions were not the subject of this study. Their presence and/or absence is not implied or suggested by this report, and should not be inferred.

The accompanying report summarizes the findings and opinions of Gularte & Associates, Inc. Our findings and opinions are based on information obtained on given dates by test logs, laboratory testing, engineering judgment, and analyses.

The analyses, conclusions, and recommendations contained in our report are based on site conditions as they existed at the time of our study, and further assume that probes such as exploratory test pits are representative of the subsurface conditions throughout the site; i.e., the subsurface conditions everywhere are not significantly different from those disclosed by the probes.

If during construction different subsurface conditions from those encountered during our exploration or different from those assumed in design are observed or appear to be present, or where variations from our design recommendations are made, we must be advised promptly so that we can review these conditions and modify the applicable recommendations if necessary. We cannot be held responsible for differing site conditions, changes in design, or modified geotechnical recommendations not brought to our attention.

Soil conditions cannot be fully determined by test pits and, therefore, unanticipated soil conditions are commonly encountered. Such unexpected soil conditions often require that additional expenditures be made to attain a properly constructed project. Therefore, some contingency funding is recommended to accommodate potential extra costs.

Foundation dimensions, minimum slab thickness, and reinforcing details recommended herein are based upon geotechnical and construction considerations and are not offered in lieu of foundation design by an engineer. A determination of flooding potential, the existence of wetlands, or corrosive soil was beyond the scope of this report.

This geotechnical study did not include an investigation regarding the existence, location, or type of possible hazardous materials. If an investigation is necessary, we should be advised. In addition, if any hazardous materials are encountered during construction of the project, the proper regulatory officials should be notified immediately.

This report was prepared for the specific use of our client and applies only to the subject property. We are not responsible for interpretations by others of data presented in this report. This report is not a legal opinion. No warranty

is expressed or implied. We base our conclusions in this report on judgment and experience. We performed this work in accordance with generally accepted standards of practice existing in northern California at the time of the report.

Gularte & Associates, Inc. is not an expert on mold prevention. If particular recommendations are desired to prevent mold, we recommend that you contact an expert in that field.

FIGURES

Figure 1 – Vicinity Map

Figure 2 – Site Plan

Figure 3 – Seismic Hazard Accelerations

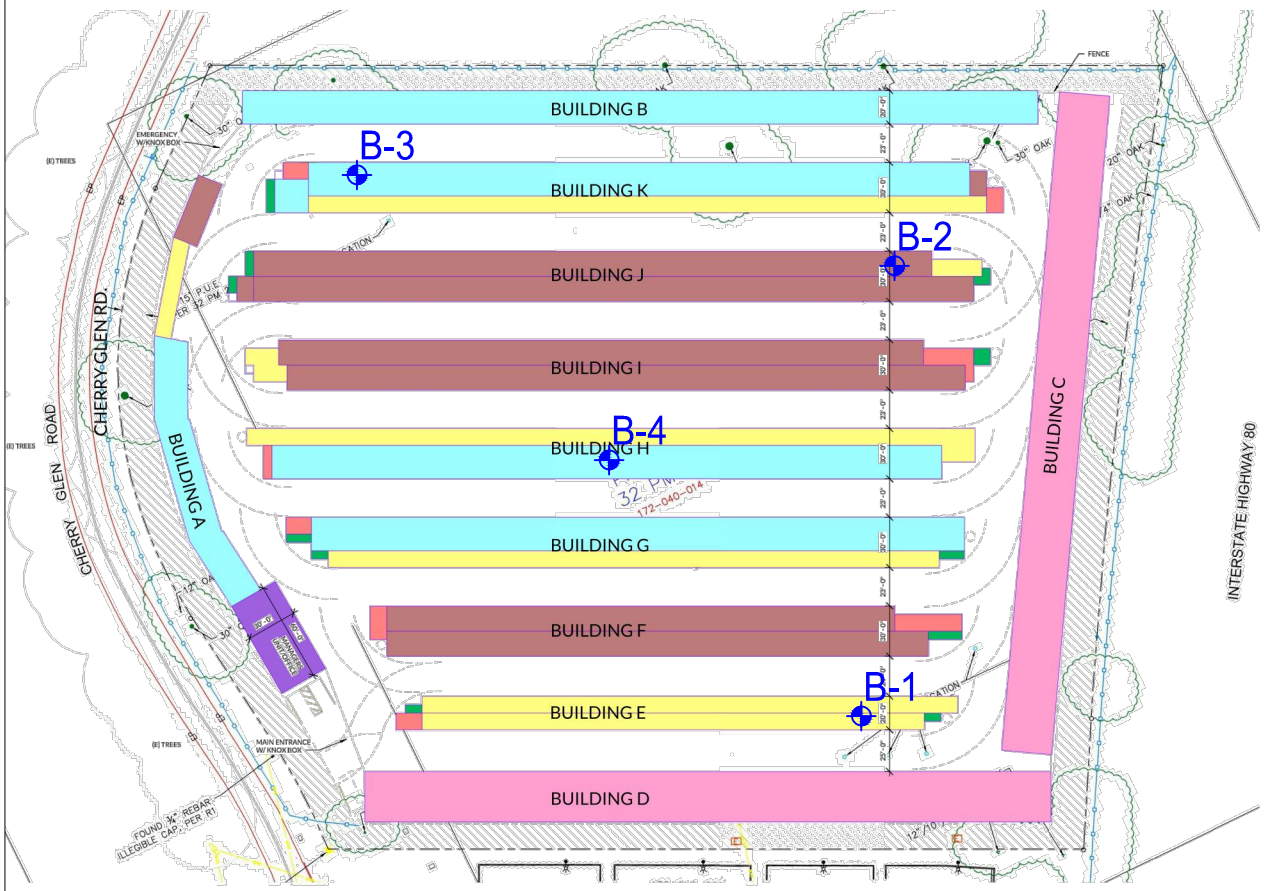
Figure 4 – Geologic Map

Vicinity Map

Cherry Glen Road (APN 127-04-0140)

Gularte & ASSOCIATES INC. Geotechnical Consultants

May 2018	Job No. 4277	Figure 1



B-1 BORING LOCATION

REFERENCE:

SITEPLAN

CHERRY GLEN RD (APN 127-04-0140)

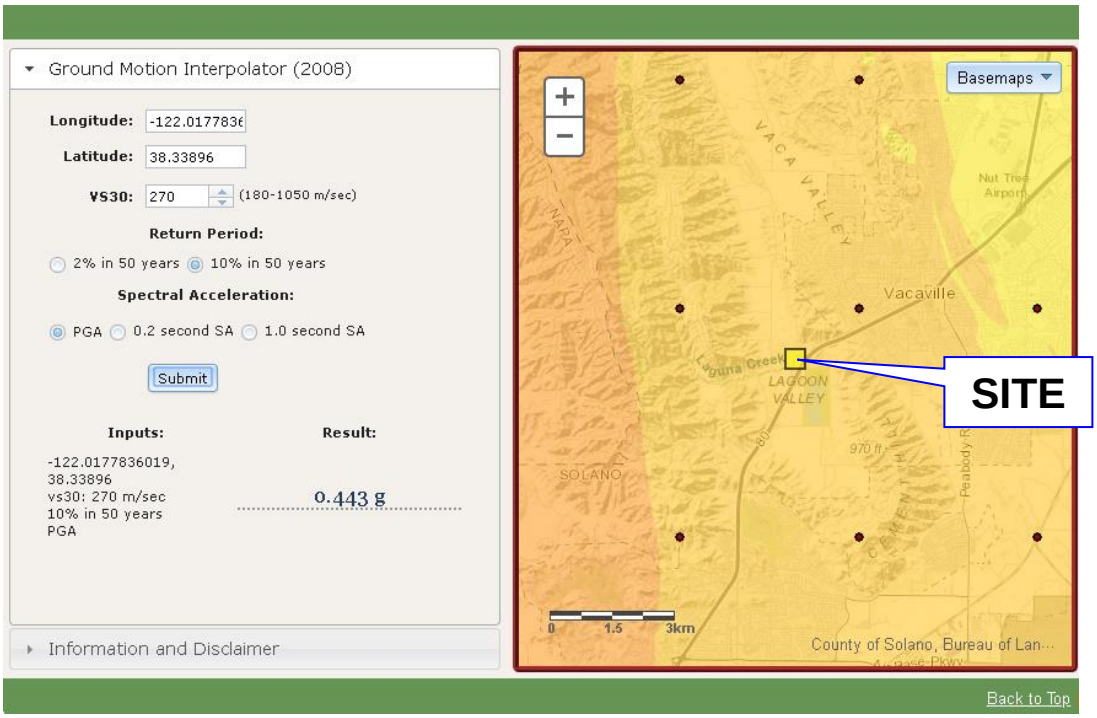
Gularte

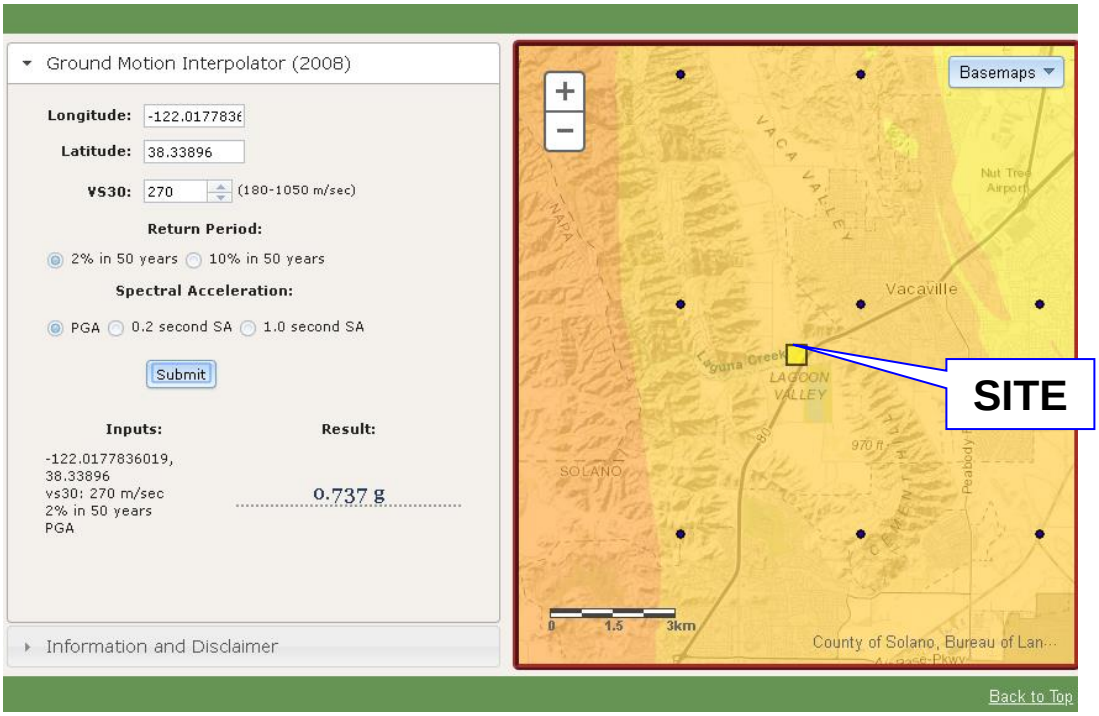
SCALE : NTS

FILE NO: 4277

REV. DATE: JUNE 4, 2018

Figure 2



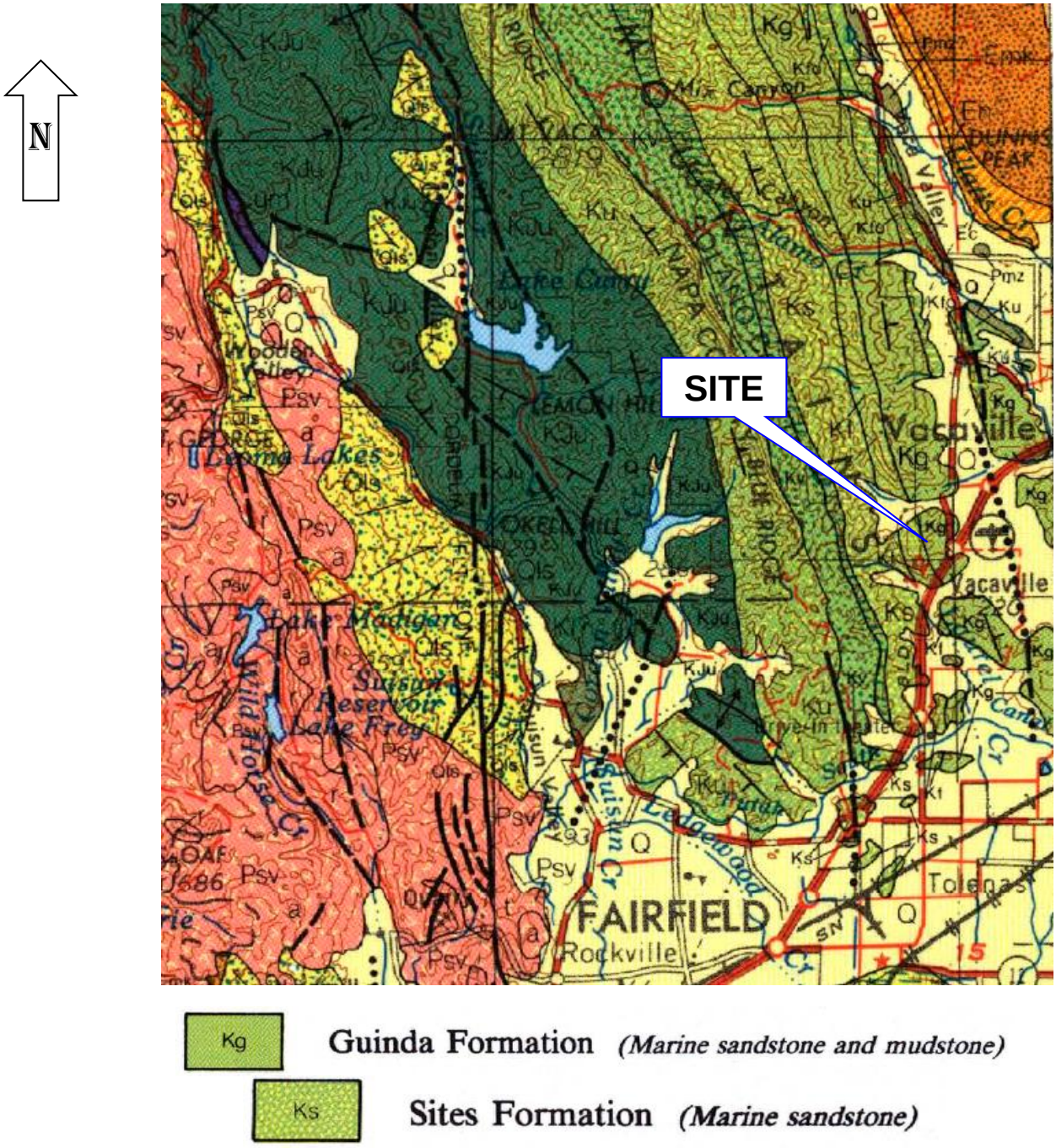


Seismic Hazard Map

Cherry Glen Rd – Vacaville

Gularte & ASSOCIATES INC. Geotechnical Consultants

June 2018	Job No. 4277	Figure 3



Geologic Map

Cherry Glen Rd – Vacaville

Gularte & ASSOCIATES INC. Geotechnical Consultants

June 2018	Job No. 4277	Figure 4

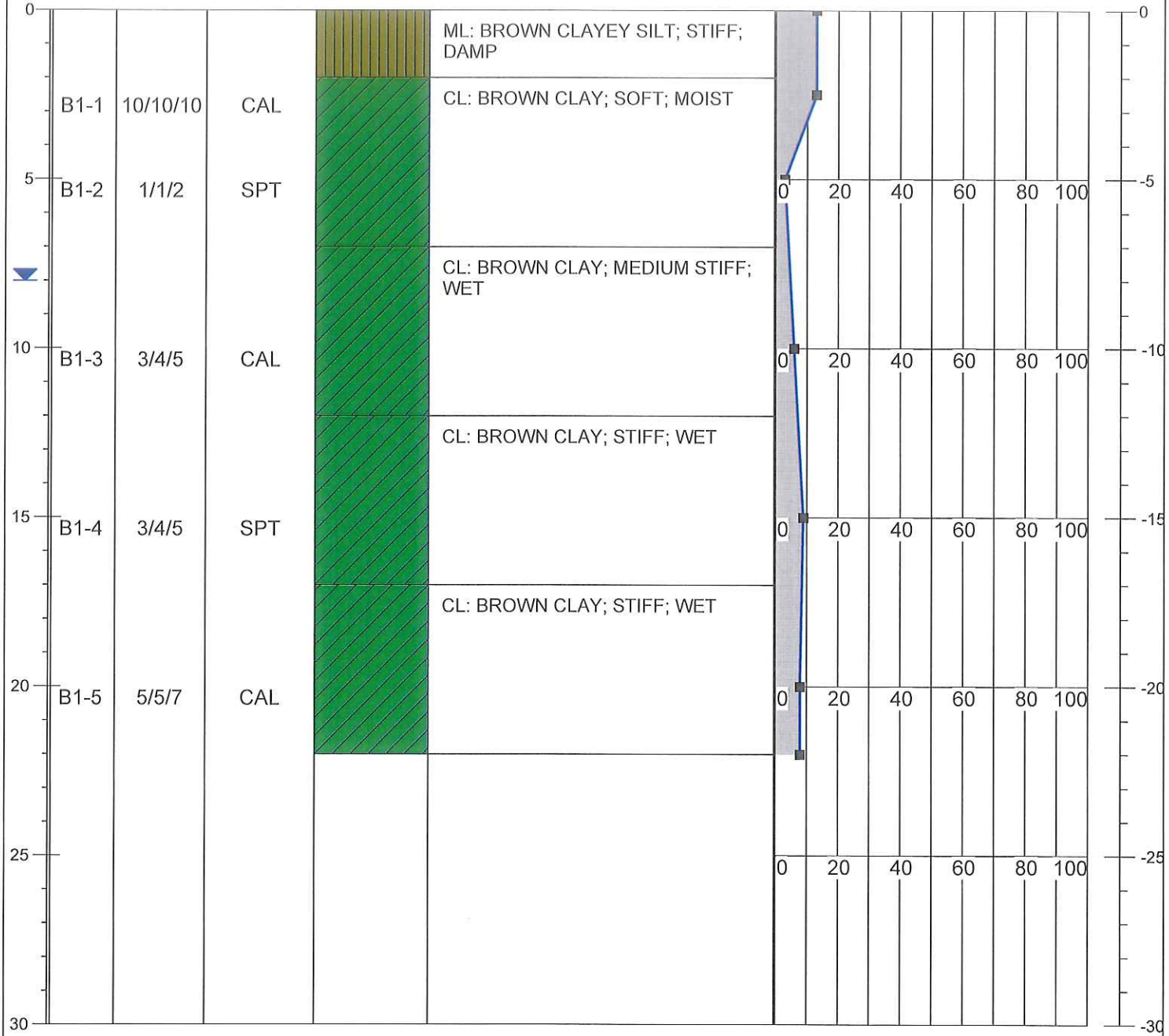
APPENDIX A

Boring Logs

Auger	HSA	**Project No.**	4277
Size	6-inch	**Project Name**	Lagoon Valley
Drill	Gefco SS15	**Elevation**	N/A
Logged By	Anna Hall	**Date**	6/1/18

Boring B-1

Depth (feet)	Sample No.	SPT/Cal Mod N-Value	Sample Type	Lithology	LITHOLOGIC DESCRIPTION
0					ML: BROWN CLAYEY SILT; STIFF; DAMP
	B1-1	10/10/10	CAL		CL: BROWN CLAY; SOFT; MOIST
5	B1-2	1/1/2	SPT		
					CL: BROWN CLAY; MEDIUM STIFF; WET
10	B1-3	3/4/5	CAL		
					CL: BROWN CLAY; STIFF; WET
15	B1-4	3/4/5	SPT		
					CL: BROWN CLAY; STIFF; WET
20	B1-5	5/5/7	CAL		
25					
30					

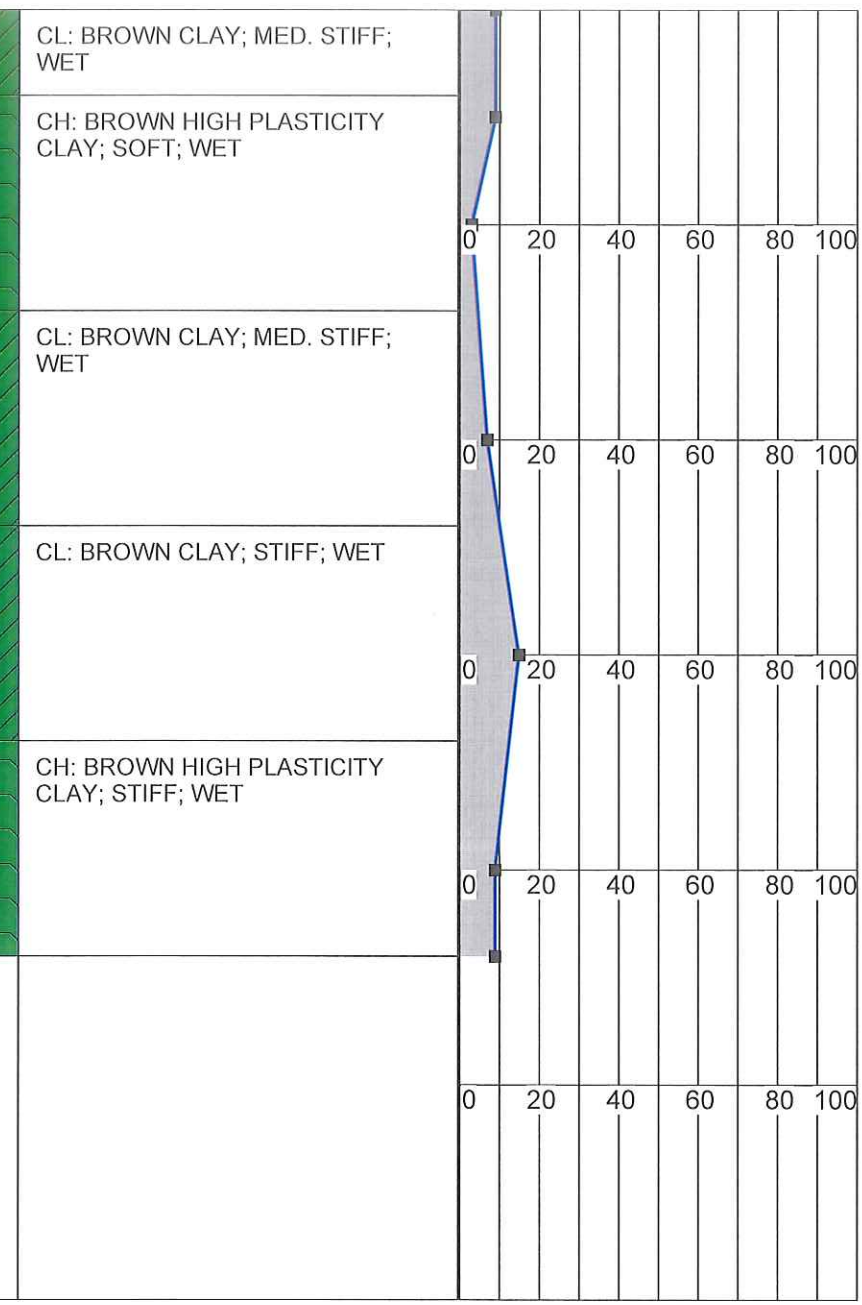


Client	**Project**	**Sheet**
Praxis Properties, LLC	Lagoon Valley	1 of 1

Auger	HSA	**Project No.**	4277
Size	6-inch	**Project Name**	Lagoon Valley
Drill	Gefco SS15	**Elevation**	N/A
Logged By	Anna Hall	**Date**	6/1/18

Boring B-2

Depth (feet)	Sample No.	SPT/Cal Mod N-Value	Sample Type	Lithology	LITHOLOGIC DESCRIPTION
0					CL: BROWN CLAY; MED. STIFF; WET
	B2-1	8/7/6	CAL		CH: BROWN HIGH PLASTICITY CLAY; SOFT; WET
5	B2-2	1/1/2	SPT		
					CL: BROWN CLAY; MED. STIFF; WET
10	B2-3	3/5/6	CAL		
					CL: BROWN CLAY; STIFF; WET
15	B2-4	4/6/9	SPT		
					CH: BROWN HIGH PLASTICITY CLAY; STIFF; WET
20	B2-5	5/6/8	CAL		
25					
30					



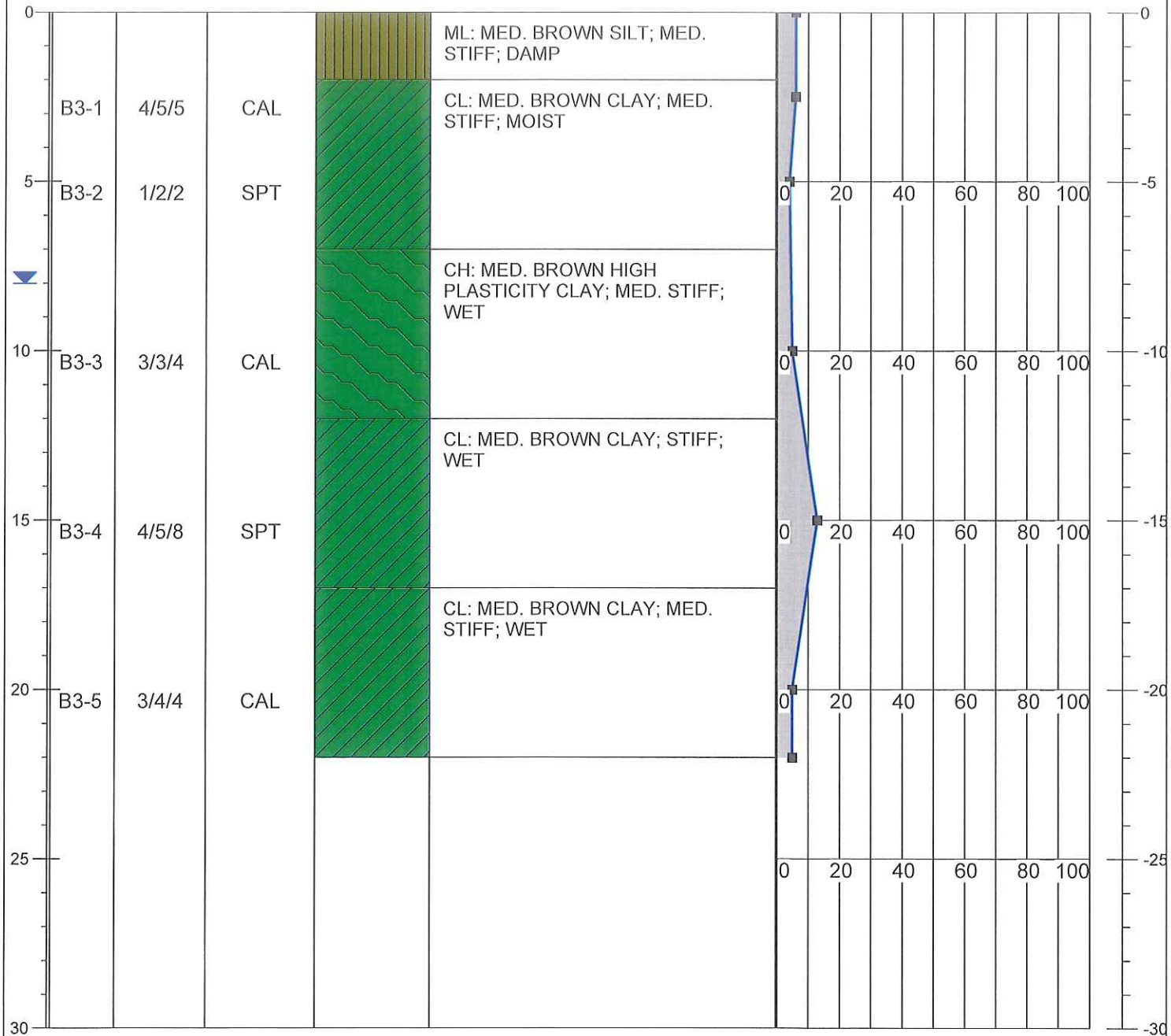
Client	Project	Sheet
Praxis Properties, LLC	Lagoon Valley	1 of 1

Auger	HSA	**Project No.**	4277
Size	6-inch	**Project Name**	Lagoon Valley
Drill	Gefco SS15	**Elevation**	N/A
Logged By	Anna Hall	**Date**	6/1/18

Gularte & Associates, Inc.

Boring B-3

Depth (feet)	Sample No.	SPT/Cal Mod N-Value	Sample Type	Lithology	LITHOLOGIC DESCRIPTION
0					ML: MED. BROWN SILT; MED. STIFF; DAMP
	B3-1	4/5/5	CAL		CL: MED. BROWN CLAY; MED. STIFF; MOIST
5	B3-2	1/2/2	SPT		
					CH: MED. BROWN HIGH PLASTICITY CLAY; MED. STIFF; WET
10	B3-3	3/3/4	CAL		
					CL: MED. BROWN CLAY; STIFF; WET
15	B3-4	4/5/8	SPT		
					CL: MED. BROWN CLAY; MED. STIFF; WET
20	B3-5	3/4/4	CAL		
25					
30					

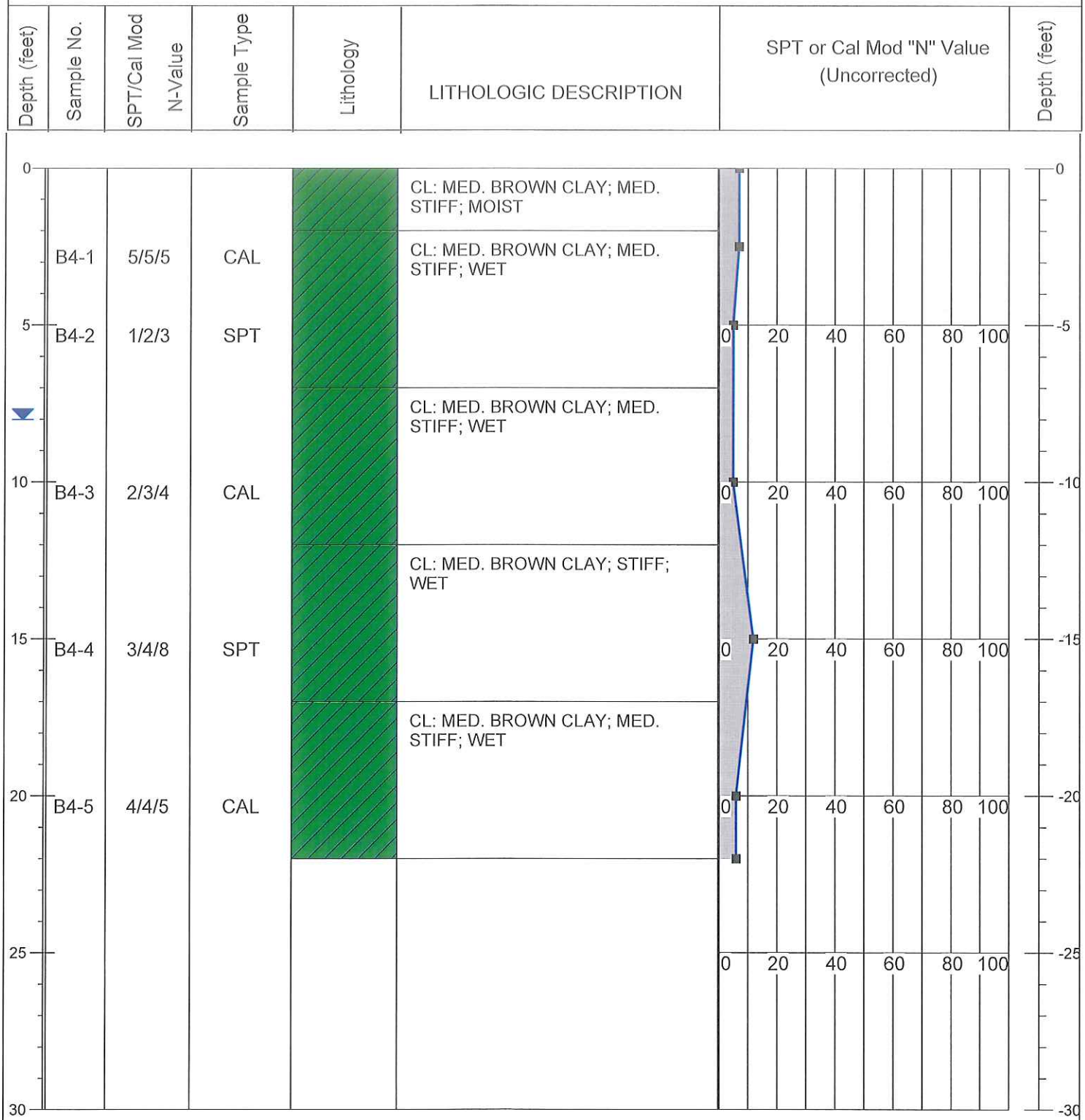


Client	Project	Sheet
Praxis Properties, LLC	Lagoon Valley	1 of 1

Auger	HSA	**Project No.**	4277
Size	6-inch	**Project Name**	Lagoon Valley
Drill	Gefco SS15	**Elevation**	N/A
Logged By	Anna Hall	**Date**	6/1/18

Gularte & Associates, Inc.

Boring B-4



Client	**Project**	**Sheet**
Praxis Properties, LLC	Lagoon Valley	1 of 1

APPENDIX B

Laboratory Test Results

Expansion Index Test; ASTM D4829

Project No.:	4277
Project Name:	Cherry Grove Road, Vacaville
Date:	6/1/2018
Sampling Location:	B3 ~1-3 ft.
Sample Description	See Boring Logs

Water Content	**No. 1**	
Mass of pan	233.8	grams
Mass of wet soil+pan	502.4	grams
Mass of dry soil+pan	472.2	grams
Water Content (%)	**12.7**	percent

Dry Soil Density		
Weight of Ring	198.8	grams
Weight of Ring + Soil	556.8	grams
Height of Ring	1	inches
Ring Diamenter	4	inches
Volume of Ring	12.6	in^3
Wet Soil Density	108.3	pcf
Dry Soil Density	**96.1**	**pcf**

Saturation and Expansion Index	
Percent Saturation	45.4
Uncorrected EI	38.5
Corrected EI	**35.8**

Dial Readings	
Time (hrs)	Reading (in)
8:33	0.0111
8:48	0.037
9:13	0.0432
11:48	0.0469
16:39	0.0482
8:26	0.0496

Delta	0.0385

EI	**Classification**
0-20	Very Low
21-50	Low
51-90	Medium
91-130	High
> 130	Very High

Notes: Caliper reaing: 1.0497, 1.0557, 1.0547, avg.= 1.053 - 1 = 0.053

ASTM D2216/2922 Moisture/Density Test

Project No.: 4277
Project Name: Cherry Grove Road, Vacaville
Sampling Locations: See Site Plan
Soil Description: See Boring Logs

Boring Location	B1	B1	B2	B2	B2	B3
Sample Depth	2.5 ft.	10 ft.	2.5 ft.	10 ft.	20 ft.	2.5 ft.

Water Content Calculations	**No. 1**	**No. 2**	**No. 3**	**No. 4**	**No. 5**	**No. 6**
Obtain Mass of Container	188.8	193.8	232.6	192.4	191.2	196.0
n Mass of Wet Specimen+Container	970.8	1084.6	1014.0	1081.4	1096.8	977.8
in Mass of Dry Specimen+Container	876.0	951.4	908.4	954.4	985.8	887.2
Water Content (%)	**13.8**	**17.6**	**15.6**	**16.7**	**14.0**	**13.1**

Soil Density Calculations	**No. 1**	**No. 2**	**No. 3**	**No. 4**	**No. 5**	**No. 6**
Obtain Mass of Mold:	280.0	281.0	276.6	277.8	278.6	275.2
Obtain Mass of Soil and Mold:	1062.2	1174.2	1059.0	1168.8	1185.0	1057.4
Total Mass of Soil	782.2	893.2	782.4	891.0	906.4	782.2
Length of sample	6.0	6.0	6.0	6.0	6.0	6.0
Wet Soil Density	107.8	123.1	107.8	122.8	124.9	107.8
Dry Soil Density	**94.7**	**104.7**	**93.3**	**105.3**	**109.6**	**95.3**

Notes

ASTM D2216/2922 Moisture/Density Test

Project No.: 4277
Project Name: Cherry Grove Road, Vacaville
Sampling Locations: See Site Plan
Soil Description: See Boring Logs

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Boring Location	B4	B4
Sample Depth	2.5 ft.	10 ft.

Water Content Calculations	**No. 7**	**No. 8**
Obtain Mass of Container	189.0	192.6
n Mass of Wet Specimen+Container	1001.4	1058.6
in Mass of Dry Specimen+Container	909.6	940.0
Water Content (%)	**12.7**	**15.9**

Soil Density Calculations	**No. 7**	**No. 8**
Obtain Mass of Mold:	281.2	280.0
Obtain Mass of Soil and Mold:	1093.8	1148.2
Total Mass of Soil	812.6	868.2
Length of sample	6.0	6.0
Wet Soil Density	112.0	119.7
Dry Soil Density	**99.3**	**103.3**

Notes

ASTM D1140 Sieve Wash Over The No. 200 Screen

Project No.: 4277
Project Name: Cherry Grove Road, Vacaville
Date: 6/1/2018

Soil Description: See Boring Logs

Basic Information

Procedure Used (A or B) A
Preparation Method Used (Wet or Dry) Wet

Boring #	B1	B2	B3	B4
Depth	5 ft.	15 ft.	5 ft.	15 ft.

Pan #	**66**	**21**	**S**	**57**
Mass of Container	191.8	196.4	191.4	188.6
Mass of Dry Specimen+Container	248.4	283.0	266.8	248.2
Mass of Dry Washed+Container	207.8	200.4	200.2	194.4
Percent Passing No. 200 Sieve	**71.7**	**95.4**	**88.3**	**90.3**

Notes

Mass of Container+Wet Specimen	261	304.2	287	264
Mass of Container+Dry Specimen	248.4	283	266.8	248.2
Moisture Content %	22.3	24.5	26.8	26.5

APPENDIX C

Geotechnical Terms/Definitions

Referenced Geotechnical Terms

ASTM: **A**merican **S**ociety for **T**esting and **M**aterials is one of the largest voluntary standards development systems in the world. Soils and materials tests are described in detail in their annual books of standards.

Bench: A relatively level step, excavated into acceptable material of a slope face, against which fill is to be placed. Its purpose is to provide a firm and stable contact between the existing material and the new fill to be placed.

Buttress: An engineered fill designed and built to support or retain a weak or unstable Slope.

Compaction: The densification of soil through mechanical manipulation (tamping, rolling, vibrating, etc.). The addition of optimum amounts of water can be crucial to obtaining adequate densification of the material.

Cut: The depth to which a material is to be removed/excavated to reach final grade elevation.

Consolidation: The gradual reduction in volume of a soil mass due to an increase in compressive stress (load).

Daylight Line: The surface contact of *cut* and *fill* soil.

Density Test: A field test used to determine compaction of a fill or native soil. The test is typically performed by the nuclear gauge method.

Expansive Soil: A soil (usually clayey) that increases in volume when water is added (expands), and shrinks when water content is reduced.

Geotechnical: Pertaining to the practical applications of soil science and civil Engineering.

Geotextile Fabric: A permeable fabric used during grading to stabilize, allow for drainage, filtration, or add reinforcement beneath a pavement or structure.

Maximum Density Test: ("curve", "max"," or "proctor") A laboratory test used to determine the optimum moisture and maximum dry density of a soil type (typically ASTM standard test method D 1557).

Native Soil (Natural Ground, NG): (1) Soil deposited by the forces of nature through weathering, erosion, etc.; soil that has not been moved by man. (2) The undisturbed surface prior to the commencement of grading, sometimes referred to as Original Ground (OG).

Nesting: Oversized material (typically >6" size) that has been placed in a manner that leaves voids between the piled boulder or rock fragments, and these voids are not infilled with solid material (soil, fine gravel/sand, etc). The absence of nesting rock is required in a *rock fill*.

NICET: National **I**nstitute for **C**ertification in **E**ngineering **T**echnologies. Engineering technicians that are tested by NICET may be certified at various levels of expertise (Levels I through IV) in different fields of construction.

Optimum Moisture: The moisture content at which the maximum density of a soil can be achieved during the compaction process. Each soil type (or blend of soil types) has its own specific optimum moisture content that is used as a guide for moisture conditioning during the grading process.

Over-excavation: The removal of the upper portion of soil on site. Usually performed under roadways or building pads and combined with replacement of structural fill

Pass: One trip or movement across a designated area by a piece of compaction equipment or machinery.

Percent Compaction: The ratio (expressed as a percentage) of the dry density of a soil (as determined by the nuclear gauge) to the maximum density of a soil (as determined by the maximum density test).

Pre-Saturation: The moisture conditioning (above optimum) of a pad subgrade or footing excavation prior to placing/pouring a foundation. Pre-saturation is usually performed on expansive soils to help limit future swelling that may be caused by seasonal rains or heavy landscape watering.

Pumping: May be observed as a rolling motion in soils compacted in an over-optimum condition (too wet). These pumping soils may, during the rolling process, become rutted or indented by rubber-tired equipment, usually leaving a bulging path in the soil parallel to the tire print.

Relative Compaction: A means of comparing the dry soil density in the field to the laboratory compaction curve. It equals the field dry density divided by the lab max dry density, and then is multiplied by 100 and expressed as a percentage.

Rock Fill: "Oversized material" (typically 6" or larger diameter) mixed/compacted during placement with a soil matrix in such a manner as to limit voids and nesting, allowing for a homogeneous, well-compacted fill.

Scarify (Rip): The act of loosening the exposed surface material (usually the upper 8-12 inches by ripper teeth on a dozer or blade) to mix, blend, moisten, or prepare for fill placement.

Structural Fill: Fill that is supporting manmade structures, including buildings, roadways, levees, and slopes. Structural Fill is typically compacted to 90 percent relative compaction.

Subdrain: A drainage system placed beneath the surface to drain surface water, or relieve hydrostatic pressure (such as water buildup behind a fill slope). It typically consists of filter material (rock and/or fabric) and a perforated drainpipe.

Toe: The contact point of the bottom of a fill or cut slope with a relatively level or pre-existing ground surface.

Transition Lot: A lot which a portion is to be cut (excavated) and a portion is to be filled (raised) to reach pad grade.

Unified Soil Classification System (USCS): A system used by soil engineers to classify soil for engineering purposes. A kind of a shorthand for describing soil types.

APPENDIX I

TREATMENT PROTOCOL FOR HANDLING HUMAN REMAINS AND CULTURAL ITEMS AFFILIATED WITH YOCHA DEHE WINTUN NATION

YOCHA DEHE
CULTURAL RESOURCES

Treatment Protocol for Handling Human Remains and Cultural Items Affiliated with the Yocha Dehe Wintun Nation

The purpose of this Protocol is to formalize procedures for the treatment of Native American human remains, grave goods, ceremonial items, and items of cultural patrimony, in the event that any are found in conjunction with development, including archaeological studies, excavation, geotechnical investigations, grading, and any ground disturbing activity. This Protocol also formalizes procedures for Tribal monitoring during archaeological studies, grading, and ground-disturbing activities.

I. Cultural Affiliation

The Yocha Dehe Wintun Nation ("Tribe") traditionally occupied lands in Yolo, Solano, Lake, Colusa and Napa Counties. The Tribe has designated its Cultural Resources Committee ("Committee") to act on the Tribe's behalf with respect to the provisions of this Protocol. Any human remains which are found in conjunction with Projects on lands culturally-affiliated with the Tribe shall be treated in accordance with Section III of this Protocol. Any other cultural resources shall be treated in accordance with Section IV of this Protocol.

II. Inadvertent Discovery of Native American Human Remains

Whenever Native American human remains are found during the course of a Project, the determination of Most Likely Descendant ("MLD") under California Public Resources Code Section 5097.98 will be made by the Native American Heritage Commission ("NAHC") upon notification to the NAHC of the discovery of said remains at a Project site. If the location of the site and the history and prehistory of the area is culturally-affiliated with the Tribe, the NAHC contacts the Tribe; a Tribal member will be designated by the Tribe to consult with the landowner and/or project proponents.

Should the NAHC determine that a member of an Indian tribe other than Yocha Dehe Wintun Nation is the MLD, and the Tribe is in agreement with this determination, the terms of this Protocol relating to the treatment of such Native American human remains shall not be applicable; however, that situation is very unlikely.

III. Treatment of Native American Remains

In the event that Native American human remains are found during development of a Project and the Tribe or a member of the Tribe is determined to be MLD pursuant to Section II of this Protocol, the following provisions shall apply. The Medical Examiner shall immediately be notified, ground disturbing activities in that location shall cease and the Tribe shall be allowed, pursuant to California Public Resources Code Section 5097.98(a), to (1) inspect the site

Tribal ceremonial and cultural items, including archeological items, which may be found on a Project site in favor of the Tribe. If any intermediary, (for example, an archaeologist retained by the Project Proponent) is necessary, said entity or individual shall not possess those items for longer than is reasonably necessary, as determined solely by the Tribe.

VI. Inadvertent Discoveries

If additional significant sites or sites not identified as significant in a Project environmental review process, but later determined to be significant, are located within a Project impact area, such sites will be subjected to further archeological and cultural significance evaluation by the Project Proponent, the Lead Agency, and the Tribe to determine if additional mitigation measures are necessary to treat sites in a culturally appropriate manner consistent with CEQA requirements for mitigation of impacts to cultural resources. If there are human remains present that have been identified as Native American, all work will cease for a period of up to 30 days in accordance with Federal Law.

VIII. Work Statement for Tribal Monitors

The description of work for Tribal monitors of the grading and ground disturbing operations at the development site is attached hereto as Addendum I and incorporated herein by reference.

given to ensure that human remains are not further impacted by the process of excavation.

(E) Provenience. Buckets, collection bags, notes, and tags should be fully labeled per provenience, and a distinction should be made between samples collected from: (1) **Perimeter Balk** (described above), (2) **Exposure** (dirt removed in exposing the exterior/burial plan and associations, and (3) **Matrix** (dirt from the interstices between bones or associations). Thus, each burial may have three bags, "Burial 1 Perimeter Balk," "Burial 1 Exposure Balk," "Burial 1 Matrix."

Please note the provisions below with respect to handling and conveyance of records and samples.

(F) Records. The following records should be compiled in the field: (1) a detailed scale drawing of the burial, including the provenience of and full for all human remains, associated artifacts, and the configuration of all associated phenomena such as burial pits, evidence for preinterment grave pit burning, soil variability, and intrusive disturbance, (2) complete a formal burial record using the consultants proprietary form or other standard form providing information on site #, unit or other proveniences, level depth, depth and location of the burial from a fixed datum, workers, date(s), artifact list, skeletal inventory, and other pertinent observations, (3) crew chief and worker field notes that may supplement or supercede information contained in the burial recording form, and (4) photographs, including either or standard photography or high-quality (400-500 DPI or 10 MP recommended) digital imaging.

(G) Stipulations for Acquisition and Use of Imagery. Photographs and images may be used only for showing location or configuration of questionable formation or for the position of the skeleton. They are not to be duplicated for publication unless a written release is obtained from the Tribe.

(H) Association. Association between the remains and other cultural materials should be determined in the field in consultation with an authorized Tribal representative, and may be amended per laboratory findings. Records of provenience and sample labels should be adequate to determine association or degree of likelihood of association of human remains and other cultural materials.

(I) Samples. For each burial, all **Perimeter Balk** soil is to be 1/8"-screened. All **Exposure** soil is to be 1/8"-screened, and a minimum of one 5-gallon bucket of excavated but unscreened Exposure soil is to be collected, placed in a plastic garbage bag in the bucket. All **Matrix** soil is to be carefully excavated, screened as appropriate, and then collected in plastic bags placed in 5-gallon buckets.

YOCHA DEHE
CULTURAL RESOURCES

VI. Curation of Recovered Materials

Should all, or a sample, of any archaeological materials collected during the data recovery activities – with the exception of Human Remains – need to be curated, an inventory and location information of the curation facility shall be given to tribe for our records.