Initial Study (IS) and Mitigated Negative Declaration (MND)

TS San Jacinto Outdoor Cultivation
San Jacinto, CA

Prepared for:

CITY OF SAN JACNITO
595 South San Jacinto Avenue
San Jacinto, California 92583

Prepared by:

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January 2023

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1.1 PROJECT TITLE

TS Farms San Jacinto Outdoor Cultivation Project

1.2 LEAD AGENCY

City of San Jacinto
595 South San Jacinto Avenue
San Jacinto, California 92583

1.3 CONTACT PERSON AND PHONE NUMBER

Kevin White, Planning Manager
(951)487-7330 ext. 306
kwhite@sanjacintoca.gov

1.4 PROJECT LOCATION

The 60.53-acre TS Farms San Jacinto Outdoor Cultivation Project (hereinafter, referred to as the Project or proposed Project) is located along Sanderson Avenue, just north of Cottonwood Avenue in the City of San Jacinto (City) in Riverside County, California (Project site; **Figure 1**). The Project site's Assessor Parcel Numbers (APNs) include 432-130-008-7, 432-130-009-8, and 432-130-001-0. Access to the site is currently available via a dirt road off of Cottonwood Avenue and a dirt entrance off of Sanderson Avenue.

1.5 PROJECT APPLICANT NAME AND ADDRESS

Applicant: TS Farms
Dawn Williams
(310)710-4447
dwnwllms@gmail.com

1.6 GENERAL PLAN DESIGNATION

High Density Residential (HDR) and Mixed Use (MU)

The High Density Residential land use designation provides for a variety of single-family dwelling units and multiple-family dwellings including: garden style units, stacked flats, courtyard homes, patio homes, townhouses, apartments, condominiums, senior housing and mobile home parks. The MU land use designation provides opportunities for mixtures of commercial, office, and residential uses in the same building, on the same parcel of land, or within the same area. Mixed-use areas offer opportunities for people to live, work, shop, and recreate without having to use cars. The MU land use designation is compatible with the MU zoning, which is described in Section 1.7 below (City 2022a).

1.7 ZONING

Residential, High Density (RH) and Mixed Use (MU)

The RH zone is applied to areas appropriate for a variety of multi-family attached housing types (for example, apartments, garden style units, condominiums, townhomes, etc.), as well as accessory structures and uses primarily on larger parcels where site design can provide the desired mixture of housing types, aesthetic and functional open space areas, and other features that enhance the development and neighborhood. The RH zone may also allow limited neighborhood serving commercial uses on small appropriately located individual parcels or in small pedestrian-oriented neighborhood centers, public facilities, and other accessory structures and uses that are compatible with high density neighborhoods. The MU zoning designation allows for a variety of uses including residential, commercial, office, and some agricultural uses (City 2022b). Outdoor cultivation in these zones, along with all other zones, is regulated by Chapter 17.435 of the Development Code. This section of the Development Code allows permits outdoor cultivation on the "parcels located west of North Sanderson Avenue and north of Cottonwood Avenue" (City 2022c).

1.8 PROJECT BACKGROUND

With the understanding that the installation of hoop houses on the Project site was considered exempt, TS Farms (Applicant) installed the surrounding fence and metal framing for the hoop house structures in Quarter 4 of 2021. After discussions with the California Department of Fish and Wildlife (CDFW) in regards to the exemption applicability, further analysis is required to determine the appropriate level of California Environmental Quality Act (CEQA) documentation. Since the meeting with CDFW, around March 2022, the Applicant has stopped any future improvements on the site and has stopped moving the Project forward.

Under CEQA, the impacts of a proposed project must be evaluated by comparing expected environmental conditions after project implementation to conditions at a point in time referred to as the baseline. The changes in environmental conditions between those two scenarios represent the environmental impacts of the proposed project. The description of the environmental conditions in the project study area under baseline conditions is referred to as the environmental setting. For the purposes of this Initial Study (IS), a baseline was utilized that describes the Project site prior to installation of fencing and the hoop house structures. Additionally, since the site was previously graded under the previous agricultural operations, and no additional grading has occurred, the baseline includes the graded site as it currently exists.

1.9 SITE HISTORY/EXISTING CONDITIONS

The site has a history of being used for farming barley in order to feed cattle. Typically, two cuts of barley per year would be cultivated on 60 acres of land. The site has been graded for agricultural purposes and contains various irrigation equipment.

The site contains minimal vegetation, mostly grasses and weeds that have grown in after being used for farming. Photographs of existing conditions on and surrounding the Project site are shown in **Figure 2.**

1.10 DESCRIPTION OF PROJECT

The City of San Jacinto is located in Riverside County just east of the Mount San Jacinto. The proposed Project involves the construction and operation of an outdoor cannabis cultivation facility with hoop house structures. The proposed Project would cultivate approximately 103,000 cannabis plants planted in ground utilizing drip irrigation within approximately 800 sets of hoop house structures. The hoop house

structures contain metal framing that are approximately 10 feet high, 20 feet wide, and 123 feet long. Plastic sheeting would be placed over the tops of the structures. One harvest per year would occur.

The Project would also include a 4 cubic yard (cu. yd.) waste bin and 4 cu. yd. recycling bin. A modular security trailer that is 32 feet by 10 feet would also be on the site. The security trailer would have one restroom, a small water heater, lights, and a wall mounted HVAC (heating, ventilation, and air conditioning) unit. The security trailer would have an above ground potable water storage tank and an above ground 250 gallon wastewater tank that would be serviced approximately once per week. The site plan is shown in **Figure 3**.

10.1 Landscaping

Landscaping would occupy approximately 0.45 acres of the Project site and would be located along the setback from Sanderson Avenue and the parking lot. Landscaping would consist of trees and shrubs that would be low or very low water demand. The Evapotranspiration Adjustment Factor (ETAF) would be 0.24, below the maximum allow 0.45 for non-residential uses.

10.2 Parking, Circulation and Site Access

Regional access to the Project site is provided by the State Route (SR) 79 "Ramona Expressway" at the Project site and Sanderson Avenue immediately east of the Project site. The north-south roadway of Sanderson Avenue and the east-west roadway of Cottonwood Avenue provide local circulation. The main driveway would be 36 feet wide and would located off of Sanderson Avenue as the entrance to the Project site. A fire road would be located along the northern portion of the Project site, inside the fencing, with a turnaround at the end. Gravel would be placed between the cultivation areas to help with dust control and erosion.

The proposed Project would provide a total of 30 parking spaces, including one accessible space. Approximately 10.8 acres of the site would be paved. Additionally a small loading area would be located in the parking lot that is under 3,000 square feet (sq. ft.).

10.3 Fencing

The Project site boundary would contain a 6 foot high chain link fencing. A 6 foot tall brown vinyl fencing would be located along portions of the frontage of Sanderson Avenue. A 30 foot wide rolling security gate would be located in front of the driveway off of Sanderson Avenue.

10.4 Utilities

Three wells are located on the site and would be used for irrigation of the plants only. The water for the security trailer and for employees would trucked in and would be stored above ground. The security trailer would have a 250 gallon above ground wastewater tank that would be serviced approximately once per week. Electric services would be provided by San Jacinto Power and would tie into nearby connections on Sanderson Avenue. No natural gas would be required.

A four cubic yard waste enclosure and four cubic yard recycling enclosure would be located on the site and would be serviced by CR&R.

10.5 Construction

Project construction is expected to occur in January 2023 and is assumed to last two months. Project construction would include grading for the parking and security trailer, installation of the hoop house structures, installation of gravel roads, paving of the parking lot, driveway, curbs and gutters, installation of fencing, installation of a trash enclosure, and placing a modular security trailer on site. The parking lot would be graded but no cut or fill would be required.

The only water needed during construction would be a water truck to help with dust suppression and potable water for employees which would be provided by water bottles. Approximately 80 employees would be needed and it is anticipated that they come from the local work force. Construction would be permitted between Monday to Saturday between 7:00 A.M. and 7:00 P.M. and per the City's Municipal Code (Section 8.40.040) would not exceed 70dBA (City 2021b).

10.6 Operation

The facility would operate from 7:00 AM to 7:00 PM and would include approximately 30 full time daytime staff members for security, management, accounting and cultivation purposes. An addition three full time night shift employees would be onsite from 7:00 PM until 7:00 AM, for security purposes. Plants would be watered via drip irrigation at night to help with evaporation. Once plants have completed growing, they would be cultivated and dried on site. No manufacturing or delivery would occur on site.

Lighting and security cameras would be provided for security purposes and would comply with the City lighting requirements. Lighting would consist of five floodlights that would be located in the parking lot, and would be dark sky compliant.

Security personnel would be trained for both safety and security. All personnel will be subject to video surveillance and monitoring 24 hours a day. Fire and safety inspection will occur daily either by personnel or security officers.

Trucks would only be required during harvest, which would be one time per year. Approximately six to ten truck trips would be required during this time. Product would be delivered to a licensed manufacturing facility, likely in Desert Hot Springs. Moving of product or cash or others assets would be provided by armored vehicle services.

1.11 SURROUNDING LAND USES AND SETTING

Surrounding the Project site are the following uses and designations:

North: Water Source and Public Institutional land use and zoning designations are north of the site. Immediately north of the site is the California Aqueduct, followed by the San Jacinto Valley Regional Water Facility.

South: The parcels south of the site have a land use designation of MU, Commercial (C) and Medium Density Residential (MDR) and a zoning designation of MU and Commercial General (CG). Immediately south of the site is agricultural land.

East: The parcels east of the site have a land use designation of MDR and C and a zoning designation of Residential, Medium Density (RM) and CG. Vacant land is immediately east across Sanderson Avenue bordering the Project site, with one single family house to the southeast of the Project site.

West: The parcels west of the site have a land use designation of HDR and C and a zoning designation of RH and CG. Cottonwood Dairy is located directly west of the Project site which contains a single family home, followed by agricultural land.

1.12 OTHER PUBLIC AGENCIES WHOSE APPROVAL IS REQUIRED

California Department of Farming and Agriculture – Outdoor Cultivation License

1.13 TRIBAL CONSULTATION

On November 8, 2022, the City sent AB 52 letters to each Tribe that had requested to be notified of Projects within the City. Four Tribes responded to the request, and only one Tribe, the Soboba Band of Luiseño Indians, requested to consult with the City. On December 15, the City met with the Tribe to discuss the project, and on January 19, 2023 the Tribe sent conditions of approval for the Project and concluded consultation.

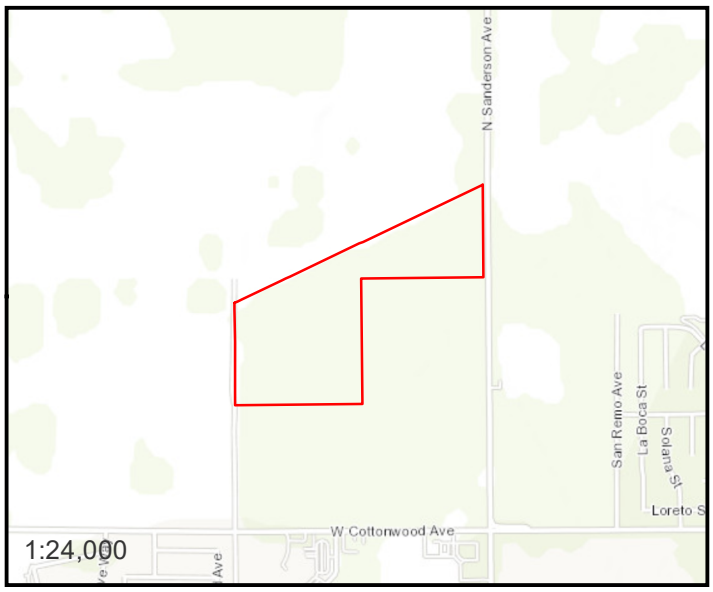
1.14 PROJECT PURPOSE

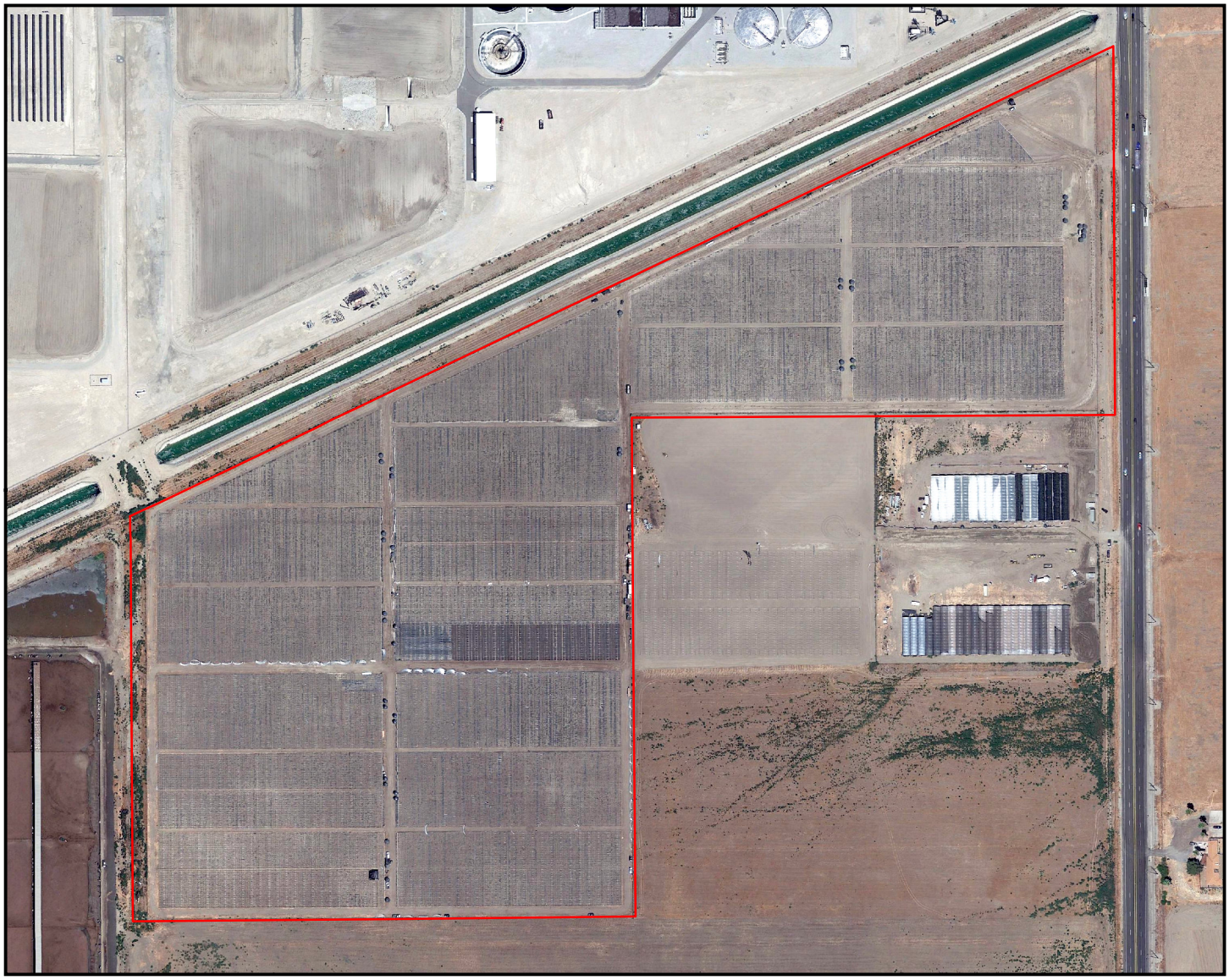
Until 1996, the cultivation, use, and sale of cannabis (also known as marijuana) for any purpose was illegal in the State of California. In 1996, California voters approved Proposition 215, which allowed seriously ill Californians the right to obtain and use cannabis for medical purposes when recommended by a physician. In 2015, the State Legislature enacted the Medical Cannabis Regulation and Safety Act (MCRSA), which mandated a comprehensive State licensure and regulatory framework for cultivation, manufacturing, distribution, transportation, testing, and dispensing of medical cannabis on a commercial basis.

As the State was drafting regulations in compliance with MCRSA, California voters in 2016 approved Proposition 64, which legalized the use and possession of non-medicinal cannabis products within California by adults age 21 years and older. In June 2017, the State Legislature passed a budget trailer bill, Senate Bill (SB) 94, which repealed MCRSA and integrated its medicinal licensing requirements with Proposition 64 to create the Medicinal and Adult-Use Cannabis Regulation and Safety Act (MAUCRSA). MAUCRSA provides the regulatory structure for commercial cannabis activities in California.

MAUCRSA designates applicable responsibilities for oversight of cannabis commerce in California to several State agencies. The Bureau of Cannabis Control (BCC) is the lead agency in regulating commercial cannabis licenses for retailers, distributors, testing labs, and microbusinesses involved with medical and adult-use cannabis. CalCannabis Cultivation Licensing, a division of the California Department of Food and Agriculture (CDFA), licenses and regulates commercial cannabis cultivators and manages the State's "track-and-trace" system that tracks cannabis and its products from cultivation to sale. The Manufactured Cannabis Safety Branch of the California Department of Public Health (CDPH) is responsible for regulation of commercial cannabis manufacturing. In accordance with MAUCRSA, all three agencies have adopted emergency regulations related to their respective responsibilities, and all three have drafted permanent regulations that are currently undergoing the State rulemaking process.

The City of San Jacinto adopted Chapter 17.435 to their Development Code to regulate Cannabis Oriented Businesses and uses to promote the health, safety, and general welfare of the citizens of the City. The Project would be required to comply with the standards set forth in this Chapter. The City is the lead agency for the proposed Project.





Project Location

N

0 150 300 600

Feet

Figure 1
TS Farms San Jacinto Outdoor Cultivation Project
Project Location and Vicinity

Name: 21355 PLAN Fig 1 Project Location and Vicinity.Mxd
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Previous Site Conditions with Agricultural Operations

Current Site Conditions

Figure 2
TS Farms San Jacinto Outdoor Cultivation Project
Site Photos

Name: 21355 PLAN Fig 2 Site Photos.Mxd
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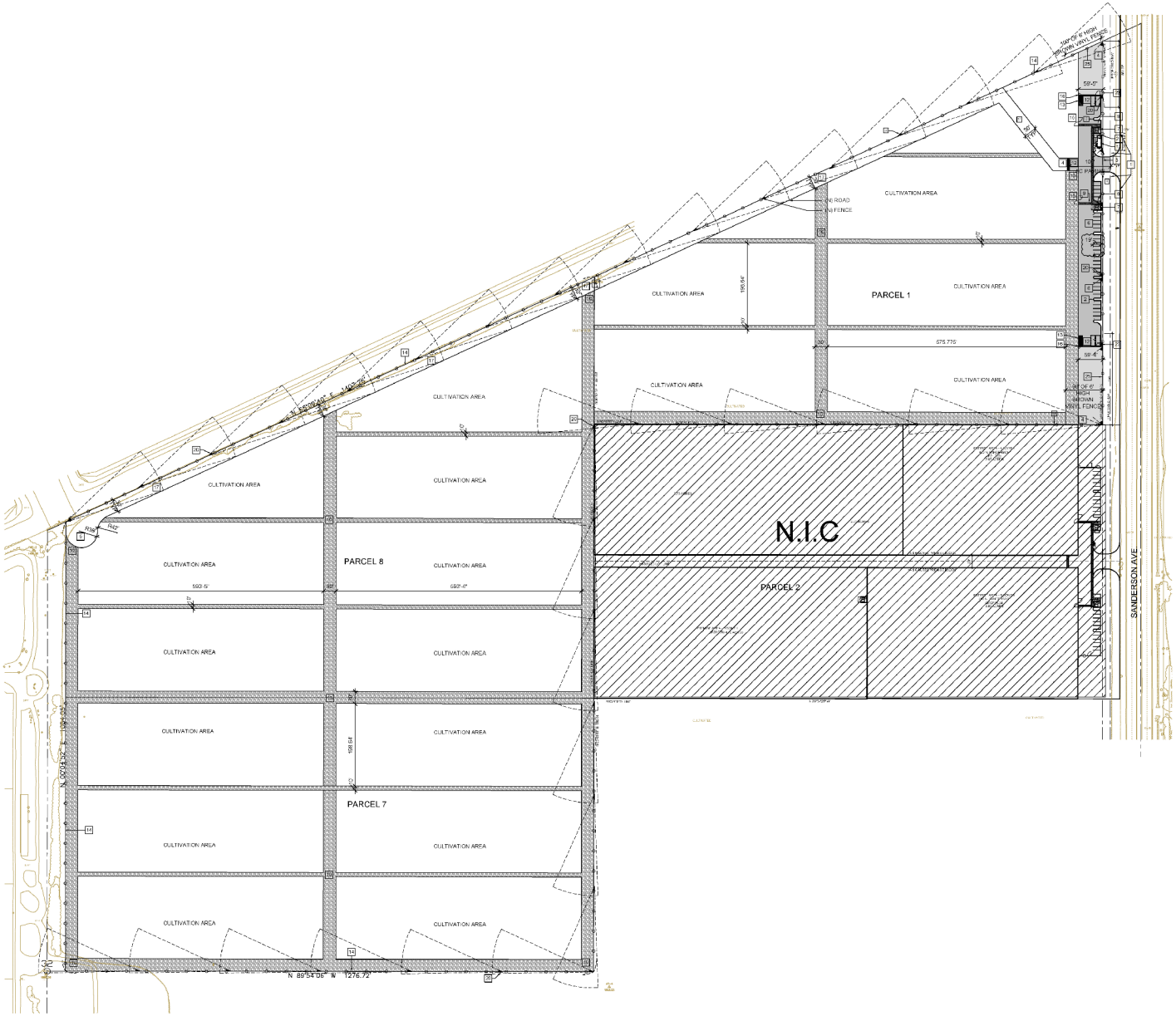

Figure 3
TS Farms San Jacinto Outdoor
Cultivation Project
Site Plan

Name: 21355 PLAN Fig 3 Site Plan.Mxd
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SECTION 2.0 – ENVIRONMENTAL DETERMINATION

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

☐ *Aesthetics*	☐ *Agriculture and Forestry Resources*	☐ *Air Quality*
☒ *Biological Resources*	☐ *Cultural Resources*	☐ *Energy*
☐ *Geology / Soils*	☐ *Greenhouse Gas Emissions*	☐ *Hazards & Hazardous Materials*
☐ *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*

DETERMINATION

On the basis of this initial evaluation:

1. I find that the project **could not** have a significant effect on the environment, and a **NEGATIVE DECLARATION** will be prepared. ☐
2. 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. ☒
3. I find the proposed Project **may have a significant effect** on the environment, and an **ENVIRONMENTAL IMPACT REPORT** is required. ☐
4. 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. ☐
5. I find that although the proposed Project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or Negative Declaration pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or Negative Declaration, including revisions or mitigation measures that are imposed upon the proposed Project, nothing further is required. ☐

Signature _____ Date _____

Name _____ Title _____

SECTION 3.0 – ENVIRONMENTAL IMPACTS

3.1 ORGANIZATION OF ENVIRONMENTAL ANALYSIS

Sections 3.3.1 through 3.3.20 provide a discussion of the potential environmental impacts of the Project. The evaluation of environmental impacts follows the questions provided in the Checklist provided in the CEQA Guidelines.

3.2 TERMINOLOGY USED IN THIS ANALYSIS

For each question listed in the IS checklist, a determination of the level of significance of the impact is provided. Impacts are categorized in the following categories:

- **No Impact.** A designation of no impact is given when no adverse changes in the environment are expected.
- **Less Than Significant.** A less than significant impact would cause no substantial adverse change in the environment.
- **Less Than Significant with Mitigation**. A potentially significant (but mitigable) impact would have a substantial adverse impact on the environment but could be reduced to a less-than-significant level with incorporation of mitigation measure(s).
- **Potentially Significant**. A significant and unavoidable impact would cause a substantial adverse effect on the environment and no feasible mitigation measures would be available to reduce the impact to a less-than-significant level.

3.3 EVALUATION OF ENVIRONMENTAL IMPACTS

A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to the project (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).

All answers must take account of the whole action involved, including off site as well as on site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.

Once the Lead Agency has determined that a particular physical impact may occur, the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant.

"Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.

"Less Than Significant With Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact."

Mitigation measures are identified and explain how they reduce the effect to a less than significant level (mitigation measures may be cross-referenced).

Earlier analyses may be used where, pursuant to the Program EIR or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. (Section 15063[c] [3][D]. In this case, a brief discussion should identify the following:

a) Earlier analyses used where they are available for review

b) Which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards and whether such effects were addressed by mitigation measures based on the earlier analysis

c) The mitigation measures that were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project for effects that are "Less than Significant with Mitigation Measures Incorporated

References and citations have been incorporated into the checklist references to identify information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document, where appropriate, include a reference to the page or pages where the statement is substantiated.

Source listings and other sources used or individuals contacted are cited in the discussion.

The explanation of each issue identifies:

a) The significance criteria or threshold, if any, used to evaluate each question

b) The mitigation measure identified, if any, to reduce the impact to less than significant.

3.3.1 Aesthetics

a)	Except as provided in Public Resources Code Section 21099, would the project have a substantial adverse effect on a scenic vista?	Potentially Significant Impact ☐	Less than Significant With Mitigation Incorporated ☐	Less than Significant Impact ☒	No Impact ☐

a) Less than Significant Impact. Scenic vistas are defined as expansive views of highly-valued landscapes from publicly accessible viewpoints. Scenic vistas include views of natural features such as topography, water courses, outcrops, and natural vegetation, as well as man-made scenic structures.

The proposed Project is located in the San Jacinto Basin, surrounded by mountain ranges in all directions. The San Jacinto Mountains are to the north and east, the Lakeview Mountains are to the west, and the Domenigoni Mountains are to the south. These mountains range from just over 2,000 feet to just under 11,000 feet.

The Project site is a historically agricultural lot immediately south of the Casa Loma canal. The surrounding area is flat agricultural and commercial uses. The proposed Project would install hoop house structures for the purposes of cannabis cultivation. The structures would be 10 feet high and would not obstruct views of the surrounding mountainside except for visitors on the Project site itself. The Project site would remain used for agricultural purposes and is an allowed use under the current zoning. Additionally, design review would be required for the construction of any structure, or to relocate, rebuild, or significantly enlarge or modify any existing structure or site within the City (City 2022d). Therefore, impacts would be considered less than significant.

b)	Except as provided in Public Resources Code Section 21099, would the project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	Potentially Significant Impact ☐	Less than Significant With Mitigation Incorporated ☐	Less than Significant Impact ☐	No Impact ☒

b) No Impact. No state scenic highways are located near the Project site; the closest eligible highway is Route 74 located more than three miles south (Caltrans 2022). The City recognizes that abundant scenic vistas are available from many of the City's roadways. Within the San Jacinto Valley Area Plan, Ramona Expressway, Gilman Springs Road, State Route 79, and Soboba Road are identified as County Eligible Scenic Highways in San Jacinto Valley (City 2022d). However, none of these roadways are in the vicinity of the Project site. Additionally, the Project site does not contain trees, rock outcroppings or historic buildings. No impacts would occur directly, indirectly or cumulatively to scenic resources within a state scenic highway.

c)	Except as provided in Public Resources Code Section 21099, would the project, 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?	Potentially Significant Impact ☐	Less than Significant With Mitigation Incorporated ☐	Less than Significant Impact ☒	No Impact ☐

c) Less than Significant Impact. The Project site is located in a non-urbanized area of San Jacinto. The Project would not substantially change the visual character from existing agricultural uses, the operation of the Project would be similar to current uses and introduce hoop house structures, a small pre-built security office and a parking lot. While the visual characteristics of the existing uses would change, it would be largely similar to existing and surrounding uses. The Project would be consistent with the existing zoning, and would comply with all design standards. No variances are being requested. Development of the site as proposed, in compliance with the City's design standards, would not result in the loss of distinct or valuable visual characteristics of the site and surroundings. The Project would result in a less-than significant impact

d)	Except as provided in Public Resources Code Section 21099, would the project create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	Potentially Significant Impact ☐	Less than Significant With Mitigation Incorporated ☐	Less than Significant Impact ☒	No Impact ☐

d) Less than Significant Impact. The City of San Jacinto is in Zone B of the Mount Palomar Observatory, located in San Diego County. Zone B is the area defined as a circular ring forty-five (45) miles in radius centered on Palomar Observatory (County 1988). The Project site is 29.65 miles from Mount Palomar Observatory. As well, the City enjoys limited night sky impacts due to its rural nature. To preserve the night sky, lighting must be designed to limit leak spillage that may obstruct or hinder the view of the nighttime sky. To reduce impacts related to light pollution, the City requires that all developments introducing new light sources, or modifications to existing light sources, to shield all such devices. No construction would occur in the evening, so no lighting would be required during construction. During operation, lighting would be provided for security purposes and would comply with the City's lighting requirements. Lighting would consist of five floodlights that would be located in the parking lot, and would be dark sky compliant.

The proposed Project would install hoop house structures that would be covered in plastic and a pre-built security trailer. No large, reflective surfaces would be located on site. As designed, the impacts to the nighttime sky and the potential for glare will be less than significant.

3.3.2 Agriculture & Forestry Resources

a) In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project 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?	Potentially Significant Impact ☐	Less than Significant With Mitigation Incorporated ☐	Less than Significant Impact ☒	No Impact ☐

a) Less than Significant Impact. The Project site has a land use designation and zoning designation of Residential, High Density (RH) and Mixed Use (MU); however, the Project site has historically been used for agricultural purposes, which is generally an allowed use in the RH and MU zones. The Project site contains a mix of land designated as Prime Farmland, Farmland of Statewide Importance, and Unique Farmland (California Department of Conservation [DOC] 2022a). The Project itself would cultivate plants, which would be considered an agricultural use. A small security trailer and parking lot would be located along the edge of the northeast boundary of the Project site. These uses would not convert land to a non-agricultural use, but would rather, support future cultivation at the site. No farmland would be converted, and agricultural uses would remain onsite. Impacts would be less than significant.

b) In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project conflict with existing zoning for agricultural use, or a Williamson Act contract?	Potentially Significant Impact ☐	Less than Significant With Mitigation Incorporated ☐	Less than Significant Impact ☒	No Impact ☐

b) Less than Significant Impact. The DOC no longer hosts Williamson Act enrollment maps and/or data 'due to the lack of up to date city and county reported enrollment data' (DOC 2022b). However, according to the City, no Williamson Act contracts are located on or near the Project site. No conflict with zoning or Williamson Act contracts would occur.

c) In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project 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))?	Potentially Significant Impact ☐	Less than Significant With Mitigation Incorporated ☐	Less than Significant Impact ☐	No Impact ☒

c) No Impact. As mentioned previously, the site is zoned RH and MU and not for timberland uses. Additionally, no trees or timberland production exists on site. No impact to timberland production would occur.

d) In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project result in the loss of forest land or conversion of forest land to non-forest use?	Potentially Significant Impact ☐	Less than Significant With Mitigation Incorporated ☐	Less than Significant Impact ☐	No Impact ☒

d) No Impact. As mentioned previously, the site is zoned RH and MU and not for forest land uses. Additionally, no trees or forest land exists on site. No impact from the conversion of forest land would occur.

e) In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project 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 the conversion of forest land to non-forest use?	Potentially Significant Impact ☐	Less than Significant With Mitigation Incorporated ☐	Less than Significant Impact ☒	No Impact ☐

e) Less than Significant. As mentioned previously, the site contains land designated on the California Important Farmland map as important farmland. The Project itself would cultivate plants, which would be considered an agricultural use. A small security trailer and parking lot would be located along the edge of the northeast boundary of the Project site. These uses would not convert land to a non-agricultural use, but would rather, support future cultivation at the site. No farmland would be converted, and agricultural uses would remain onsite. Impacts would be less than significant.

3.3.3 Air Quality

a)	Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations. Would the project conflict with or obstruct implementation of the applicable air quality plan?	Potentially Significant Impact ☐	Less than Significant With Mitigation Incorporated ☐	Less than Significant Impact ☒	No Impact ☐

a) Less than Significant Impact. Currently Riverside County is designated as "attainment" "non-attainment" or "unclassified" for all federal and state air quality standards, the proposed Project is subject to an air quality plan. The South Coast Air Basin portion of Riverside is in non-attainment for 1-hour ozone and PM_{10} (inhalable particulate matter [PM] with diameters that are generally 10 micrometers and smaller; USEPA 2022). The South Coast Air Quality Management District (SCAQMD) 2016 Air Quality Management Plan sets the standards for Projects within the region. Some of the rules and regulations that apply to the proposed Project include, but are not limited to, the following:

SCAQMD Rule 402 prohibits a person from discharging from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or which endanger the comfort, repose, health or safety of any such persons or the public, or which cause, or have a natural tendency to cause, injury or damage to business or property.

SCAQMD Rule 403 governs emissions of fugitive dust during construction and operation activities. Compliance with this rule is achieved through application of standard Best Management Practices (BMPs), such as application of water or chemical stabilizers to disturbed soils, covering haul vehicles, restricting vehicle speeds on unpaved roads to 15 miles per hour, sweeping loose dirt from paved site access roadways, cessation of construction activity when winds exceed 25 mph, and establishing a permanent ground cover on finished sites.

Southern California Association of Government's (SCAG's) Air Quality Planning Program coordinates with various air quality and transportation stakeholders in Southern California to ensure compliance with the federal, state, and regional air quality requirements. Federal Clean Air Act Section 176(c) (42 U.S.C. 7506(c)) requires transportation conformity to ensure that federal funding and approval are given to highway and transit projects that are consistent with the air quality goals established by the state. The 2016 Air Quality Management Plan (AQMP) includes transportation control measures developed by SCAG from the 2016 Regional Transportation Plan and Sustainable Communities Strategy Program. Since the forecast assumptions forms the basis of the land use and transportation control measures of the AQMP.

The primary source of air pollutants generated by the Project would be classified as being generated from "mobile" sources. Mobile sources would generally include dust from roads, farming, and automobile exhausts. Mobile sources are generally regulated by the Air Resources

Board of the California Environmental Protection Agency which sets emissions for vehicles and acts on issues regarding cleaner burning fuels and alternative fuel technologies. As such, the District has addressed most criteria air pollutants through basin wide programs and policies to prevent cumulative deterioration of air quality within the Basin. The City would implement Best Management Practices (BMPs) as required under SCAQMD air quality attainment rules to obtain a permit to construct the proposed Project. The Project would not require the use of heavy machinery previously required for barley harvests conducted onsite. During harvest period, plants would be harvested by hand which would reduce the overall operational emissions compared to the previous use. SCAQMD sets daily limits for emissions for both construction and operation as shown below in Table 3-1 (SCAQMD 2019).

Table 3-1. SCAQMD Threshold Limits

Pollutant	Construction (lbs/day)	Operation (lbs/day)
NO_x	100	55
VOC	75	55
PM_{10}	150	150
$PM_{2.5}$	55	55
SO_x	150	150
CO	550	550
Lead	3	3

As a point of reference, the Project's emissions were compared to the Luisñeo Village Retail Center Project in the City, which was expected to end construction in Summer 2020. This project included over 13,000 cubic yards of import soil, on approximately 10 acres, and included the construction and operation of a retail center, two restaurants with drive throughs, and a service station with convenience store and car wash; overall a higher intensity usage project when compared to the proposed Project. The IS / MND prepared for the Luiseño Village Retail Center found that emissions during both construction and operation would be under the SCAQMD significance thresholds (CEQAnet 2019). Therefore, given the minor scope of the construction effort, the proposed Project would not emit a significant amount of regional criteria pollutant emissions, nor would it create a localized air quality impact. Potential operational impacts on local and regional air quality are also anticipated to be less than significant, falling below SCAQMD thresholds, as all SCAQMD requirements and conditions would be implemented, as needed. Because construction and operation of the Project would not exceed the SCAQMD significance thresholds, the proposed Project would not increase the frequency or severity of existing air quality standards or the interim emission reductions specified in the air plans and impacts would be less than significant.

b)	Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations. Would the project 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?	Potentially Significant Impact ☐	Less than Significant With Mitigation Incorporated ☐	Less than Significant Impact ☒	No Impact ☐

b) Less than Significant Impact. Currently Riverside County is designated as "attainment" "non-attainment" or "unclassified" for all federal and state air quality standards, the Project is subject to an air quality plan. The South Coast Air Basin portion of Riverside is in non-attainment for 1-hour ozone (i.e., the daily maximum surface ozone concentration backward averaged over 1 hour), and non-attainment for PM_{10} (USEPA 2022). The SCAQMD 2016 Air Quality Management Plan sets the standards for Projects within the region.

Construction activities associated with new development may temporarily increase localized PM10, PM2.5, volatile organic compound (VOC), nitrogen oxides (NOX), sulfur oxides (SOX), and carbon monoxide (CO) concentrations a Project's vicinity. The primary source of construction-related CO, SOX, VOC, and NOX emission is gasoline and diesel-powered, heavy-duty mobile construction equipment. Primary sources of PM_{10} and $PM_{2.5}$ emissions are generally clearing and demolition activities, grading operations, construction vehicle traffic on unpaved ground, and wind blowing over exposed surfaces. The proposed Project requires minimal grading and paving. Grading would be only required for the parking lot and security trailer and would take less than one month to complete. Paving would be required for the parking lot, driveway, curbs, and gutters, and would cover approximately 10.8 acres of the 60.5-acre Project site. Furthermore, the proposed Project site has been previously graded for agricultural purposes and is generally flat; therefore, additional grading would be minimal.

Operational vehicle use in the vicinity of the Project, as well as at the cultivation areas, would be on paved roads or roads with decomposed granite that have minimal dust emissions. Vehicle/truck trips during operation of the Project are estimated to be approximately 90 trips daily. As discussed in Threshold a above, based on the proposed Project's comparison to a larger project in the City, vehicle traffic associated with the Project is not expected to generate dust emissions that would cause a substantial increase in PM_{10} within the surrounding area, Riverside County, or the SCAQMD.

Based on the size, construction requirements, location, and nature of the proposed Project, and the required compliance with the SCAQMD requirements and conditions, since the Project would result in a less than significant impact on a Project level, the Project is not expected to result in a cumulatively considerable increase of any criteria pollutant, including PM_{10} and ozone. Therefore, impacts from the proposed Project would be less than significant.

c)	Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations. Would the project expose sensitive receptors to substantial pollutant concentrations?	Potentially Significant Impact ☐	Less than Significant With Mitigation Incorporated ☐	Less than Significant Impact ☒	No Impact ☐

c) Less than Significant Impact. The Project is not located near any sensitive receptors due to its rural location in a primarily agricultural portion of the City, with the nearest residence being located approximately 0.22 mile southeast of the Project (Google 2022). The Project includes the construction and operation of a cannabis cultivation facility with hoop houses which would not require significant amounts of construction equipment due to the majority of the site being previously graded and used for agricultural land uses. As mentioned previously, operational impacts would also be less than significant. Therefore, impacts to sensitive receptors would be less than significant.

d)	Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations. Would the project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	Potentially Significant Impact ☐	Less than Significant With Mitigation Incorporated ☐	Less than Significant Impact ☒	No Impact ☐

d) Less than Significant Impact. During long-term operation of the Project there is the potential to impact air quality due to odors that would be generated by the proposed cultivation activity. While odors from flowering cannabis plants can be strong within the immediate vicinity of cultivation sites, the distance of the cultivation areas and use of hoop houses to the nearest sensitive receptors (0.22 mile) would reduce impacts associated with odor.

Additionally, the Chapter 17 City of San Jacinto Development Code outlines proximity standards to help ensure odors associated with outdoor cultivation are not significant as outlined below:

- Shall not be established or located within 100 feet of any residence excluding residences located within the parcel for which a Cannabis Oriented Business Permit is requested.

- Outdoor cultivation within 200 feet of any residence, excluding residences located within the parcel for which a Cannabis Oriented Business Permit is requested, shall be limited to areas within an enclosed greenhouse with sufficient odor control mechanisms.

- No outdoor cultivation use shall be established or located within 600 feet of a school providing instruction in kindergarten or any grades 1 through 12, Day Care Center, or

Youth Center. The distance between any Cannabis Oriented Businesses and any school shall be measured in a straight line, without regard to the boundaries of the City and intervening structures, from the nearest property line of the site containing the Cannabis Oriented Business to the nearest property line of the School, Day Care and Youth Center

The Project would adhere to these proximity standards which would ensure odor impacts would remain less than significant.

3.3.4 Biological Resources

a)	Would the project have a substantial adverse effect, either directly or through habitat modification, on any species identified as 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?	Potentially Significant Impact ☐	Less than Significant With Mitigation Incorporated ☒	Less than Significant Impact ☐	No Impact ☐

a) Less than Significant with Mitigation. A Biological Reconnaissance Assessment was completed for the proposed Project. A survey took place on December 15, 2021 to investigate hydrology and species onsite (Appendix A).

The site was historically used for agriculture, specifically farming barley in order to feed cattle. Typically, two cuts of barley per year would be cultivated on 60 acres of land. The site was previously graded for agricultural purposes and now contains minimal vegetation comprising mostly grasses and weeds that have grown in after farming operations ceased. Currently, the site supports two different vegetation communities including Ruderal and Developed landscape. Areas with Ruderal vegetation were present along the fence surrounding the Survey Area. Developed areas are present throughout the Survey Area, including graded soils. Following the literature review and after the assessment of the various habitat types in the Survey Area, it was determined that of the 18 special status plant species known to historically occur within the Survey Area, all 18 species were considered absent within the Survey Area. No special status species were found during the biological reconnaissance survey.

Prior to the survey, database searches for federally and/or state listed species were conducted. Following the literature review and the assessment of the various habitat types in the Survey Area, it was determined that of the 31 special status wildlife species known to occur within the Project site, 30 species are considered absent. The burrowing owl (BUOW) has a low potential to occur within the Project site. In fact, a pre-construction survey was conducted on the site directly south of the Project site on May 25, 2021, which found negative results (BUOW Survey 2021). Nonetheless, the Project would implement Mitigation Measures **BIO-1** and **BIO-2** which would require breeding and pre-construction surveys for BUOW and appropriate mitigation for any found on site, to ensure that impacts to BUOW would remain less than significant.

Additionally, there is a potential for the Project to have nesting birds on site. The Project would be required to implement Mitigation Measure **BIO-3**, which would require compliance with the Migratory Bird Treaty Act (MBTA), by recommending construction activities take place outside the nest bird season (February 1 to August 31) or require additional measures if construction must take place during that time.

To further reduce any potential impacts to any potential species on site, the Project would implement Mitigation Measure **BIO-4** which would require worker awareness training for all persons employed or otherwise working on the Project site prior to performing any work on-site.

As mentioned previously, Project lighting would consist of five floodlights that would be located in the parking lot, and would be dark sky compliant. To ensure that no species are impacted due to lighting during operation of the Project, the Project would also implement Mitigation Measure **BIO-5,** which would require that the Project would not use unnecessary lighting and that it would be dark sky compliant.

The Project site occurs within the Western Riverside Multi-Species Habitat Conservation Plan (MSHCP) Planning Area and is subject to the provisions and policies of the MSHCP. To be considered a covered activity, Permittees need to demonstrate that proposed actions are consistent with the City of San Jacinto's Implementation Resolution 2479, the MSHCP, the Permits, and the Implementing Agreement. The City of San Jacinto is the Lead Agency and is signatory to the Implementing Agreement of the MSHCP. To demonstrate consistency with the MSHCP, as part of the CEQA review, the City shall ensure the Project implements the following:

1. Pays Local Development Mitigation Fees and other relevant fees as set forth in Section 8.5 of the MSHCP (City of San Jacinto Ordinance No. 21-03).

2. Demonstrates compliance with the policies for compliance with the Best Management Practices and the siting, construction, design, operation and maintenance guidelines as set forth in Section 7.0 and Appendix C of the MSHCP.

Chambers Group conducted an online search in the Western Riverside County Regional Conservation Authority (RCA) MSHCP Information Map. The Project site falls within the mapped area for the BUOW and within a Narrow Endemic Plant Species Survey Area (NEPSSA).

As mentioned above, the Project would implement Mitigation Measures **BIO-1** and **BIO-2** to ensure less than significant impacts to the BUOW, which would be consistent with the MSHCP Species Specific Objective 6. The Project site is also located within a NEPSSA for the following five plant species that are also MSHCP Covered Species: California Orcutt grass, Munz's onion, many-stemmed, Wrights's trichocoronis, and the San Diego ambrosia. However, it was determined that the Project site lacks suitable habitat for all five species; therefore, no focused surveys are required.

With incorporation of Mitigation Measures **BIO-1** through **BIO-5**, impacts to species would remain less than significant.

BIO-1: Burrowing Owl Breeding Surveys: Suitable burrowing owl habitat has been confirmed on the Project site; therefore, breeding season surveys as described in the *Staff Report on Burrowing*

Owl Mitigation (Staff Report: CDFG 2012 or most recent version) shall be conducted prior to any additional construction activities. If presence of burrowing owl is determined, the applicant shall contact CDFW and conduct an impact assessment, in accordance with the *Staff Report on Burrowing Owl Mitigation* (CDFW 2012), prior to commencing Project activities to determine appropriate mitigation, including the acquisition and conservation of occupied replacement habitat. In addition, and regardless of the results of the breeding season surveys, mitigation measure **BIO-2** shall be completed prior to any additional ground disturbing activities.

BIO-2: Burrowing Owl Pre-Construction Surveys: Pre-construction burrowing owl surveys shall be conducted by a qualified biologist (i.e., a biologist with previous burrowing owl survey experience), no less than 14 days prior to the start of Project-related construction activities (e.g., vegetation clearance, grading) and within 24 hours prior to any additional Project ground disturbance, in accordance with the *Staff Report on Burrowing Owl Mitigation* (CDFG 2012 or most recent version). If the pre-construction surveys confirm occupied burrowing owl habitat, Project activities shall be immediately halted. CDFW shall be notified of burrowing owl survey results within 48 hours of detection. The qualified biologist and the Project applicant shall coordinate with CDFW to conduct an impact assessment, in accordance with the *Staff Report on Burrowing Owl Mitigation* (CDFW 2012), to develop avoidance and minimization measures to be approved by CDFW prior to commencing further Project construction activities.

BIO – 3 Nesting Birds: Nesting bird surveys shall be conducted by a qualified avian biologist no more than three (3) days prior to vegetation clearing or additional ground disturbance activities. Preconstruction surveys shall focus on both direct and indirect evidence of nesting, including nest locations and nesting behavior. The qualified avian biologist will make every effort to avoid potential nest predation as a result of survey and monitoring efforts. If active nests are found during the pre-construction nesting bird surveys, a Nesting Bird Plan (NBP) shall be prepared and implemented by the qualified avian biologist. At a minimum, the NBP shall include guidelines for addressing active nests, establishing buffers, ongoing monitoring, establishment of avoidance and minimization measures, and reporting. The size and location of all buffer zones, if required, shall be based on the nesting species, individual/pair's behavior, nesting stage, nest location, its sensitivity to disturbance, and intensity and duration of the disturbance activity. To avoid impacts to nesting birds, any grubbing or vegetation removal should occur outside peak breeding season (typically February 1 through September 1).

BIO-4 Workers Environmental Awareness Program (WEAP): A qualified biologist shall conduct an education program for all persons employed or otherwise working on the Project site prior to performing any work on-site (Workers Environmental Awareness Program; WEAP). The WEAP shall consist of a presentation that includes a discussion of the biology of the habitats and species that may be present at the site. The qualified biologist shall also include as part of the WEAP information about the distribution and habitat needs of any special-status species that may be present, legal protections for those species, penalties for violations, and mitigation measures. The WEAP should include, but not be limited to: (1) regulations and requirements associated with the MSHCP, (2) best practices for managing waste and reducing activities that can lead to increased occurrences of opportunistic species and the impacts these species can have on wildlife in the area, and (3) protected species that have the potential to occur on the Project site. Interpretation shall be provided for any non-English speaking workers, and the same instruction shall be provided for any new workers prior to their performing any work on-site.

BIO-5 Artificial Light: Light shall not be visible outside of any structure used for cannabis cultivation. Employ blackout curtains where artificial light is used to prevent light escapement. Eliminate all nonessential lighting from cannabis sites and avoid or limit the use of artificial light during the hours of dawn and dusk, as these windows of time are when many wildlife species are most active. Ensure that lighting for cultivation activities and security purposes is shielded, cast downward, and does not spill over onto other properties or upward into the night sky (see the International Dark-Sky Association standards at http://darksky.org/). Use LED lighting with a correlated color temperature of 3,000 Kelvins or less, properly dispose of hazardous waste, and recycle lighting that contains toxic compounds with a qualified recycler.

b)	Would the project have a substantial adverse effect on any riparian habitat or sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	Potentially Significant Impact ☐	Less than Significant With Mitigation Incorporated ☐	Less than Significant Impact ☒	No Impact ☐

b) Less than Significant Impact. The California Department of Fish and Wildlife (CDFW), through provisions of the State of California Administrative Code, is empowered to issue agreements for any alteration of a river, stream or lake where fish or wildlife resources may adversely be affected. Streams (and rivers) are defined by the presence of a channel bed and banks, and at least an intermittent flow of water. Lateral limits of jurisdiction are not clearly defined, but generally include any riparian resources associated with a stream or lake, CDFW regulates wetland areas only to the extent that those wetlands are part of a river, stream or lake as defined by CDFW.

As mentioned in Threshold (a) above, the Biological Reconnaissance Assessment conducted for the proposed Project, also evaluated the current hydrological features on site. No jurisdictional features such as drainages or swales were observed within the Survey Area. A canal runs parallel to the northern boundary outside of the Project site just south of the San Jacinto Valley Regional Water Plant and a roadside ditch occurs between Sanderson Avenue and the Project site. Both features are located outside of the Project boundary and no work will occur within or adjacent to either feature. The non-jurisdictional roadside ditch located between Sanderson Avenue and the Project site directs surface flow during rain events and runs under an existing access road as the entrance to the Project site.

Additionally, the Department of Cannabis Control (DCC) requires cannabis cultivators to demonstrate compliance with Fish and Game Code section 1602 prior to issuing a cultivation license (Business and Professions Code, § 26060.1). To qualify for an Annual License from DCC, cultivators must have a Lake and Streambed Alteration (LSA) Agreement or written verification from CDFW that one is not needed. The Project received an LSA from CDFW on August 24, 2022 and is provided in Appendix B. Impacts to riparian habitats or sensitive natural communities would remain less than significant.

c)	Would the project 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?	Potentially Significant Impact ☐	Less than Significant With Mitigation Incorporated ☐	Less than Significant Impact ☐	No Impact ☒

c) No Impact. A field survey was conducted on April 6, 2022 to delineate any vernal pools that could be found onsite (Appendix C). Vernal pools are defined by the MSHCP as "seasonal wetlands that occur in depression areas that have wetlands indicators of all three parameters (soils, vegetation and hydrology) during the wetter portion of the growing season but normally lack wetlands indicators of hydrology and/or vegetation during the drier portion of the growing season…. Evidence concerning the persistence of an area's wetness can be obtained from its history, vegetation, soils, and drainage characteristics, uses to which it has been subjected, and weather and hydrologic records" (Riverside County Transportation and Land Management Agency MSHCP 2004).

Results from the field survey showed that no hydric soils occur within the Project site. In addition, no vernal pools or areas that could support vernal pools were observed in the historical aerial images over the past 15 years. No playas or basins were observed within the Project site that could support wetland or vernal pool habitat (i.e., fairy shrimp species). One non-jurisdictional roadside ditch located between Sanderson Avenue and the Project site which directs surface overflow during rain events and runs under an existing access road as the entrance to the Project site. The roadside ditch was comprised of bare ground and emergent ruderal species. No wetland plant species were observed within the ditch.

The majority of the Project site is developed, with some portions of ruderal vegetation occurring along the outer edges of the site. Areas classified as Ruderal tend to be dominated by pioneering herbaceous species that readily colonize disturbed ground and that are typically found in temporary, often frequently disturbed habitats. Areas with Ruderal vegetation were present along the fence surrounding the Survey Area. Additionally developed areas are present throughout the Survey Area, including graded soils. With the absence of vernal pools or wetlands within the Project site or immediately adjacent to the Project site, no impacts to vernal pools are anticipated to occur as a result of Project activities.

d)	Would the project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	Potentially Significant Impact ☐	Less than Significant With Mitigation Incorporated ☒	Less than Significant Impact ☐	No Impact ☐

d) Less than Significant with Mitigation. The Project site does have the potential habitat for species covered by the MBTA to occur onsite. Additionally, the Project would install fencing for security

purposes. However, as discussed in Threshold (a) the only wildlife species that has a potential to occur on site, is the BUOW, which would be capable of flying over said fencing. Nonetheless, the Project would implement Mitigation Measure **BIO-3**, which would require compliance with the Migratory Bird Treaty Act (MBTA), by recommending construction activities take place outside the nest bird season (February 1 to August 31) or require additional measures if construction must take place during that time. Impacts would be less than significant with incorporation of mitigation.

e)	Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	Potentially Significant Impact ☐	Less than Significant With Mitigation Incorporated ☒	Less than Significant Impact ☐	No Impact ☐
f)	Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Conservancy Conservation Plan, or other approved local, regional, or state habitat conservation plan?	Potentially Significant Impact ☐	Less than Significant With Mitigation Incorporated ☒	Less than Significant Impact ☐	No Impact ☐

e, f) Less than Significant with Mitigation. The Project site is located within the Western Riverside County MSHCP Planning Area. As discussed in Threshold (a) above, the Project is subject to the provisions and policies of the MSHCP. To be considered a covered activity, Permittees need to demonstrate that proposed actions are consistent with the City of San Jacinto's Implementation Resolution 2479, the MSHCP, the Permits, and the Implementing Agreement. The City of San Jacinto is the Lead Agency and is signatory to the Implementing Agreement of the MSHCP. To demonstrate consistency with the MSHCP, as part of the CEQA review, the City shall ensure the Project implements the following:

1. Pays Local Development Mitigation Fees and other relevant fees as set forth in Section 8.5 of the MSHCP (City of San Jacinto Ordinance No. 21-03).

2. Demonstrates compliance with the policies for compliance with the Best Management Practices and the siting, construction, design, operation and maintenance guidelines as set forth in Section 7.0 and Appendix C of the MSHCP.

Chambers Group conducted an online search in the Western Riverside County Regional Conservation Authority (RCA) MSHCP Information Map. The Project site falls within the mapped area for the BUOW and within a Narrow Endemic Plant Species Survey Area (NEPSSA).

As mentioned above, the Project would implement Mitigation Measures **BIO-1** and **BIO-2** to ensure less than significant impacts to the BUOW, which would be consistent with the MSHCP Species Specific Objective 6. The Project site is also located within a NEPSSA for the following five plant species that are also MSHCP Covered Species: California Orcutt grass, Munz's onion, many-stemmed, Wrights's trichocoronis, and the San Diego ambrosia. However, it was determined that the Project site lacks suitable habitat for all five species; therefore, no focused surveys are required.

With incorporation of **BIO-1** and **BIO-2**, implementation of the Project would not conflict with the MSHCP and impacts would be less than significant.

3.3.5 Cultural Resources

a)	Would the project cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?	Potentially Significant Impact ☐	Less than Significant With Mitigation Incorporated ☐	Less than Significant Impact ☒	No Impact ☐

a) Less than Significant Impact. Chambers Group conducted a cultural resources records search and literature review within the Project site and surrounding one-half-mile study area in April 2022 (Appendix D). The purpose of the review was to gather and analyze information needed to assess the potential for impacts to cultural and paleontological resources within the Project site. In addition, Chambers Group evaluated whether the Project would impact cultural resources and if additional studies, including a site visit or field survey, are warranted.

An archival records search through the California Historical Resources Information System (CHRIS) database at the South Central Coastal Information Center (SCCIC) and background study of the Project site were conducted as part of the study. In addition, Chambers Group submitted a record search request of the Native American Heritage Commission (NAHC) Sacred Lands File (SLF) to determine the presence or absence of data regarding any known tribal cultural resources previously reported within the Project site or surrounding vicinity. The SCCIC records search identified four cultural resources reports within or that intersected with the Project site, and no cultural resources within the Project site. The NAHC SLF search results have not been received at this time (resulted in negative findings within the search radius).

In addition, historic maps and aerial imagery revealed that the Project site was not previously occupied and was mostly used as agricultural land, until sometime between 2019 and 2021. Between August 2019 and August 2021, a large section of the property in the southeastern portion was developed. The site has a history of being used for farming barley, and various types of irrigation equipment are on the site. (NETRonline 2022).

Based on the results of the records search review and background research, Chambers Group archaeologists observed that the Project site is previously disturbed and is a set of previously vacant parcels of land located within a largely industrial/agricultural area with the San Jacinto Valley Regional Water Reclamation Facility - Sewage treatment plant to the north; Cottonwood Daisy to the west; land to the east, across Sanderson Avenue is agricultural land; and areas south of Cottonwood Avenue include commercial uses and a school (Google Earth 2022). Further, the cultural resources records search from the Eastern Information Center (EIC) was negative for previously recorded cultural resources within the Project site. Prior to this study, four cultural resources studies were completed that included the Project site. Based on the research completed for this study and the associated records search data available at this time, the Project site is considered to have low potential for cultural resources. It should be noted, the Project's proximity of the historic built environment feature, the Casa Loma Canal, which is along the northern margin of the Project site. However, this feature is outside the Project boundary and would not be disturbed with implementation of the Project. That conclusion, as well as the

previous disturbed nature of the site and the minimal ground disturbance proposed with the Project, it is consistent with the determination that the likelihood of encountering previously unknown cultural resources is low.

However, if any potential cultural resources are identified during Project development or related construction activities, the Applicant or Applicant's contractor would be required to comply with the City's General Plan Resources Management Goal 34 and related Policies (3.1, 3.4, and 3.64.1-4.4) regarding cultural resources and historic preservation. In particular, the General Plan Resource Management Implementation Program includes actions and procedures related to the Goals and Policies pertaining to cultural resources and historic preservation that outline responsibilities and protocols in the event of encountering cultural resources during construction activity (RM 3d, RM 3f, and RM 3g)RM-16-e, d). Generally, if potential cultural resources are encountered during ground disturbing activity, a qualified archaeologist would be retained to assess the find. If the resources are determined significant, they would need to be further evaluated. Evaluation for archaeological sites consists of an archaeological testing program. For historical structures, evaluation by an architectural historian may be necessary. If determined eligible for inclusion on the CRHR by the CEQA lead agency or the State Historic Preservation Office; mitigation, consisting of data recovery for archaeological sites and documentation for historical structures, would be required if avoidance or preservation is not feasible. These procedures also require that a TDA with the Soboba Band of Luiseño Indians be implemented for projects involving ground disturbance prior to obtaining a grading permit to address treatment and disposition of archaeological/cultural resources and human remains associated with Soboba Band of Luiseño Indians that may be uncovered or otherwise discovered during construction of the project. With a low likelihood of discovery and compliance with the City's policies, impacts would be less than significant.

b)	Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	Potentially Significant Impact ☐	Less than Significant With Mitigation Incorporated ☐	Less than Significant Impact ☒	No Impact ☐

b) Less than Significant Impact. As discussed above in Threshold (a), a cultural resources records search and literature review was conducted within the Project site and surrounding one-half-mile study area. Based on the research completed for this study and the associated records search data available at this time, the Project site is considered to have low potential for cultural resources. It should be noted, the Project's proximity of the historic built environment feature, the Casa Loma Canal, which is along the northern margin of the Project site. However, this feature is outside the Project boundary and would not be disturbed with implementation of the Project. That conclusion, as well as the previous disturbed nature of the site and the minimal ground disturbance proposed with the Project, it is consistent with the determination that the likelihood of encountering previously unknown cultural or archaeological resources is low. With a low likelihood of discovery and compliance with the City's policies, impacts would be less than significant.

c)	Would the project disturb any human remains, including those interred outside of formal cemeteries?	Potentially Significant Impact ☐	Less than Significant With Mitigation Incorporated ☐	Less than Significant Impact ☒	No Impact ☐

c) Less than Significant Impact. As discussed in Thresholds (a) and (b) above, it is unlikely that any resources would be found onsite. However, in the unlikely event that human remains are discovered during ground-disturbing activities, then the proposed Project would be subject to California Health and Safety Code 7050.5, CEQA Section 15064.5, and California Public Resources Code Section 5097.98. If human remains are found during ground-disturbing activities, State of California Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the Ventura County Coroner has made a determination of origin and disposition pursuant to Public Resources Code Section 5097.98. In the event of an unanticipated discovery of human remains, the County Coroner shall be notified immediately. If the human remains are determined to be prehistoric, the County Coroner shall notify the NAHC, which shall notify a most likely descendant (MLD). The MLD shall complete the inspection of the site within 48 hours of notification and may recommend scientific removal and nondestructive analysis of human remains and items associated with Native American burials. This is also consistent with the City's action item RM-3g which requires proper handling of human remains as well.

As further discussed in Section 3.3.18 Tribal Cultural Resources below, in addition to the above regulatory requirements, based on consultation with the Soboba Tribe, the following will be made a condition of Project approval: If human remains, grave goods, ceremonial items, and/or sacred items are encountered, work will immediately halt within the immediate area and any nearby area reasonably suspected to overlie adjacent remains, and a 100-foot ESA boundary will be established to protect the find from impact, and the Soboba Band of Luiseño Indians and the City of San Jacinto Planning Division shall be immediately notified. Therefore, a less than significant impact would occur.

3.3.6 Energy

a)	Would the project result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	Potentially Significant Impact ☐	Less than Significant With Mitigation Incorporated ☐	Less than Significant Impact ☒	No Impact ☐

a) Less than Significant Impact. During construction of the proposed Project, energy would be consumed in the form of petroleum-based fuels used to power off-road construction vehicles and equipment on the Project site, construction worker travel and delivery truck trips to and from the Project site, and to operate generators to provide temporary power electronic equipment. Construction would consist of installation of the hoop houses, grading of the parking area, and placement of a security trailer. Construction activity would be temporary, lasting just two months.

Due to the temporary nature of construction activities , the fuel and energy needed during Project construction would not be considered a wasteful or inefficient use of energy. Therefore, it is expected that construction energy consumption associated with the proposed Project would be temporary and minimal, and would therefore not be inefficient, wasteful, or unnecessary.

During long term operation of the cultivation operation, energy would be consumed in the form of petroleum-based fuels fuel for vehicles, and local electricity supply for surveillance technologies and support services for the trailer. No growth lights would be used on site for the cultivation facilities. The Project would not require the use of heavy machinery previously required for barley harvests conducted onsite. During harvest period, plants would be harvested by hand which would reduce the overall operational emissions compared to the previous use.

Due to the limited scope of the proposed Project, and the use of natural sunlight for cultivation, the additional energy use from operation of the Project would not result in the wasteful, inefficient, or unnecessary consumption of energy resources during project operation. Energy use from operation of the Project would be similar to other cultivation operations in the area. Therefore, the proposed Project would result in a less than significant impact.

b) Would the project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
	☐	☐	☒	☐

b) Less than Significant Impact. As noted above, the proposed Project would not use artificial lighting for cultivation and would be similar to other cultivation operations in the City and County. Due to the limited energy use that would result from the proposed Project, it is not anticipated that this switch in agricultural product would conflict with or obstruct a state plan for renewable energy or energy efficiency. Therefore, the proposed Project would result in a less than significant impact.

3.3.7 Geology and Soils

a) i) Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving 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.	Potentially Significant Impact ☐	Less than Significant With Mitigation Incorporated ☐	Less than Significant Impact ☒	No Impact ☐
a) ii) Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving strong seismic ground shaking?	Potentially Significant Impact ☐	Less than Significant With Mitigation Incorporated ☐	Less than Significant Impact ☒	No Impact ☐

a) i & ii) Less than Significant Impact. A geotechnical investigation was performed by Sladden Engineering (Sladden) for a portion of the Project site, including the western two parcels of the Project site in 2019 to evaluate the engineering properties of the subsurface materials, to evaluate their *in-situ* characteristics, and to provide engineering recommendations and design criteria for site preparation, foundation design and the design of various site improvements. The study also included a review of published and unpublished geotechnical and geological literature regarding seismicity at and near the subject site. The Geotechnical Investigation Report is provided as Appendix E.

Subsurface Conditions

The subsurface conditions of the site were investigated by drilling three exploratory boreholes throughout the project site to depths between 21 and 51 feet below ground surface (bgs). The boreholes were advanced using a Mobile B-61 drill rig equipped with 8-inch outside diameter hollowstem augers. During the field investigation, a thin mantle of fill/disturbed soil was encountered to a depth of less than approximately 3 feet bgs. Underlying the fill soil and extending to the maximum depth explored, native alluvium was encountered. The site soil consists primarily of sandy silt (ML) and silty sand (SM) with minor portions of clayey sand (SC) and sand (SP). Generally, the native earth materials appeared grayish brown, moist to very moist, fine-grained with soil densities generally increasing with depth. Cohesive sediments exhibited low to medium plasticity characteristics.

Groundwater was not encountered to a maximum explored depth of 51.0 feet bgs during the field investigation. According to the Geotechnical Report, groundwater should not be a factor during construction of the proposed Project.

Seismicity and Faulting

The proposed Project is located in the highly seismic Southern California region, within the influence of several fault systems that are considered to be active or potentially active. The Project site is situated within a State of California Designated Fault Zone. Table 3-2 lists the closest known potentially active faults.

Table 3-2. Closest Known Active Faults

Fault Name	Distance (km)	Maximum Event
San Jacinto – San Jacinto Valley	0.0*	6.9
San Jacinto – Anza	10.3	7.2
San Andreas – Southern	27.3	7.5
San Andreas – San Bernardino	27.3	7.5
Elsinore – Temecula	32.7	6.8
San Jacinto – San Bernardino	33.8	6.7
Elsinore – Glen Ivy	35.6	6.8
Pinto Mountain	39.5	7.2
Elsinore – Julian	46.3	7.1

*The project site is situated within the San Jacinto fault zone.

Geologic Hazards

The subject site is located in an active seismic zone and will likely experience strong seismic shaking during the design life of the proposed Project. In general, the intensity of ground shaking will depend on several factors including: the distance to the earthquake focus, the earthquake magnitude, the response characteristics of the underlying materials, and the quality and type of construction. Geologic hazards and their relationship to the site are discussed below and in further detail in the Geotechnical Investigation Report (Appendix E).

1. **Surface Rupture.** Surface rupture is expected to occur along preexisting, known active fault traces. However, surface rupture could potentially splay or step from known active faults or rupture along unidentified traces. Based on the Project site being situated within a State of California designated fault zone, the geotechnical report states that risks associated with primary surface ground rupture should be considered "high".

2. **Ground Shaking.** The site has been subjected to past ground shaking by faults that traverse through the region and the subject site. Strong seismic shaking from active faults is expected to produce strong seismic shaking during the design life of the proposed Project. Based on the United States Geological Survey (USGS) Unified Hazard Tool and shear wave velocity of 259 meters per second, the Project site could be subjected to ground motions on the order of 0.615g. The peak ground acceleration at the site is judged to have a 475-year return period and a 10 percent chance of exceedance in 50 years.

3. **Liquefaction.** Liquefaction is the process in which loose, saturated granular soil loses strength as a result of cyclic loading. Based on the depth to groundwater in the site vicinity (California Department of Water Resources 2019), risks associated with liquefaction are considered negligible.

4. **Tsunamis and Seiches.** Because the site is situated at an elevated inland location and is not immediately adjacent to any impounded bodies of water, risk associated with tsunamis and seiches is considered negligible.

5. **Slope Failure, Landsliding, Rock Falls.** The site is located on relatively flat ground and not immediately adjacent to any slopes or hillsides. Therefore, the risks associated with slope instability should be considered negligible.

6. **Expansive Soil.** Generally, the surface soil consists of sandy silt (ML) overlying silty sand. Based on the results of the laboratory testing, the sandy silt materials are considered to have a "low" expansion potential.

A portion of the Project is located on the Casa Loma Fault as shown in **Figure 4, Geological and Seismic Hazards,** which is an APEFZ and has the potential for fault rupture. The Project would utilize a majority of the site for cultivation, similar to the uses that were previously on the site. The single level trailer would be located adjacent to Sanderson Avenue and would adhere to California Building Code standards, and be sited to avoid placement near any faults onsite. No habitable structures would be built on site. Therefore, the risk of loss, injury or death is low. Therefore, fault rupture and seismic ground shaking related impacts would be less than significant.

a) iii) Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving seismic-related ground failure, including liquefaction?	Potentially Significant Impact ☐	Less than Significant With Mitigation Incorporated ☐	Less than Significant Impact ☒	No Impact ☐

a) iii) Less than Significant Impact. Liquefaction is the process in which loose, saturated granular soil loses strength because of cyclic loading. The strength loss is a result of a decrease in granular sand volume and a positive increase in pore pressures. The Department of Conservation does not have any data for the Project site related to liquification hazard (DOC 2022c). However, the City's General Plan notes that a significant area of the City is vulnerable to liquefaction in an earthquake. The potential for liquefaction is particularly high in the floodways located adjacent to and downstream of the San Jacinto River and in the valley floor where water is less than 30 feet deep. The Project is not located in a flood zone area. Additionally, boreholes were drilled on the parcel directly south of the parcel located along Sanderson Avenue and water was not discovered until 51 feet below ground surface (bgs) (Appendix E). Therefore, the risk of loss, injury, death, related to liquefaction is low. Therefore, impacts would be less than significant.

a) iv) Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving landslides?	Potentially Significant Impact ☐	Less than Significant With Mitigation Incorporated ☐	Less than Significant Impact ☒	No Impact ☐

a) iv) Less than Significant Impact. The site is located on relatively level ground and is not immediately adjacent to any slopes or hillsides that could be potentially susceptible to landslides. As such, risks associated with slope instability should be considered "negligible." Therefore, impacts related to landslides would be less than significant.

b)	Would the project result in substantial soil erosion or the loss of topsoil?	Potentially Significant Impact ☐	Less than Significant With Mitigation Incorporated ☐	Less than Significant Impact ☒	No Impact ☐

b) Less than Significant Impact. Erosion is a large-scale impact caused by human activity and disturbance of surface soil, wind, and water. According to the Geotechnical Investigation Report, no signs of flooding or erosion were observed during field visits for the parcels that were included in the report. During construction, grading of the site would expose soil to wind and water erosion. The developer would be required to comply with the General Construction Activity Storm Water Permit issued by the State Water Resources Control Board (SWRCB) under the National Pollution Discharge Elimination System (NPDES). Construction activity subject to this permit includes clearing, grading and disturbances to the ground such as stockpiling, or excavation. To obtain coverage under this permit, the developer would need to submit a Storm Water Pollution Prevention Plan (SWPPP). The SWPPP would identify potential pollution sources and best management practices (BMPs) to reduce pollutants. Permanent BMPs would be required as part

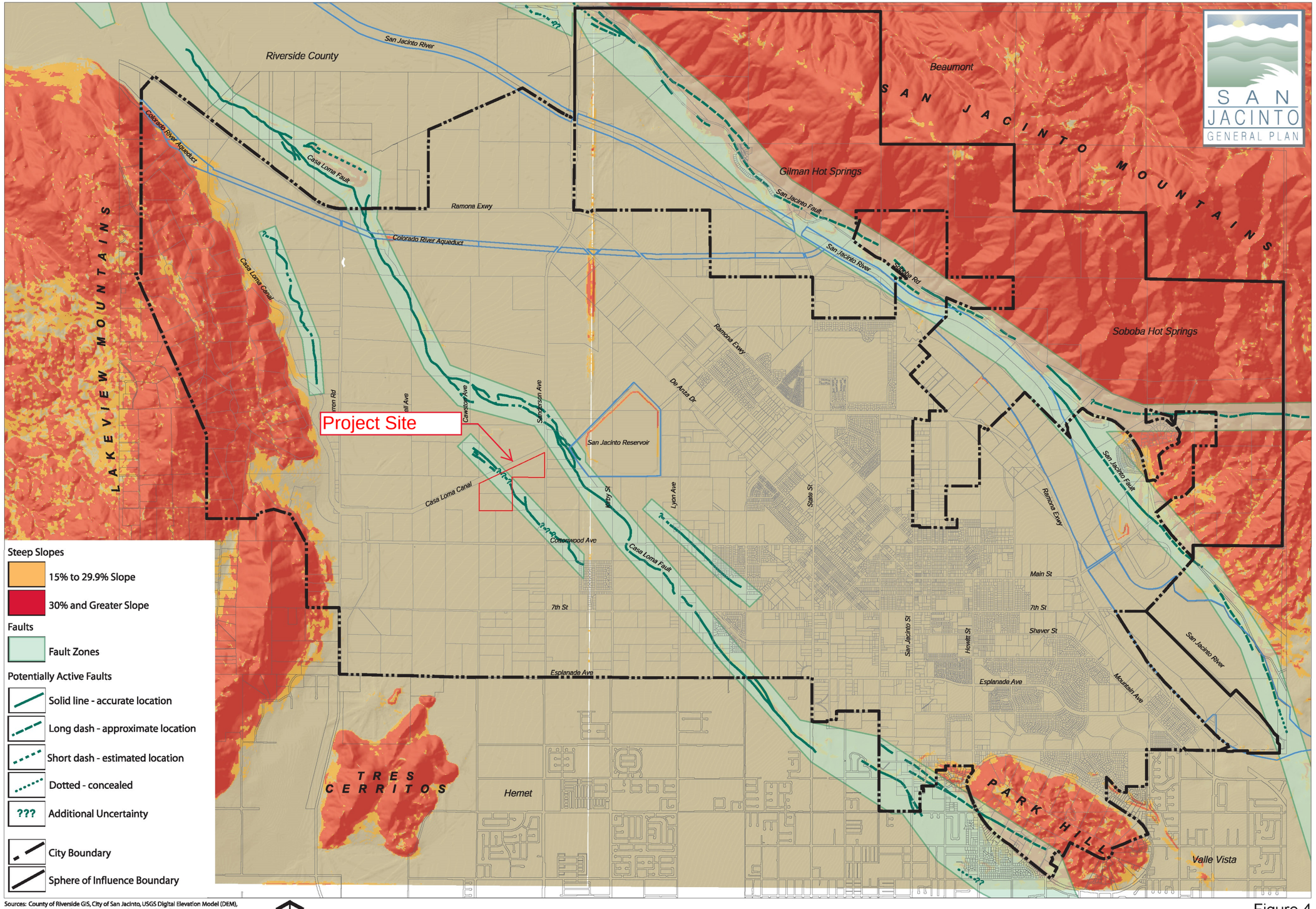

Figure 4
Geologic and Seismic Hazards

c)	Would the project 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?	Potentially Significant Impact ☐	Less than Significant With Mitigation Incorporated ☐	Less than Significant Impact ☒	No Impact ☐

c) Less than Significant Impact. As previously mentioned, the Project is not located in a flood zone area. Additionally, boreholes were drilled on the parcel directly south of the parcel located along Sanderson Avenue and water was not discovered until 51 feet below ground surface (bgs) (Geotechnical Investigation 2019). Therefore, the risk of loss, injury, death, related to liquefaction is low. Additionally, the site is located on relatively level ground and is not immediately adjacent to any slopes or hillsides that could be potentially susceptible to landslides. As such, risks associated with slope instability should be considered "negligible." As such, the Project would not be located on an unstable geologic unit and impacts would be less than significant.

d)	Would the project be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?	Potentially Significant Impact ☐	Less than Significant With Mitigation Incorporated ☐	Less than Significant Impact ☐	No Impact ☒

d) No Impact. Expansive soils contain certain types of clay minerals that shrink or swell as the moisture content changes; the shrinking or swelling can shift, crack, or break structures built on such soils. Arid or semiarid areas with seasonal changes of soil moisture experience a much higher frequency of problems from expansive soils than areas with higher rainfall and more constant soil moisture. Mapping provided by the USDA Web Soil Survey shows the area having varying types of sandy loam and loamy fine sand (USDA 2022). These soils do not contain expansive properties. Therefore, no impacts would occur.

e)	Would the project have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	Potentially Significant Impact ☐	Less than Significant With Mitigation Incorporated ☐	Less than Significant Impact ☐	No Impact ☒

e) No Impact. The proposed Project would utilize a 250 gallon above ground wastewater tank on the security trailer that would be emptied once per week. No septic tanks or leach fields would be installed on site. Therefore, no impact would occur.

f)	Would the project directly or indirectly destroy a unique paleontological resource or site or unique geological feature?	Potentially Significant Impact ☐	Less than Significant With Mitigation Incorporated ☐	Less than Significant Impact ☒	No Impact ☐

f) Less than Significant Impact. As noted in Section 3.3.5 Cultural Resource above, Chambers Group conducted a cultural resources records search and literature review within the Project site and surrounding one-half-mile study area in April 2022 (Appendix D). On April 22, 2022, Chambers Group received the results of the paleontological records search from the Western Science Center. The results show that no known fossil localities have been identified or recorded within the proposed Project site. However, records show there is one fossil locality recorded just outside the one mile range from the same sedimentary deposits that occur in the proposed Project site, either at the surface or at depth. Based on the records search results the paleontological sensitivity could be considered low to moderate in the overall area considering the fossil localities within the one-half mile radius. No fossils are mapped within the Project site. Additionally, the proposed Project activities do not currently include excavation, to depths that would disturb potentially intact native soil formations, or any further ground disturbance beyond that required to erect hoop house structures to aid in outdoor cultivation. With the low to moderate likelihood of a discovery, and minimal ground disturbance proposed, associated impacts would be less than significant.

3.3.8 Greenhouse Gas Emissions

a)	Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	Potentially Significant Impact ☐	Less than Significant With Mitigation Incorporated ☐	Less than Significant Impact ☒	No Impact ☐

a) Less than Significant Impact. The proposed Project would generate both direct and indirect Greenhouse Gas (GHG) emissions. Direct GHG emissions would include emissions from construction activities and mobile sources (vehicles and equipment). Typically, mobile sources make up the majority of direct emissions from land use projects. Indirect GHG emissions would be generated by waste generation. Typically, electricity and water use are considered indirect sources of emissions, but the proposed Project will require minimal electricity and water would mostly be sourced from onsite groundwater wells. The SCAQMD has developed project screening criteria to provide lead agencies and project applicants with a conservative indication of whether a project could result in potentially significant impacts related to greenhouse gas emissions. Projects below the applicable screening criteria would not exceed the 3,000 metric tons (MT) of CO2e (MTCO2e) per year GHG threshold established by the SCAQMD for land use projects, other than permitted stationary sources.

Due to the size, design, location, and nature of the proposed Project, it is not anticipated that it would result in the generation of substantial GHG emissions that would have a significant impact on the environment. The construction activities required for development of the hoop houses, security trailer, and associated infrastructure., are not anticipated to generate a significant amount of GHG emissions. For comparison, a project proposing the construction of 100 single-

family residences would fall well below the 3,000 MTCO2e annual threshold used by the SCAQMD and other air districts in the State (e.g., Mendocino County Air Quality Management District [AQMD], Bay Area AQMD, etc.) to determine whether GHG emissions would be significant. The number of trips and vehicle miles traveled (VMT) from the Project is minimal and would not be expected to generate significant GHG emissions. For comparison, a project that generates 300 daily trips would not exceed the 3,000 MTCO2e annual threshold. Also, the proposed Project would use natural sunlight for cultivation, instead of artificial lighting, which significantly reduces potential GHG emissions from electricity use. Additionally, during the harvest period, harvests would be completed by hand rather than using heavy machinery like those required for traditional agricultural harvests. Based on the discussion above, development of the Project would have a less than significant impact.

b)	Would the project conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	Potentially Significant Impact ☐	Less than Significant With Mitigation Incorporated ☐	Less than Significant Impact ☒	No Impact ☐

b) Less than Significant Impact. The proposed Project involves a cannabis cultivation operation. As a result, the proposed Project could generate both direct and indirect GHG emissions. A GHG impact would be significant if GHG emissions from the proposed Project would conflict with an applicable plan, policy, or regulation for the purpose of reducing GHG emissions. The County of Riverside has adopted a Climate Action Plan in November 2019 which set forth guidelines and goals to reduce emissions within the County. The Project would utilize hoop houses and drip line irrigation to reduce water needs.

As described above, due to the size, design, location, and nature the proposed Project, it is not anticipated that it would result in the generation of substantial GHG emissions during either construction or operation. The potential GHG emissions from construction activities, vehicle trips, electricity use, and water would be minimal and are anticipated to fall below the SCAQMD annual threshold of 3,000 $MTCO_2e$ to determine whether GHG emissions would be significant. In addition, the Project proposes to primarily use areas on the site for cultivation that were previously disturbed by existing agricultural activities. Also, the proposed Project would use natural sunlight for cultivation, instead of artificial lighting, which significantly reduces potential GHG emissions from electricity use.

As designed and in compliance with existing regulatory requirements, the proposed Project would not generate GHG emissions that would conflict with an applicable plan, policy, or regulation for the purpose of reducing GHG emissions. Therefore, the Project would have less than significant impact in regards to conflicting with existing plans reducing greenhouse gas emissions.

3.3.9 Hazards and Hazardous Materials

a)	Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	Potentially Significant Impact ☐	Less than Significant With Mitigation Incorporated ☐	Less than Significant Impact ☒	No Impact ☐

a) Less than Significant Impact. Small quantities of potentially hazardous substances (e.g., petroleum and other chemicals used to operate and maintain equipment, fertilizers, pesticides, etc.) may be utilized and stored on site. However, none of these materials will be stored at the Project facilities in quantities to be considered a significant hazard. According to the Emergency Planning and Community Right-To-Know-Act (EPCRA) the reportable amount for extremely hazardous substances is anything over 500 pounds (CalEPA 2022). For the plants themselves, organic hydroponic fertilizers and pesticides would be utilized. The products are listed by the California Department of Pesticide Regulation (CDPR) as "Legal to Use on Cannabis" (CDPR 2021).The proposed Project will also be subject to the requirements of the State Water Resources Control Board Cannabis Cultivation Waste Discharge Regulatory Program (SWRCB 2021). The SWRCB program and County ordinance have standard requirements applicable to cannabis cultivation operations that address impacts from the storage and use of hazardous materials. These include implementation of spill prevention, control, and countermeasures (SPCC) and the maintenance of appropriate cleanup materials onsite.

Compliance with standard transport and handling procedures of the chemical manufacturers, and the existing regulatory requirements of the City cannabis ordinances (City 2019a-c), CDPR, and the SWRCB, would ensure that impacts from the proposed Project would be less than significant.

b)	Would the project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	Potentially Significant Impact ☐	Less than Significant With Mitigation Incorporated ☐	Less than Significant Impact ☒	No Impact ☐

b) Less than Significant Impact. The proposed Project could expose workers, the public, or the environment to hazardous materials through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment. Small quantities of potentially hazardous substances (e.g., petroleum and other chemicals used to operate and maintain equipment, fertilizers, pesticides, etc.) are currently and would continue to be used at the Project site. Accidental releases of these substances could potentially contaminate soils and degrade the quality of surface water and groundwater, resulting in a public safety hazard. Compliance with standard safety procedures, hazardous materials handling regulations, and pesticide application requirements would minimize potential impacts from the Project. As discussed above, the proposed Project will also be subject to the requirements of the State Water Resources Control Board Cannabis Cultivation Waste Discharge Regulatory Program and the County Cannabis Ordinance (SWRCB 2021). The SWRCB program has standard requirements applicable to cannabis cultivation operations that address impacts from the storage and use of

hazardous materials. These include implementation of SPCC and the maintenance of appropriate cleanup materials onsite.

Therefore, in compliance with existing regulatory requirements, impacts from the proposed Project would be less than significant.

c)	Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	Potentially Significant Impact ☐	Less than Significant With Mitigation Incorporated ☐	Less than Significant Impact ☐	No Impact ☒

c) No Impact. The Project would not 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 located approximately 0.27 miles north of the Megan Cope Elementary School (Google 2022). Additionally, as mentioned above, any hazardous material used on site, is regulated by the various state and local agencies. Therefore, no impacts would result from the proposed Project.

d)	Would the project 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?	Potentially Significant Impact ☐	Less than Significant With Mitigation Incorporated ☐	Less than Significant Impact ☐	No Impact ☒

d) No Impact. A Phase I Environmental Site Assessment (ESA) was conducted for a portion of the site, specifically the two parcels on the eastern boundary. The results of Phase I ESA concluded that no Recognized Environmental Condition (REC) in connection with the property. Because the proposed site use remain agricultural in nature the past agricultural use should not present any significant environmental concerns (Phase I 2018). According to the Department of Toxic Substances Control (DTSC) Envirostor database and SWRCB Geotracker database, no hazardous facilities or hazardous materials contamination have been documented at the Project site or in the adjacent area (DTSC 2022; SWRCB 2022). As such, the proposed Project is not located on a site which is included on a list of hazardous materials sites and would not create a significant hazard to the public or the environment. Therefore, with implementation of the Project, no impacts from an existing hazardous material site would occur.

e)	For a project located within an airport land use plan or, where such a plan has not been adopted, within 2 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?	Potentially Significant Impact ☐	Less than Significant With Mitigation Incorporated ☐	Less than Significant Impact ☐	No Impact ☒

e) No Impact. The Project site is not located within an airport land use plan and is not within two miles of a public airport or public use airport. The nearest airport is Hemet Ryan Airport, located approximately 4.5 miles north of the Project site (Google 2022). Therefore, no impacts would result from the proposed Project.

f)	Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	Potentially Significant Impact ☐	Less than Significant With Mitigation Incorporated ☐	Less than Significant Impact ☐	No Impact ☒

f) No Impact. The City's Emergency Operation Plan describes the City's process for responding to emergencies or disasters. In addition, the City, along with most other jurisdictions in Riverside County, joined with the County of Riverside to submit a Multi-Jurisdictional Local Hazard Mitigation Plan (LHMP) providing a framework for emergency response.

Access for the Project would be provided along Sanderson Avenue. These are existing streets within the City's established street system. The Project would not alter the existing circulation pattern in the Project area. As further described in Section 3.3.17, Transportation, the Project would not require any road closures during construction and would not result in a significant increase to existing traffic. Emergency access and evacuation routes would be unaffected by the Project and therefore no impacts would occur.

g)	Would the project expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	Potentially Significant Impact ☐	Less than Significant With Mitigation Incorporated ☐	Less than Significant Impact ☒	No Impact ☐

g) Less than Significant Impact. As mentioned in Section 3.3.20 Wildfire below, the Project site is not directly located within a Very High Fire Hazard Zone (VHFHZ) but is approximately 1.5 miles east of the nearest zone. The Project would not build any livable structures. The Project would employ a total of 33 full time individuals and the only structure on site would be the security trailer.

However, the City reduces the potential for dangerous fires by coordinating with the Riverside County Fire Department (RCFD) to implement fire hazard education programs and requirements for fire protection and fuel modification zones around existing and proposed development. The

current Uniform Fire Code is also used to reduce structural fire hazards in these areas. In addition, the City and RCFD review development proposals to ensure that existing fire department staffing, water pressure and emergency access is adequate for firefighting purposes. Therefore, impacts from wildland fire would be less than significant.

3.3.10 Hydrology and Water Quality

a)	Would the project violate any water quality standards or waste discharge requirements, or otherwise substantially degrade surface or ground water quality?	Potentially Significant Impact ☐	Less than Significant With Mitigation Incorporated ☐	Less than Significant Impact ☒	No Impact ☐

a) Less Than Significant Impact. Sediment associated with earthmoving activities and exposed soil would have the potential to erode and be transported down gradient areas, potentially resulting in water quality standard violations. Additionally, stormwater passing through the construction and staging sites has the potential to pick up construction-related chemicals such as fuels or oils from construction equipment which may pass into the local stormwater collection system, impacting water quality. However, because the proposed Project would disturb more than one acre, construction would be subject to the NPDES General Permit for Discharges of Storm Water Runoff Associated with Construction Activity. In compliance with the statewide NPDES General Construction Permit, the City would require the contractor to prepare and submit a SWPPP that would identify pollutant sources that may affect the quality of stormwater discharge and identify BMPs, such as erosion control and pollution prevention measures, to be used throughout the course of construction. As a result, construction of the proposed Project would not result in violation of water quality standards, waste discharge requirements, or otherwise degrade water quality. The construction contractor would be required to implement BMPs and required to for NPDES stormwater permits to protect the water quality objectives and beneficial uses of local surface waters.

Additionally, the Project would be required to comply with the SWRCB and SB-94, which also regulate the use of pesticides and fertilizers onsite. Compliance with these existing regulatory requirements will ensure the proposed cultivation operation will not violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality. With implementation of required BMPs and securing of all applicable permits, operation of these facilities would not conflict with any water quality standards or waste discharge requirements, or otherwise substantially degrade water quality, and impacts would be less than significant.

b)	Would the project substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	Potentially Significant Impact ☐	Less than Significant With Mitigation Incorporated ☐	Less than Significant Impact ☒	No Impact ☐

b) Less than Significant Impact. Groundwater supplies would come from the San Jacinto Basin, which is designated as a high-priority basin as required by the Sustainable Groundwater Management Act (SGMA) (Department of Water Resources [DWR] 2022). SGMA requires the San Jacinto Basin be managed by a Groundwater Sustainability Agency (GSA). Eastern Municipal Water District (EMWD) is the GSA for the basin. The San Jacinto Groundwater Basin is deemed a high priority basin, but not critically overdrafted, by DWR, and the GSA is required to develop by 2022 and implement by 2042 a Groundwater Sustainability Plan (GSP). The GSP will document basin conditions and basin management will be based on measurable objectives and minimum thresholds defined to prevent significant and unreasonable impacts to the sustainability indicators defined in the GSP.

The City currently produces groundwater from the San Jacinto Basin. The City's Base Production Rights to the San Jacinto Basin are 3,004 acre-feet per year (AFY) (City 2021a). The City's production from the San Jacinto Basin over the past five years has ranged from 2,157 AFY to 2,874 AFY, with an average of 2,516 AFY.

The Project site has three existing groundwater wells onsite and water rights to the wells, which would be utilized for watering and potable water needs. As noted in Section 3.3.19 Utilities and Services Systems, the proposed Project would result in a net increase of 141 AFY of water demand. Therefore, impacts would be less than significant.

c)	i) Would the project 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 result in substantial erosion or siltation on- or off-site?	Potentially Significant Impact ☐	Less than Significant With Mitigation Incorporated ☐	Less than Significant Impact ☒	No Impact ☐

c) i) Less than Significant Impact. The Project activities will be required to comply with the requirements of the City Cannabis Ordinances (San Jacinto Ordinance No. 19-10, 19-11, and 19-12), as well as the SWRCB Cannabis Cultivation Waste Discharge Regulatory Program (California Water Boards 2022). These existing regulatory requirements contain a number of regulations related to controlling erosion and preventing potential impacts to water quality from stormwater runoff. In compliance with the requirements of the SWRCB and City, the proposed Project would result in less than significant impacts from substantial erosion or siltation on or off-site.

c)	ii) Would the project 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 substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?	Potentially Significant Impact ☐	Less than Significant With Mitigation Incorporated ☐	Less than Significant Impact ☒	No Impact ☐

c) ii) Less than Significant Impact. According to the Federal Emergency Management Agency (FEMA), Flood Insurance Rate Map (FIRM) Panel 06065C1470G, no portion of the Project site is located within a regulated flood hazard zone (FEMA 2022). Nonetheless, the Project would install hoop house structures, a small pre-built security office and a parking lot. Paved areas would account for approximately 10.8 acres of the 60.53 acre site, which would represent a minimal increase the amount of impervious surfaces on the Project site. As noted above, the Project would be required to comply with the SWRCB Cannabis Cultivation Waste Discharge Regulatory Program. The SWRCB program requires the management of stormwater runoff to prevent substantial increases in runoff that may result in flooding. In compliance with these requirements, the proposed Project would not substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site. Therefore, impacts from the proposed Project would be less than significant.

c)	iii) Would the project 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 create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources or polluted runoff?	Potentially Significant Impact ☐	Less than Significant With Mitigation Incorporated ☐	Less than Significant Impact ☒	No Impact ☐

c) iii) Less than Significant Impact. Due to the rural location of the Project site and the nature of the existing and proposed agricultural activities, there are no stormwater drainage systems which would be impacted by the proposed Project. Stormwater runoff will be managed in compliance with the requirements of the SWRCB Cannabis Cultivation Waste Discharge Regulatory Program, which would ensure the proposed Project does not result in substantial additional sources of polluted runoff. Therefore, impacts from the proposed Project would be less than significant.

c)	iv) Would the project 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 impede or redirect flood flows?	Potentially Significant Impact ☐	Less than Significant With Mitigation Incorporated ☐	Less than Significant Impact ☒	No Impact ☐

c) iv) Less than Significant Impact. As previously mentioned in Threshold c.ii. above, the addition of impervious surfaces would be minimal. Additionally, no portion of the Project site is within a flood hazard zone. As such, the proposed Project would not impede or redirect flood flows. Therefore, impacts from the proposed Project would be less than significant.

d)	Would the project in flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	Potentially Significant Impact ☐	Less than Significant With Mitigation Incorporated ☐	Less than Significant Impact ☐	No Impact ☒

d) No Impact. The City is protected from sea waves (tsunamis) due to its inland location. However, the City's (and adjacent jurisdictions') tanks, reservoirs, lakes and swimming pools are enclosed bodies of water that are subject to potentially damaging oscillation, or seiches during earthquakes. The hazard is dependent upon specific earthquake parameters, and the degree of damage due to seiches is likely to be minor. Dam failure at any of the reservoirs such as Diamond Valley Lake, Lake Hemet, or Little Lake could also cause potential downstream inundation and flooding however, the Project site is located outside the flood hazard zone (City 2022a). No impacts would occur.

e)	Would the project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	Potentially Significant Impact ☐	Less than Significant With Mitigation Incorporated ☐	Less than Significant Impact ☒	No Impact ☐

e) Less than Significant Impact. In compliance with the statewide NPDES General Construction Permit, the City would require the contractor to prepare and submit a SWPPP that would identify pollutant sources that may affect the quality of stormwater discharge and identify BMPs, such as erosion control and pollution prevention measures, to be used throughout the course of construction. Construction of the proposed Project would not result in violation of water quality standards, waste discharge requirements, or otherwise degrade water quality. As discussed in Threshold b above, no Groundwater Management Plan has been implemented currently, but is expected to go into effect in 2024. Nonetheless, the proposed Project would not conflict with any of the sustainable management criteria that is included in the Groundwater Sustainability Plan for the San Jacinto Groundwater Basin (EMWD 2021). Groundwater would be provided by three

onsite wells, and groundwater extraction activities would be similar to previous uses onsite. Therefore, a less than significant impact would occur.

3.3.11 Land Use Planning

a)	Would the project physically divide an established community?	Potentially Significant Impact ☐	Less than Significant With Mitigation Incorporated ☐	Less than Significant Impact ☐	No Impact ☒

a) No Impact. The Project site is located with existing agricultural land uses; however, it has a land use destination and zoning designation of high density residential and mixed use. The Project would fill existing agricultural land and maintain similar intensity. The surrounding community would not be physically divided by the Project. The Project would not alter existing traffic patterns or otherwise limit access to and from the community. Therefore, no impact would occur.

b)	Would the project 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?	Potentially Significant Impact ☐	Less than Significant With Mitigation Incorporated ☐	Less than Significant Impact ☒	No Impact ☐

b) Less than Significant Impact. The Project would not conflict with any zoning or general plan designations. Additionally, the City of San Jacinto Development Code maintains specific proximity standards for cannabis-oriented businesses including locations near Schools, Day Cares, Youth Centers, and residences. Schools, Day Cares, and Youth Centers are required to be located more than 600 feet from cannabis-oriented businesses and the Project would be located approximately 1,100 feet from the nearest school. Residences are required to be located more than 100 feet from cannabis-oriented businesses and the Project would be located approximately 800 feet from the nearest residence. Therefore, the location of the Project would not conflict with any existing plans and impacts would be less than significant.

3.3.12 Mineral Resources

a)	Would the project 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?	Potentially Significant Impact ☐	Less than Significant With Mitigation Incorporated ☐	Less than Significant Impact ☐	No Impact ☒

a) No Impact. The California DOC classifies the regional significance of mineral resources in accordance with the California Surface Mining and Reclamation Act of 1975 (SMARA). The DOC designates Mineral Resources Zones (MRZs) that have regionally significant mineral deposits. The proposed Project area is classified by the DOC as an MRZ-3, which is defined as an urban area of known or inferred mineral occurrences of undetermined mineral resource significance (DOC,

2008). The City's General Plan EIR also notes that the City is located within MRZ-3 (City 2022d) The proposed Project will be implemented within areas that have been previously disturbed. The site is not currently being used for mining or the production of mineral resources nor would implementation of the Project preclude future mineral extraction from the site. Therefore, implementation of the Project will have no impact on mineral resources.

b)	Would the project 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?	Potentially Significant Impact ☐	Less than Significant With Mitigation Incorporated ☐	Less than Significant Impact ☐	No Impact ☒

b) No Impact. As mentioned in Threshold (a) above, the Project site is identified as a known or inferred mineral resource recovery zone, however, the Project itself will not extract any mineral resources. Therefore, the implementation of the proposed Project would not result in the loss of a locally important mineral resource recovery site. No impacts would occur.

3.3.13 Noise

a)	Would the project result in 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?	Potentially Significant Impact ☐	Less than Significant With Mitigation Incorporated ☐	Less than Significant Impact ☒	No Impact ☐

a) Less than Significant Impact.

Construction-Related Noise

Noise from construction activities would add to the existing noise environment of the Project site and immediate vicinity. Sensitive receptors located near the Project site could be exposed to construction related noise. However, the closest sensitive receptors are residents located east of the Project site where homes are located more than 800 feet east of the Project site.

The City of San Jacinto Noise Control Ordinance (Municipal Code Section 8.40) limits exterior noise levels for single-family residential areas to 65 dBA Leq from 7:00 a.m. to 10:00 p.m. and 45 dBA Leq from 10:00 p.m. to 7:00 a.m. The Noise Control Ordinance allows for interior noise levels of 45 dBA from 7:00 a.m. to 10:00 p.m. and 40 dBA from 10:00 p.m. to 7:00 a.m. (Section 8.40.040) (City 2021b). Construction noise that exceeds these noise levels is exempted from this standard if it occurs between 7:00 a.m. and 7:00 p.m. on weekdays and Saturdays. Construction (and associated noise) is prohibited on Sundays and federal holidays. Emergency construction work is exempted when authorized by the city manager or his or her designee (Municipal Code Section 8.40.090).

Noise will be generated from construction activities including site preparation, minimal grading, and building construction. However, this noise is temporary and would be limited to daytime hours and comply with the existing City noise regulations. Based on the limited scope of construction activity and the lack of proximity to sensitive receptors, noise impacts from construction activity would be less than significant at the nearest noise-sensitive land uses.

Operation-Related Noise

Typical cultivation operations are not considered a significant noise generation source because the daily activities are generally hand operations with minimal equipment use. Based on the distance to the nearest sensitive receptors (e.g., residences), implementation of standard conditions of the various cannabis ordinances, and review by City staff for compliance during operations, noise levels from the proposed Project are not anticipated to exceed the noise standards in the Municipal Code at the nearest noise-sensitive land uses. Noise generated by real property maintenance is limited by Section 8.40.080. Operation of equipment to maintain real property in a manner that produces loud noise that disturbs a person on normal sensitivity who works or resides in the vicinity is prohibited, except between 7:00 a.m. and 7:00 p.m. Therefore, impacts from the proposed Project will be less than significant.

b)	Would the project result in generation of excessive groundborne vibration or groundborne noise levels?	Potentially Significant Impact ☐	Less than Significant With Mitigation Incorporated ☐	Less than Significant Impact ☒	No Impact ☐

b) Less than Significant Impact. Ground borne vibrations are usually associated with heavy vehicle traffic (including railroad traffic), and with heavy equipment operations. The proposed Project does not include activities that would result in groundborne vibration, such as pile driving or heavy construction equipment. Some minor groundborne vibration may occur during construction due to the minimal grading that would occur, but would temporary and not be considered excessive or have the potential to cause damage to structures. Therefore, the proposed Project would result in a less than significant impact.

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 areas?	Potentially Significant Impact ☐	Less than Significant With Mitigation Incorporated ☐	Less than Significant Impact ☐	No Impact ☒

c) No Impact. The Project site is not located within an airport land use plan and is not within two miles of a public airport or public use airport. The nearest airport is Hemet Ryan Airport, located approximately 4.5 miles north of the Project site (Google 2022). Therefore, no impacts would result from the proposed Project.

3.3.14 Population and Housing

a)	Would the project induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	Potentially Significant Impact ☐	Less than Significant With Mitigation Incorporated ☐	Less than Significant Impact ☐	No Impact ☒

a) No Impact. The Project will not introduce growth as it is an agricultural project on lands that have previously supported agricultural operations. Approximately 80 persons would be employed onsite during construction. A majority of the employees utilized during construction would come from the existing work force. However, construction would occur over a period of 2 months, and would not require that employees move to the area. Once operations commence, approximately 30 employees and three nighttime security guard would be required. Due to the nature of the work not requiring any technical trades, these employees are expected to come from the local employment pool and not expected to come from outside the City. The Project would connect to existing utilities and infrastructure and no new public roads or utility infrastructure would be required as part of the Project. Therefore, no Project related impacts would occur.

b)	Would the project displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	Potentially Significant Impact ☐	Less than Significant With Mitigation Incorporated ☐	Less than Significant Impact ☐	No Impact ☒

b) No Impact. The Project site would support agriculture operations on a site previously used for agricultural uses. While the site is zoned for medium residential, there are no houses located on site. Persons employed onsite, both during construction and operation, are expected to come from the local employment pool and not expected to come from outside the City. Therefore no persons or housing would be displaced and no reconstruction of housing would be required. No impacts would occur.

3.3.15 Public Services

a)	i) 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 fire protection?	Potentially Significant Impact ☐	Less than Significant With Mitigation Incorporated ☐	Less than Significant Impact ☒	No Impact ☐

a) i) Less than Significant Impact. As discussed in Section 3.3.14, Population and Housing, approximately 80 persons would be employed onsite during construction. A majority of the employees utilized during construction would come from the existing work force. However, construction would occur over a period of 2 months, and would not require that employees move to the area. Once operational, approximately 30 employees and three nighttime security guard would be required. Due to the nature of the work not requiring any technical trades, these employees are expected to come from the local employment pool and not expected to come from outside the City. Nonetheless, the Project may still require Fire Services. The Project is located approximately 0.6 mile north of Riverside County Fire Station 78, which is located at 2450 Cottonwood Avenue. As a result, fire personnel will be able to reach the site within a reasonable response time. Additionally, the Fire Department has reviewed the application for the Project, and will be required to approve the Project site plan to ensure it meets applicable fire standards and regulations. Therefore, a less than significant impact would occur.

a)	ii) 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 police protection?	Potentially Significant Impact ☐	Less than Significant With Mitigation Incorporated ☐	Less than Significant Impact ☒	No Impact ☐

a) ii) Less than Significant Impact. As discussed in Threshold (a i) above, although the Project would not result in a population increase, development of the site would result in additional facilities that would need to be provided with police protection. Police services are provided by Riverside County Sheriff's Department, with the station being located 3 miles east of the Project site at 160

West 6th Street. The Project incorporates features that would limit the demand for police protection. These features include adequate site and security lighting, and security cameras. Additionally, the Police department has reviewed the application for the Project. Through project design and code enforcement, the potential increase for police protection services would be minimized and a less than significant impact would occur.

	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
a) iii) 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 schools?	☐	☐	☐	☒

a) iii) No Impact. The Project is located within the service area boundary of the San Jacinto Unified School District. However, it is expected that employment at the facility would be filled by the local employment pool and the Project would not increase the need for school facilities. The employment opportunities associated with the Project are not expected to attract a substantial number of new employees that would relocate to the area. Accordingly, the proposed development is not expected to result in an increase in the need to provide additional schools to serve new residents. Therefore, no impact would occur.

	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
a) iv) 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 parks**?**	☐	☐	☐	☒

a) iv) No Impact. The City has a broad range of available recreation facilities, programs, and parks. As noted above, the employees are expected to be existing residents of San Jacinto, Hemet and other nearby communities. The employment opportunities associated with the Project are not expected to attract a substantial number of new employees that would relocate to the area. Accordingly, the proposed development is not expected to result in an increase in service demand or the need to provide additional parks to serve new residents. Therefore, no impacts would occur.

a) v) 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 other public facilities?	Potentially Significant Impact ☐	Less than Significant With Mitigation Incorporated ☐	Less than Significant Impact ☐	No Impact ☒

a) **v) No Impact**. As noted above, the Project will not result in an increase in demand for other City services and facilities, including recreational trails and library services. The employment opportunities associated with the Project are not expected to attract a substantial number of new employees that would relocate to the area. Therefore, no impacts would occur.

3.3.16 Recreation

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?	Potentially Significant Impact ☐	Less than Significant With Mitigation Incorporated ☐	Less than Significant Impact ☐	No Impact ☒

a) No Impact. The City and Valley-Wide Recreation provide a broad range of recreation facilities, programs, and parks. The City established a park ratio of 5.0 acres of developed parkland for every 1,000 residents. The City's Parks Master Plan details recommendations and standards to meet park facility demand. There are over 170 acres of public parks and grassy common areas that the general public, City residents, their families and friends can enjoy every day of the year (City 2022d). The Project would not affect the park ratio due to the Project not introducing additional residents, or housing units. Therefore, no impact would occur.

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?	Potentially Significant Impact ☐	Less than Significant With Mitigation Incorporated ☐	Less than Significant Impact ☐	No Impact ☒

b) No Impact. The Project does not include the construction of recreational facilities. Additionally since the Project would not result in an increase in population, there would be no increase in usage of recreational facilities, and the Project would not require the need to construct recreational facilities. Therefore, no impact would occur.

3.3.17 Transportation

a) Would the project conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadways, bicycle and pedestrian facilities?	Potentially Significant Impact ☐	Less than Significant With Mitigation Incorporated ☐	Less than Significant Impact ☒	No Impact ☐

a) Less than Significant Impact. The City of San Jacinto Circulation Element of the General Plan contains goals and policies to improve overall circulation in City (City 2022a). To ensure circulation impacts would be consistent with the City's goals and policies in the General Plan, the City of San Jacinto adopted their Traffic Impact Analysis Guidelines for Vehicle Miles Traveled and Level of Service Assessment on June 16, 2020 (City 2020). The guidelines offer screening methodology for Projects that would typically result in a less than significant impact for both level of service (LOS) and VMT. Typically, Projects that would generate 100 trips or less, do not affect LOS significantly once distributed to the local roadway network and would not require a traffic impact analysis. A full analysis of VMT is provided in Threshold (b) below.

Construction traffic for the proposed Project would result in a short-term increase in construction related vehicle trips on Sanderson Avenue and Cottonwood Avenue, and other local roadways in the San Jacinto area. Construction would result in vehicle trips by construction workers, haul-truck trips for delivery, and disposal of construction materials to and from construction areas. Based on the number of hoop houses, the Project is expected to require 40 truck trips for delivery purposes, which would be delivered intermittently over the two months, assuming one truck per day. Additionally, the maximum number of construction workers that would be required, would be 80. Due to the limited amount of development proposed by the Project, and limited construction period, construction activities would not result in substantial adverse effects or conflicts with the local roadway system.

Once operational, the Project would have 30 employees on site per day and 3 employees overnight, these employees are expected to commute to work each day. Trucks would only be required during harvest, which would be one time per year. Approximately six to ten truck trips would be required during this time. Product would be delivered to a licensed manufacturing facility, likely in Desert Hot Springs.

The proposed Project is estimated to generate up to 90 vehicle/truck trips per day. This will include 66 employee vehicles trips (2 in/2 out), 4 trips for the import of agricultural materials and supplies needed for the cultivation operation or other services including weekly wastewater pumping (2 in/2 out), and 20 trips for the export of unprocessed cannabis plants/flower (10 in/10 out). This number is considered conservative as harvest of the cannabis plants/flower would only occur once per year and not daily. Additionally, employees are presumed to be from the City population and would not cause significant additional traffic in the area. Since the estimate number of trips is below the screening threshold, impacts would be considered less than significant.

Additionally, there are no existing sidewalks adjacent to the Project site along Sanderson Avenue. Sanderson Avenue and Cottonwood Avenue both have class II bikeways that would remain unchanged with implementation of the Project.

The estimated vehicle trips from the proposed Project are not anticipated to cause a significant increase in traffic or require changes to any roadways, public transit, or pedestrian/bicycle facilities. Therefore, the Project would not conflict with any program, plan, ordinance or policy addressing the circulation system and impacts would be less than significant.

b)	Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?	Potentially Significant Impact ☐	Less than Significant With Mitigation Incorporated ☐	Less than Significant Impact ☒	No Impact ☐

b) Less than Significant Impact. Senate Bill 743 (SB 743) was passed by the California State Legislature and signed into law by Governor Brown in 2013. SB 743 required the Office of Planning and Research and the California Natural Resources Agency to develop alternative methods of measuring transportation impacts under the California Environmental Quality Act (CEQA). In December 2018, the California Natural Resources Agency finalized updates to the CEQA Guidelines, which included SB 743. Section 15064.3 of the 2019 State CEQA Guidelines provide that transportation impacts of projects are, in general, best measured by evaluating the project's VMT. Automobile delay (often called Level of Service) will no longer be considered to be an environmental impact under CEQA. Automobile delay can, however, still be used by agencies to determine local operational impacts.

As previously mentioned, the City's Traffic Impact Analysis Guidelines offer screening methodology for Projects that would typically result in a less than significant impact for both level of service (LOS) and VMT. Among the uses notes that 'projects generating less than 500 daily vehicle trips are presumed to have a less than significant impact absent substantial evidence to the contrary as their uses are local serving in nature'. As mentioned above, the Project would conservatively generate 90 daily trips, well below the screening threshold for a significant impact. Additionally, the Project would employ individuals from the local community. Therefore, impacts would be less than significant.

c)	Would the project substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g. farm equipment)?	Potentially Significant Impact ☐	Less than Significant With Mitigation Incorporated ☐	Less than Significant Impact ☒	No Impact ☐

c) Less than Significant Impact. The proposed Project does not propose any new public roads and does not propose or require any realignment of existing roads that might cause hazards due to a geometric design feature. Internal dirt pathways would be constructed throughout the property and would be built to ensure compliance with the Fire Department standard (i.e., turnaround width). The Project is an allowed use, and would therefore be considered compatible. Therefore,

no significant hazards are anticipated with the development of the Project and the Project would have a less than significant impact.

D)	Would the project result in inadequate emergency access?	Potentially Significant Impact ☐	Less than Significant With Mitigation Incorporated ☐	Less than Significant Impact ☒	No Impact ☐

d) Less Than Significant Impact. The City's Emergency Operation Plan describes the City's process for responding to emergencies or disasters. In addition, the City, along with most other jurisdictions in Riverside County, joined with the County of Riverside to submit a Multi-Jurisdictional LHMP providing a framework for emergency response.

Access for the Project would be provided on Sanderson Avenue and Cottonwood Avenue. These are existing streets within the City's established street system. The Project would not alter the existing circulation pattern in the Project area or increase traffic. Construction would not require any road closures. Emergency access and evacuation routes would be unaffected by the Project. The Project would result in a less than significant impact.

3.3.18 Tribal Cultural Resources

a)	Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is 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)?	Potentially Significant Impact ☐	Less than Significant With Mitigation Incorporated ☐	Less than Significant Impact ☒	No Impact ☐
b)	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 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 of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe?	Potentially Significant Impact ☐	Less than Significant With Mitigation Incorporated ☐	Less than Significant Impact ☒	No Impact ☐

a & b) **Less than Significant Impact.** Assembly Bill (AB) 52 was enacted in 2015 and expands CEQA by defining a new resource category: tribal cultural resources. AB 52 establishes that "a project with an effect that may cause a substantial adverse change in the significance of a tribal cultural resource is a project that may have a significant effect on the environment" (Public Resources Code [PRC] Section 21084.2). AB 52 also establishes a formal consultation process for California tribes regarding those resources. The consultation process must be completed before a CEQA document can be certified. AB 52 requires that lead agencies "begin consultation with a California

Native American tribe that is traditionally and culturally affiliated with the geographic area of the proposed project." Native American tribes to be included in the process are those that have requested notice of projects proposed in the jurisdiction of the lead agency. It further states that the lead agency shall establish measures to avoid impacts that would alter the significant characteristics of a tribal cultural resource, when feasible (PRC Section 21084.3). PRC Section 21074 (a)(1)(A) and (B) defines tribal cultural resources as "sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe" and meets either of the following criteria:

- Listed or eligible for listing in the CRHR, or in a local register of historical resources as defined in PRC Section 5020.1(k)

- 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 PRC Section 5024.1 (in applying the criteria set forth in subdivision (c) of PRC Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe)

As discussed above in Section 3.3.5 Cultural Resources, above, a cultural resources records search and literature review was conducted within the Project site and surrounding one-half-mile study area. Based on the research completed for this study and the associated records search data available at this time, the Project site is considered to have low potential for cultural resources. It should be noted, the Project's proximity of the historic built environment feature, the Casa Loma Canal, which is along the northern margin of the Project site. However, this feature is outside the Project boundary and would not be disturbed with implementation of the Project. That conclusion, as well as the previous disturbed nature of the site and the minimal ground disturbance proposed with the Project, it is consistent with the determination that the likelihood of encountering previously unknown archaeological resource is low.

The City of San Jacinto as the Lead Agency, is responsible to complete the initial AB 52 outreach for the Project. On November 8, 2022, the City sent AB 52 letters to each Tribe that had requested to be notified of Projects within the City. Four Tribes responded to the request, and only one Tribe, the Soboba Band of Luiseño Indians, requested to consult with the City. On December 15, the City met with the Tribe to discuss the project, and on January 19, 2023 the Tribe sent conditions of approval for the Project and concluded consultation. The Tribe requested that a TDA be developed, which is required by all future Projects in the City per General Plan policy RM-3d. Additionally, the Tribe requested that a condition of Project approval be made that if human remains, grave goods, ceremonial items, and/or sacred items are encountered, work will immediately halt within the immediate area and any nearby area reasonably suspected to overlie adjacent remains, and a 100-foot ESA boundary will be established to protect the find from impact, and the Soboba Band of Luiseño Indians and the City of San Jacinto Planning Division shall be immediately notified. Lastly, the Tribe requested that the Project follow proper protocols in accordance with Section 7050.5 of the California Health and Safety Code and State CEQA Guidelines Section 15064.5(e), if human remains are found on site. With compliance with existing regulations, impacts would be less than significant.

3.3.19 Utilities and Service Systems

a)	Would the project require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or expansion of which could cause significant environmental effects?	Potentially Significant Impact ☐	Less than Significant With Mitigation Incorporated ☐	Less than Significant Impact ☒	No Impact ☐

a) Less than Significant Impacts. Potable water required by the Project would be supplied by the City, which obtains water from EMWD. The City of San Jacinto projected water supplies and demand in the 2020 Urban Water Management Plan (UWMP) and noted adequate supply, meaning enough supply to meet demand, through the year 2045 (City 2021a). Construction activities associated with the Project are not expected to require a large amount of water due to the small amount of paving and would be trucked in as needed. The Applicant is assuming one water truck per day of construction may be required, which can hold approximately 2,000 gallons of water. Based on this amount, and the construction timing of two months, the Project would be expected to utilize 0.3 acre feet of water during construction. The Project is consistent with the City of San Jacinto General Plan designation of the Project site. Because the General Plan was used to forecast future water demand, the proposed development has already been factored into the overall water demand. Additionally, water demand for the Project would be less than previous water usage. A full discussion of the water needs of the Project is provided in Threshold (b).

Stormwater would be allowed to penetrate the soil and no stormwater infrastructure would be installed as part of the proposed Project. Surface flow exiting the site in a southwest direction does not appear to connect to any offsite water features subject to CDFW, Regional Water Quality Control Board (RWQCB), or United States Army Corps of Engineers jurisdiction. A canal runs parallel to the northern boundary outside the Project site, just south of the San Jacinto Valley Regional Water Plant. This feature includes a raised berm which would prevent surface runoff from entering the canal.

No sewer connection would be required as part of the Project. During harvest, portable toilets would be utilized and would be serviced on site. During normal operations, wastewater would held within a 250 gallon above ground tank for the security trailer. Wastewater would be removed via an offsite hauler approximately once per week, and treated by San Jacinto Valley Regional Water Reclamation Facility (RWRF). Based on 250 gallons per week, the annual wastewater generation would be approximately 13,000 gallons per year. The RWRF has a total treatment capacity of 14 million gallons per day (MGD) (City 2021a). The Project represent a nominal increase to the existing available capacity.

Electric power would be provided by overhead powerlines above Sanderson Avenue, with Southern California Edison providing electrical services. Power would only be used to support the surveillance equipment, security lighting, and trailer onsite. No lights would be used in the cultivation process. The Project would not require any connections for natural gas.

Internet is likely to be provided by Spectrum Internet and telecommunication services (cell) would be available from Verizon, AT&T or T-Mobile.

The Project would require minimal utility usage which would not require or result in additional facilities. Therefore, impacts would be less than significant.

b)	Would the project have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal dry and multiple dry years?	Potentially Significant Impact ☐	Less than Significant With Mitigation Incorporated ☐	Less than Significant Impact ☒	No Impact ☐

b) Less than Significant Impact. The site has a history of being used for farming barley in order to feed cattle. Typically, two cuts of barley per year would be cultivated on 60 acres of land. According to the California Agricultural Production and Irrigated Water Use study conducted by Congressional Research Service in 2015, in 2013, barley utilized an average of 1.8 acre-feet per acre (Congressional Research Service 2015). At this rate, it is assumed that approximately 108 acre-feet of water was utilized to grow the first cut of barely.

Three wells are located on the site and would be used for irrigation of the plants only. The proposed Project would cultivate approximately 103,000 cannabis plants, which would require an average of 4.5 gallons per day per plant (6 gallons per day per plant in the summer months 3 gallons per day per plant in other months) or 463,500 gallons per day. For 175 days of growing, this would be 81,112,500 gallons or 249 AFY. Additionally, plants would be watered via drip irrigation at night to help with evaporation. Overall, the Project would result in a net increase from the historical barley use of approximately 141 AFY of water which would be supplied by the onsite wells.

The water for the security trailer and for employees would be trucked in and stored in an above ground storage tank. Industry standard notes that wastewater typically represents 75 percent of water usage. Based on this and the wastewater generation being approximately 13,000 gallons per year or 0.04 AFY, expected potable water demand would be 0.05 AFY.

The City of San Jacinto projected water supplies and demand in the 2020 UWMP and noted adequate supply through the year 2045 (City 2021a). For supply, EMWD utilizes both treated imported water and groundwater. Since groundwater is only pumped as needed, demand and supply of water are equal. Thus, with the use of onsite wells, of which the Project site has water rights to, on site water demand would equal supplies. Therefore, sufficient water supplies would be available and impacts would be less than significant.

c)	Would the project 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?	Potentially Significant Impact ☐	Less than Significant With Mitigation Incorporated ☐	Less than Significant Impact ☒	No Impact ☐

c) Less than Significant Impact. As mentioned in Threshold (a) above, wastewater would be removed via an offsite hauler approximately once per week, and treated by San Jacinto Valley RWRF. Based on 250 gallons per week, the annual wastewater generation would be approximately 13,000 gallons per year. The RWRF has a total treatment capacity of 14 MGD (City 2021a). The Project represent a nominal increase to the existing available capacity and impacts 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?	Potentially Significant Impact ☐	Less than Significant With Mitigation Incorporated ☐	Less than Significant Impact ☒	No Impact ☐

d) Less than Significant Impact. CR&R Waste and Recycling Services transports solid waste to the Lamb Canyon landfill. The Lamb Canyon landfill is expected to meet capacity in 2032 at which time waste can be taken to the El Sobrante or Badlands landfills. The Lamb Canyon Landfill has a permitted remaining capacity of 19,242,950 cubic yards (cu yd) (CalRecycle 2022a).

Waste generation rates provided by CalRecycle note that an office typical generates 1.24 pounds of solid waste per employee, per day (CalRecycle 2022b). With 33 employees (30 day shift employees and 3 night shift), total solid waste generation would be 14,936 pounds per year or 8.9 cubic yards per year. This amount represents a nominal amount of the remaining capacity at Lamb Canyon.

Additionally, with the implementation of the City's and CR&R's recycling programs the City continues to divert waste from the landfill. The California Integrated Waste Management Act (CIWMA) of 1989 mandates that all cities and counties in California reduce solid waste disposed at landfills generated within their jurisdictions by 50% and has a long-term compliance goal of 70%. Construction waste associated with the proposed Project will be recycled to the extent practicable with the remainder sent to a landfill. Pursuant to Municipal Code Chapter 8.34 – Construction Demolition Waste Management, 50% of the construction debris must be diverted. Therefore, landfill capacity is available to accommodate the Project and the Project would have a less than significant impact.

e)	Would the project comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	Potentially Significant Impact ☐	Less than Significant With Mitigation Incorporated ☐	Less than Significant Impact ☒	No Impact ☐

e) Less than Significant Impact. Federal, State, and local statutes and regulations regarding solid waste generation, transport, and disposal are intended to assure adequate landfill capacity through mandatory reductions in solid waste quantities (for example, through recycling and composting of green waste) and the safe and efficient transportation of solid waste. The Project will comply with all regulatory requirements regarding solid waste including AB 939 and AB 341. AB 939, which is administered by the California Department of Resources Recycling and Recovery required local governments to achieve a landfill diversion rate of at least 50 percent by January 1, 2000, through source reduction, recycling, and composting activities. Moreover, AB 341 increases the minimum solid waste diversion rate to 75 percent by 2020. Such regulations will be applicable to the Project and compliance is mandatory. Further, mandates set forth by the CALGreen Code aim to reduce solid waste generation and promote recycling and diversion design and activities, to which the Project is required to comply. The Project would comply with CALGreen requirements and applicable law related to management of construction and demolition debris (C&D), including diversion of organic waste in C&D from disposal. The Project would comply with the City's municipal code, and all written and published City policies and/or administrative guidelines regarding the collection, recycling, diversion, tracking, and/or reporting of C&D. Therefore, impacts would be less than significant.

3.3.20 Wildfire

a)	If located in or near state responsibility areas or lands classified as very high fire hazard severity zones would the project impair an adopted emergency response plan or emergency evacuation plan?	Potentially Significant Impact ☐	Less than Significant With Mitigation Incorporated ☐	Less than Significant Impact ☒	No Impact ☐

a) Less than Significant Impact. The Project site is located approximately 1.5 miles east of the nearest Local Responsibility Area VHFHZ (CalFire 2022). Nonetheless, the City's Public Safety Element of the General Plan notes that the City is subject to both wildland fires and structural fires. The natural vegetation in the City is highly prone to wildland fires. However, the City reduces the potential for dangerous fires by coordinating with the RCFD to implement fire hazard education programs and requirements for fire protection and fuel modification zones around existing and proposed development. The current Uniform Fire Code is also used to reduce structural fire hazards in these areas. In addition, the City and RCFD review development proposals to ensure that existing fire department staffing, water pressure and emergency access is adequate for firefighting purposes.

The City's Emergency Operation Plan describes the City's process for responding to emergencies or disasters. In addition, the City, along with most other jurisdictions in Riverside County, joined with the County of Riverside to submit a Multi-Jurisdictional LHMP providing a framework for emergency response. The Project provides adequate access for emergency vehicles, including

adequate street widths and vertical clearance. Implementation of federal, state, and local laws and regulations in the construction of the Project would result in less than significant impacts.

b)	If located in or near state responsibility areas or lands classified as very high fire hazard severity zones would the project, 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?	Potentially Significant Impact ☐	Less than Significant With Mitigation Incorporated ☐	Less than Significant Impact ☒	No Impact ☐

b) Less than Significant Impact. As previously mentioned, the Project site is not directly located within a VHFHZ but is approximately 1.5 miles east of the nearest zone. Additionally, the City is subject to both wildland fires and structural fires. However, the Project site, is relatively flat. The General Plan does not note any wind related hazards. Therefore, the Project will not exacerbate wildfire risks from winds or slopes and impacts would be less than significant.

c)	If located in or near state responsibility areas or lands classified as very high fire hazard severity zones would the project 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?	Potentially Significant Impact ☐	Less than Significant With Mitigation Incorporated ☐	Less than Significant Impact ☒	No Impact ☐

c) Less than Significant Impact. The Project does not include the addition of new roads, fuel breaks, emergency water sources, power lines or other utilities. Maintenance of existing infrastructure at the site (e.g., groundwater well, access roads, etc.) is not an activity that has the potential to substantially exacerbate fire risk or result in significant impacts to the environment. There are no temporary or ongoing activities that will exacerbate the fire risk in the area, impacts are considered less than significant.

d)	If located in or near state responsibility areas or lands classified as very high fire hazard severity zones would the project 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?	Potentially Significant Impact ☐	Less than Significant With Mitigation Incorporated ☐	Less than Significant Impact ☐	No Impact ☒

d) No Impact. The Project site is relatively flat and is not located near any slopes that could subject to instability after a fire. Additionally, the Project site is located outside the flood hazard zone (FEMA 2022). Therefore, the Project will have a less than impact as it is will not expose people or structures to significant risk from flooding or landslides as a result of a wildfire.

3.3.21 Mandatory Findings of Significance

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?	Potentially Significant Impact ☐	Less than Significant With Mitigation Incorporated ☒	Less than Significant Impact ☐	No Impact ☐

a) Less than Significant with Mitigation. As described in Section 3.3.4 Biological Resources and Section 3.3.5 Cultural Resources, impacts to both biological resources and cultural resources would remain less than significant with adherence to Mitigation Measures **BIO-1** through **BIO-5** and regulatory compliance measures, respectively. Implementation of the proposed Project would not substantially degrade the quality of the environment, substantially reduce the habitat of fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, or 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. Therefore, impacts would be less than significant with incorporation of mitigation.

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?)	Potentially Significant Impact ☐	Less than Significant With Mitigation Incorporated ☒	Less than Significant Impact ☐	No Impact ☐

b) Less than Significant with Mitigation. The potential for cumulative impacts occurs when the independent impacts of the Project are combined with the impact of related projects in proximity to the Project such that impacts occur that are greater than the impacts of the Project alone. As discussed above, the Project would implement Mitigation Measures **BIO-1** through **BIO-5,** which would ensure that all Project impacts would remain less than significant. Since these impacts associated with the proposed Project would not be significant when compared to applicable thresholds, none of the impacts associated with the proposed Project would make cumulatively considerable, incremental contributions to significant cumulative impacts. Impacts would be less than significant with incorporation of mitigation.

c)	Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	Potentially Significant Impact ☐	Less than Significant With Mitigation Incorporated ☐	Less than Significant Impact ☒	No Impact ☐

c) Less than Significant Impact. Based on the discussion and findings in all Sections above, there is no evidence to support a finding that the proposed Project has potential environmental effects which may cause substantial adverse effects on human beings, either directly or indirectly.

SECTION 4.0 – REFERENCES

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Appendix A – Biological Resources Reconnaissance Assessment for the San Jacinto Cultivation Farm Project, prepared by Chambers Group, December 28, 2021.

December 28, 2021
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Subject: Biological Resources Reconnaissance Assessment for the San Jacinto Cultivation Farm Project

Chambers Group, Inc. (Chambers Group) was retained by Roots Properties to conduct a literature review and biological reconnaissance-level survey for the San Jacinto Cultivation Farm Project (Project). The purpose of this survey was to document existing vegetation communities, identify special status species with a potential for occurrence, and map habitats that could support special status wildlife species as well as evaluate potential impacts of the Project to these resources.

Project Site Location and Description

The approximately 67.72-acre Project site is located on parcels 1, 7, and 8, northwest of Sanderson Avenue and Cottonwood Avenue, in the City of San Jacinto, Riverside County, California. The Project site is surrounded by agriculture and the San Jacinto Valley Regional Water and a canal to the north. A dairy farm is located directly west of the site, and an open lot occurs south and southeast of the site. The elevation at the Project site is approximately 1,500 feet above mean sea level (amsl). Maps of the Project Location and Project Vicinity are provided in Attachment 1 (Figure 1 – Project Location and Vicinity Map). Roots Properties plans to develop an outdoor cultivation farm within lands previously used for agriculture.

Methods

The Survey Area encompasses the Project Site which includes the entirety of the 67.72-acre parcel.

Literature Review

Prior to performing the biological reconnaissance survey, Chambers Group staff conducted a literature review for soils, jurisdictional water features that contribute to hydrology, and special status species known to occur within the vicinity (approximately 5 miles) of the Survey Area.

Soils

Prior to performing the biological reconnaissance survey, soil maps for the Survey Area were referenced in accordance with categories set forth by the U.S. Department of Agriculture (USDA) Soil Conservation Service and the USDA Natural Resources Conservation Service (NRCS) Web Soil Survey (USDA 2021).

Hydrology

A general assessment of waters potentially regulated by the U.S. Army Corps of Engineers (USACE), California Regional Water Quality Control Board (RWQCB), and California Department of Fish and Wildlife (CDFW) was conducted for the Survey Area. Pursuant to Section 404 of the Clean Water Act, USACE regulates the discharge of dredged and/or fill material into waters of the United States. The State of California (State) regulates discharge of material into waters of the State pursuant to Section 401 of the Clean Water Act and the California Porter-Cologne Water Quality Control Act (California Water Code, Division 7, §13000 et seq.). Pursuant to Division 2, Chapter 6, Sections 1600-1602 of the

California Fish and Wildlife (CDFW) Code, CDFW regulates all diversions, obstructions, or changes to the natural flow or bed, channel, or bank of any river, stream, or lake, which supports fish or wildlife. A desktop assessment was conducted of available data prior to the biological reconnaissance survey in the field.

Special Status Habitats and Species

The most recent records of the California Natural Diversity Database (CNDDB) managed by CDFW (2021) and the California Native Plant Society's Electronic Inventory (CNPSEI) of Rare and Endangered Vascular Plants of California (CNPS 2021) were reviewed for the following quadrangles containing and surrounding the Project: *El Casco, Beaumont, Cabazon, Lakeview, San Jacinto, Lake Fulmor, Winchester, Hemet,* and *Blackburn Canyon,* California U.S. Geological Survey (USGS) 7.5-minute quadrangles. These databases contain records of reported occurrences of federally or State-listed endangered or threatened species, California Species of Concern (SSC), or otherwise special status species or habitats that may occur within or in the immediate vicinity of the Survey Area (Attachment 1: Figure 3 – CNDDB Occurrences Map).

Biological Reconnaissance Survey

The biological reconnaissance survey was conducted on foot within the Project site. During the survey, the biologists identified and mapped all vegetation communities found within the Survey Area onto aerial photographs (Attachment 1: Figure 2 – Vegetation Communities Map). Plant communities were determined in accordance with the *Manual of California Vegetation*, *Second Edition* (Sawyer et al. 2009). Plant nomenclature follows that of *The Jepson Manual*, *Vascular Plants of California, Second Edition* (Baldwin et al. 2012). Plant and wildlife species observed or detected within the Survey Area were recorded (Attachments 2 and 3). In addition, site photographs were taken depicting current site conditions (Attachment 4).

Results

Chambers Group biologists Heather Franklin and Mauricio Gomez conducted the biological reconnaissance survey within the Survey Area to identify vegetation communities, the potential for occurrence of special status species, and/or habitats that could support special status wildlife species. The survey was conducted on foot between 0900 and 1200 hours on December 15, 2021. Weather conditions during the survey included temperatures ranging from 41 to 54 degrees Fahrenheit, wind speeds between 0 and 1 mile per hour, with cloud cover ranging from 0 to 20 percent, and no precipitation.

Biological Site Conditions

Soils

According to the results from the USDA NRCS Web Soil Survey (USDA 2021), the Project Site is located in the Western Riverside Area, CA679 part of the soil map. Six soil types are known to occur within and/or adjacent to the Project site (Attachment 1: Figure 5 – USDA Soils Map). These soil types are described below.

- Grangeville loamy fine sand (GoB) occurs in the western portion of the Survey Area. The parent material is alluvium derived from granite. The available water storage is classified as moderate (approximately 7.4 inches) with a depth to the water table of 0 inches.
- Grangeville sandy loam drained, saline-alkali (GpB) occurs in the northwestern portion of the Survey Area. The parent material is alluvium derived from granite. The available water storage is classified as moderate (approximately 7.2 inches) with a depth to the water table of 0 inches.

- Traver loamy fine sand eroded (Tp2) occurs in the western, middle and southern portions of the Survey Area. The parent material is alluvium derived from granite. The available water storage is classified as moderate (approximately 6.2 inches) with a depth to the water table of more than 80 inches.
- Traver loamy fine sand saline-alkali eroded (Tr2) occurs in the middle portion and throughout the boundaries of the Survey Area. The parent material is alluvium derived from granite. The available water storage is classified as moderate (approximately 6.2 inches) with a depth to the water table of more than 80 inches.
- Traver fine sandy loam, saline alkali (Ts) occurs in northeastern portion of the Survey Area. The available water storage is classified as moderate (approximately 6.4 inches) with a depth to the water table of more than 80 inches.
- Traver fine sandy loam, strongly saline-alkali eroded (Tt2) occurs in the northeastern, northwestern and southern portions of the Survey Area. The available water storage is classified as moderate (approximately 6.4 inches) with a depth to the water table of more than 80 inches.

Hydrology

No jurisdictional features such as drainages or swales were observed within the Survey Area (Attachment 1: Figure 6 – Jurisdictional Waters Map). A canal runs parallel to the northern boundary outside of the Project site just south of the San Jacinto Valley Regional Water Plant and a roadside ditch occurs between Sanderson Avenue and the Project site. Both features are located outside of the Project boundary and no work will occur within or adjacent to either feature. The non-jurisdictional roadside ditch located between Sanderson Avenue and the Project site directs surface flow during rain events and runs under an existing access road as the entrance to the Project site. However, this area can be avoided during construction with the uses of best management practices (BMP's) during ingress/egress to the Project site. Therefore, no impacts to waters of the United States or waters of the State are anticipated to occur as a result of this Project.

Vegetation Communities and Other Areas

Two vegetation communities or land types were found within the Survey Area during the biological reconnaissance survey: Ruderal and Developed Landscape. The majority of the Project site is developed with some portions of ruderal vegetation occurring along the outer edges of the site. The communities are described in the following subsections.

Ruderal

Areas classified as Ruderal tend to be dominated by pioneering herbaceous species that readily colonize disturbed ground, and that are typically found in temporary, often frequently disturbed habitats (Barbour et al. 1999). The soils in ruderal areas are typically characterized as heavily compacted or frequently disturbed. The vegetation in these areas is adapted to compact soils where water does not readily penetrate the soil. Ruderal areas are often dominated by species of the *Centaurea*, *Brassica*, *Malva*, *Salsola*, *Eremocarpus, Amaranthus*, and *Atriplex* genera.

Areas with Ruderal vegetation were present along the fence surrounding the Survey Area. Native plant species identified within this community on site included two dry big saltbush individuals (*Atriplex lentiformis*). Non-native plant species identified within this community on site included Russian-thistle (*Salsola australis*) and cheeseweed (*Malva parviflora*).

Developed

Developed areas are areas that have been altered by humans and now display man-made structures such as urban areas, houses, paved roads, buildings, parks, and other maintained areas (Gray and Bramlet 1992). Developed areas are present throughout the Survey Area, including graded soils, assembled frames for greenhouses, and portions

surrounding the greenhouse frames were unvegetated. Based on information provided, the site was graded by a previous owner.

General Plants

A total of three plant species were observed within the Survey Area during the biological reconnaissance survey (Attachment 2: Plant Species Observed). Plant species observed during the survey were representative of the existing Survey Area conditions. No special status plant species were observed during the survey.

General Wildlife

A total of 15 wildlife species were observed within the Survey Area during the biological reconnaissance survey. Wildlife species observed or detected during the survey were characteristic of the existing Survey Area conditions. A complete list of wildlife species observed or detected is provided in Attachment 3 – Wildlife Species Observed/Detected List.

Sensitive Species

Special Status Species

The following information is a list of abbreviations used to help determine special status biological resources potentially occurring in the Survey Area.

CNPS California Rare Plant Rank (CRPR)

1A	=	Plants presumed extinct in California.
1B	=	Plants rare and endangered in California and throughout their range.
2	=	Plants rare, threatened or endangered in California but more common elsewhere in their range.
3	=	Plants about which we need more information, a review list.
4	=	Plants of limited distribution; a watch list.

CRPR Extensions

0.1	=	Seriously endangered in California (greater than 80 percent of occurrences threatened/high degree and immediacy of threat).
0.2	=	Fairly endangered in California (20 to 80 percent occurrences threatened).
0.3	=	Not very endangered in California (less than 20 percent of occurrences threatened).

Federal

FE	=	Federally listed; Endangered
FT	=	Federally listed; Threatened

State

ST	=	State listed; Threatened
SE	=	State listed; Endangered
RARE	=	State listed; Rare (Listed “Rare” animals have been re-designated as Threatened, but Rare plants have retained the Rare designation.)
SSC	=	State Species of Special Concern
WL	=	CDFW Watch List
FP	=	CDFW Fully Protected

The following information was used to determine biological resources potentially occurring within the Survey Area. The criteria used to evaluate the potential for special status species to occur within the Survey Area are outlined in Table 1.

Table 1: Criteria for Evaluating Special Status Species Potential for Occurrence (PFO)

PFO*	CRITERIA
Absent:	Species is restricted to habitats or environmental conditions that do not occur within the Project site.
Low:	Historical records for this species do not exist within the vicinity (approximately 5 miles) of the Project site, and/or habitats or environmental conditions needed to support the species are of poor quality.
Moderate:	Either a historical record exists of the species within the vicinity of the Project site (approximately 5 miles) and marginal habitat exists on the Survey Area, or the habitat requirements or environmental conditions associated with the species occur within the Survey Area, but no historical records exist within 5 miles of the Project site.
High:	Both a historical record exists of the species within the Survey Area or its immediate vicinity (approximately 1 mile), and the habitat requirements and environmental conditions associated with the species occur within the Survey Area.
Present:	Species was detected within the Survey Area at the time of the survey.

*PFO: Potential for Occurrence

Special Status Plant Species

Database searches (CDFW 2021; CNPS 2021) resulted in a list of 18 federally and/or state-listed threatened, endangered, or otherwise special status plant species documented to historically occur within the vicinity of the Survey Area. Of the 18 plant species that resulted from the database search, it was determined that all 18 are considered absent from the Survey Area. No special status plant species were found during the biological reconnaissance survey.

The following 18 plant species are considered **Absent** from the Survey Area due to lack of suitable habitat or because they grow outside the elevation range of the Survey Area:

- California satintail (*Imperata brevifolia)* – CRPR 2B.1
- California screw moss (*Tortula californica*) – CRPR 1B.2
- chaparral sand-verbena (*Abronia villosa* var. *aurita*) – CRPR 1B.1
- Coulter's goldfields (*Lasthenia glabrata* ssp. *coulteri*) – CRPR 1B.1
- Davidson's saltscale (*Atriplex serenana* var. *davidsonii*) – CRPR 1B.2
- Jaeger's milk-vetch (*Astragalus pachypus* var. *jaegeri)* – CRPR 1B.1
- Little mousetail (*Myosurus minimus* ssp. *apus*) – CRPR 3.1
- long-spined spineflower (*Chorizanthe polygonoides* var. *longispina*) – CRPR 1B.2
- Mojave tarplant (*Deinandra mohavensis*) – SE, CRPR 1B.3
- Parish's brittlescale (*Atriplex parishii*) – CRPR 1B.1
- Parry's spineflower (*Chorizanthe parryi* var. *parryi*) – CRPR 1B.1

- Payson's jewelflower (*Caulanthus simulans*) – CRPR 4.2
- Plummer's Mariposa-Lily (*Calochortus plummerae*) - CRPR 4.2
- salt spring checkerbloom (*Sidalcea neomexicana*) – CRPR 2B.2
- San Jacinto Valley crownscale (*Atriplex coronata* var. *notatior*) – FE, CRPR 1B.1
- Smooth tarplant (*Centromadia pungens* ssp. *laevis*) – CRPR 1B.1
- spreading navarretia (*Navarretia fossalis*) – FT, CRPR 1B.1
- white rabbit-tobacco (*Pseudognaphalium leucocephalum*) – CRPR 2B.2

Special Status Wildlife Species

Database searches (CDFW 2021; USFWS 2021) resulted in a list of 31 federally and/or state listed endangered or threatened, State Species of Concern, or otherwise special status wildlife species documented to occur within the Survey Area. After a literature review and the assessment of the various habitat types within the Survey Area, it was determined that 30 special status wildlife species are considered absent and one species has a low potential to occur.

The following 30 wildlife species are considered **Absent** from the Survey Area due to the absence of suitable habitat present within the site:

- American badger (*Taxidea taxus*) – SSC
- Bell's sage sparrow (*Artemisiospiza belli belli*) - WL
- California glossy snake (*Arizona elegans occidentalis*) – SSC
- coast horned lizard (*Phrynosoma blainvillii*) – SSC
- coastal cactus wren (*Campylorhynchus brunneicapillus sandiegensis*) - SSC
- coastal California gnatcatcher (*Polioptila californica californica*) – **FT**, SSC
- Cooper's hawk (*Accipiter cooperii*) – WL
- ferruginous hawk (*Buteo regalis*) - WL
- least Bell's vireo (*Vireo bellii pusillus*) – **FE**, **SE**
- loggerhead shrike (*Lanius ludovicianus*) – SSC
- Los Angeles pocket mouse (*Perognathus longimembris brevinasus*) - SSC
- northwestern San Diego pocket mouse (*Chaetodipus fallax fallax*) – SSC
- orange-throated whiptail (*Aspidoscelis hyperythra*) – WL
- red-diamond rattlesnake (*Crotalus ruber*) – SSC
- San Bernardino kangaroo rat (*Dipodomys merriami parvus*) – **FE**, SSC
- San Diego black-tailed jackrabbit (*Lepus californicus bennettii*) – SSC
- San Diego desert woodrat (*Neotoma lepida intermedia*) – SSC
- southern California legless lizard (*Anniella stebbinsi*) – SSC
- southern California rufous-crowned sparrow (*Aimophila ruficeps canescens*) – WL
- southwestern willow flycatcher (*Empidonax traillii extimus*) – **FE**, **SE**
- Stephen's kangaroo rat (*Dipodomys stephensi*) – **FE**, **ST**
- Townsend's big-eared bat (*Corynorhinus townsendii*) – SSC

- tricolored blackbird (*Agelaius tricolor*) – **ST**
- vernal pool fairy shrimp (*Branchinecta lynchi*) – **FT**
- western spadefoot (*Spea hammondii*) – SSC
- western yellow bat (*Lasiurus xanthinus*) - SSC
- western yellow-billed cuckoo (*Coccyzus americanus occidentalis*) – **FT**, **SE**
- white-faced ibis (*Plegadis chihi*) – WL
- yellow warbler (*Setophaga petechia*) – SSC
- yellow-headed blackbird (*Xanthocephalus xanthocephalus*) – SSC

Although the ferruginous hawk has no potential for nesting within the Project site, there is a potential for foraging within the Survey Area and the adjacent areas. One adult ferruginous hawk was observed foraging within the Project site and then flew north to the San Jacinto Valley Regional Water Plant.

The analysis of the CNDDB search and field survey resulted in one species with a low potential to occur on the Project site. The burrowing owl has a low potential to occur and is described below:

Burrowing Owl (*Athene cunicularia*) – SSC

- The burrowing owl inhabits dry, open, native, or non-native grasslands, deserts, and other arid environments with low-growing and low-density vegetation. Moderate quality habitat for this species occurs within the open lot located south and southeast outside of the Project site. The area is disturbed and consists primarily of non-native vegetation; however, no burrows or ground squirrels were observed within the field. In addition, a large open space is located east of the Project site; however, the open space is separated by N Sanderson Avenue (Highway 79). This species has been recorded within 0.5 miles of the Project site, in the open fields located just north of the San Jacinto Valley Regional Water Plant. However, the potential habitat for this species within the Project site is a very small area, and no burrows or ground squirrels were observed during the survey. Therefore, the burrowing owl has a low potential to occur within the Project site.

United States Fish Wildlife Service Critical Habitat

Critical Habitat is defined as areas of land, water, and air space containing the physical and biological features essential for the survival and recovery of endangered and threatened species. Designated Critical Habitat includes sites for breeding and rearing, movement or migration, feeding, roosting, cover, and shelter. Designated Critical Habitats require special management and protection of existing resources, including water quality and quantity, host animals and plants, food availability, pollinators, sunlight, and specific soil types. Designated Critical Habitat delineates all suitable habitat, occupied or not, that is essential to the survival and recovery of the species. According to the USFWS Critical Habitat WebGIS map, the Project site does not fall within any designated Critical Habitat (USFWS 2021). Critical Habitat for the San Bernardino kangaroo rat is present within 2.5 miles of the Project site to the northeast, and Critical Habitat for spreading navarretia and thread-leaved brodiaea is present within 5 miles of the Project site to the southwest as depicted in (Attachment 1: Figure 4 – USFWS Occurrences and Critical Habitat Map).

Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP) Compliance

The Project site occurs within the MSHCP Planning Area. The survey requirements and conservations measures were found by conducting an online search in the Western Riverside County Regional Conservation Authority (RCA) MSHCP Information Map. In addition, Volume 1 of the MSHCP discussed general conservation requirements for MSCHP Compliance.

The MSHCP Project Review Checklist was used to determine surveys and conservation measures necessary for MSHCP Compliance.

The Project site is not:

- in an amphibian survey area
- in a mammal survey area
- in a criteria area species survey area
- in a Delhi Sands Flower-loving fly survey area

The Project site does fall under a:

- burrowing owl survey area
- narrow endemic species survey area

Criteria Cell Requirements

The Project site resides outside of the MSHCP Criteria Cell. The Project site is found within the following Assessor Parcel Numbers: 432130001, 432130002, 432130008, and 432130009.

Burrowing Owl Survey Area

The Project site falls within the mapped survey area for burrowing owl.

Narrow Endemic Plant Species Survey Area

The Project site is located within a Narrow Endemic Plant Species Survey Area (NEPSSA). Database search (RCA MSHCP Information Map 2021) resulted in a list of five federally and/or state-listed threatened, endangered, or otherwise special status plant species that are MSCHP Covered Species. Of the five plant species that resulted from the database search, it was determined that all five are considered absent from the Survey Area and one species is considered to have a low potential to occur within the Survey Area. No MSCHP Covered Species were found during the biological reconnaissance survey.

The following five plant species are considered **Absent** from the Survey Area due to lack of suitable habitat or because they grow outside the elevation range of the Survey Area:

- California Orcutt grass (*Orcuttia californica*) – FE, CE, CRPR 1B.1
- Munz's onion (*Allium munzii*) – FE, CE, CRPR 1B.1
- many-stemmed dudleya (*Dudleya multicaulis*) – CRPR 1B.2
- San Diego ambrosia (*Ambrosia pumila*) – FE, CRPR 1B.1
- Wrights's trichocoronis (*Trichocoronis wrightii* var. *wrightii*) – CRPR 2B.1

Conclusions and Recommendations

Hydrology

No jurisdictional features were observed within the Project site. A canal runs parallel to the northern boundary outside of the Project site, just south of the San Jacinto Valley Regional Water Plant, and a non-jurisdictional roadside ditch occurs between Sanderson Avenue and the Project site. No work is anticipated to occur to the canal or the roadside ditch during the construction activities and both features can be avoided. If any offsite required improvements

associated with the development of this Project could potentially impact the canal, a Jurisdictional Delineation must be conducted to determine agency jurisdiction, and applications for a USACE 404 permit, State 401 certification, or CDFW State Streambed Alteration Agreement may be required for Project authorization.

Special Status Plant Species

Following the literature review and after the assessment of the various habitat types in the Survey Area, it was determined that of the 18 special status plant species known to historically occur within the Survey Area, all 18 species were considered absent within the Survey Area. No special status species were found during the biological reconnaissance survey.

Special Status Wildlife Species

Following the literature review and the assessment of the various habitat types in the Survey Area, it was determined that of the 31 special status wildlife species known to occur within the Project site, 30 species are considered absent. The burrowing owl has a low potential to occur within the Project site.

To minimize potential impacts to nesting birds protected under the Migratory Bird Treaty Act (MBTA), construction activities should take place outside nesting season (February 1 to August 31), to the greatest extent practicable.

If construction activities occur during nesting season, preconstruction nesting bird surveys should be conducted. The survey should occur no more than three days prior to initiation of ground disturbing activities, and any occupied passerine and/or raptor nests occurring within or adjacent to the impact area should be delineated. Additional follow-up surveys may be required by the resource agencies. To the maximum extent practicable, a minimum buffer zone around occupied nests should be determined by the qualified biologist to avoid impacts to the active nest. The buffer should be maintained during physical ground-disturbing activities. Once nesting has ceased, the buffer may be removed.

MSHCP Compliance

Burrowing Owl Survey Area

The Project site is within the designated survey area for burrowing owl. Therefore, a pre-construction survey for burrowing owl (BUOW) shall be conducted within 30 days prior to ground disturbance to reevaluate the locations of active burrowing owl burrows located adjacent to or within the Project limits and to avoid direct take of BUOW (MSHCP Species Specific Objective 6). If BUOWs are identified on site, avoidance measures will be developed in compliance with the MSHCP and in coordination with the CDFW and/or Western Riverside County Regional Conservation Authority (RCA). These measures would include the following as well as any others developed in coordination with CDFW and/or RCA:

- A biologist with knowledge of BUOW and its habitat will be retained to function as a biological monitor.
- The biological monitor will develop and implement a contractor education program with regard to the BUOW to be provided to all personnel (including temporary contractors and subcontractors) before beginning work on the Project.
- The biological monitor will be present during vegetation clearing, grading, and construction, to monitor occupied BUOW burrows and any construction-related impacts.
- Prior to any ground disturbance, all limits of Project construction will be delineated and marked to be clearly visible to personnel on foot and in heavy equipment. All construction-related activities (e.g., vegetation removal, grading, equipment lay-down and storage, and contractor parking) will occur inside the limits of construction and designated staging areas. Construction staging and equipment storage will

be located outside any occupied BUOW burrow locations.

- All movement of contractors, subcontractors, or their agents and equipment will be restricted to the limits of construction and staging areas.
- A qualified biologist will conduct any necessary BUOW passive relocation that may be required to avoid Project effects to BUOW.
- If BUOW must be moved away from the proposed work area, passive relocation techniques would be used rather than actual avian trapping. At least one or more weeks would be necessary to accomplish this to allow the birds to acclimate to alternate burrows.
- The Project would provide funding for long-term management and monitoring of the protected lands acquired for BUOW impacts. This monitoring would include an annual report submittal to the CDFW.

Narrow Endemic Plant Species Survey Area (NEPSSA)

The Project site is located within a NEPSSA for the following five plant species that are also MSCHP Covered Species: California Orcutt grass, Munz's onion, many-stemmed, Wrights's trichocoronis, and the San Diego ambrosia. However, it was determined that the Project site lacks suitable habitat for all five species; therefore, no focused surveys are required.

Please contact me at (949) 261-5414 ext. 7232 if you have any questions or concerns regarding this memo report.

Sincerely,

CHAMBERS GROUP, INC.

Heather Franklin
Project Biologist
hfranklin@chambersgroupinc.com
(949) 261-5414 ext. 7232

Attachments

Attachment 1: Figure 1 – Project Location and Vicinity Map
Figure 2 – Vegetation Communities Map
Figure 3 – CNDDB Occurrences Map
Figure 4 - USFWS Occurrences and Critical Habitat Map
Figure 5 – USDA Soils Map
Figure 6 - Jurisdictional Waters Map

Attachment 2: Plant Species Observed

Attachment 3: Wildlife Species Observed/Detected

Attachment 4: Site Photographs

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ATTACHMENT 1 – FIGURES

ATTACHMENT 2 – PLANT SPECIES OBSERVED

ATTACHMENT 3 – WILDLIFE SPECIES OBSERVED/DETECTED

ATTACHMENT 4 – SITE PHOTOGRAPHS

Appendix B – Notification of Lake or Streambed Alteration, EPIMS Notification RIV-26200-R6, TS Farms

State of California – Natural Resources Agency
DEPARTMENT OF FISH AND WILDLIFE
Inland Deserts Region
3602 Inland Empire Blvd., Suite C220
Ontario, CA 91764
wildlife.ca.gov

GAVIN NEWSOM, Governor
CHARLTON H. BONHAM, Director

August 24, 2022

Tony Huang
TS Farms, LLC
23 Corporate Plaza, #150
Newport Beach, CA 92660

Dear Mr. Huang:

Notification of Lake or Streambed Alteration, EPIMS Notification RIV-26200-R6, TS Farms

CDFW had until August 20, 2022, to submit a draft Lake or Streambed Alteration Agreement (Agreement) to you or inform you that an Agreement is not required. CDFW did not meet that date. As a result, by law, you may now complete the project described in your notification without an Agreement.

Please note that pursuant to Fish and Game Code section 1602, subdivision (a)(4)(D), if you proceed with this project, it must be the same as described and conducted in the same manner as specified in the notification and any modifications to that notification received by CDFW in writing prior to June 20, 2022. This includes completing the project within the proposed term and seasonal work period and implementing all avoidance and mitigation measures to protect fish and wildlife resources specified in the notification. If the term proposed in your notification has expired, you will need to re-notify CDFW before you may begin your project. Beginning or completing a project that differs in any way from the one described in the notification may constitute a violation of Fish and Game Code section 1602.

Also note that while you are entitled to complete the project without an Agreement, you are still responsible for complying with other applicable local, state, and federal laws. These include, but are not limited to, Fish and Game Code sections 2080 *et seq*. (species listed as threatened or endangered, or a candidate for listing under the California Endangered Species Act); section 1908 (rare native plants); sections 3511, 4700, 5050, and 5515 (fully protected species); section 3503 (bird nests and eggs); section 3503.5 (birds of prey); section 5650 (water pollution); section 5652 (refuse disposal into water); section 5901 (fish passage); section 5937 (sufficient water for fish); and section 5948 (obstruction of stream).

Finally, if you decide to proceed with your project without an Agreement, you must have a copy of this letter and your notification with all attachments available at all times at the work site.

If you have questions regarding this letter, please contact Kevin Francis, Environmental Scientist by email at kevin.francis@wildlife.ca.gov.

Sincerely,

DocuSigned by:
Jeff Brandt
6BBFAB19FE504F9...

Jeff Brandt
Senior Environmental Scientist (Supervisory)

ec: California Department of Fish and Wildlife
Kevin Francis, Environmental Scientist
kevin.francis@wildlife.ca.gov

Appendix C – Vernal Pool Assessment for the San Jacinto Cultivation Farm Project, prepared by Chambers Group, May 18, 2022.

June 27, 2022
5 Hutton Centre Drive, Suite 750
Santa Ana, California 92707

Tony Huang
TS Farms
1519 E Chapman Avenue #91
Fullerton, California 92831

Subject: Vernal Pool Assessment for the San Jacinto Cultivation Farm Project

Chambers Group, Inc. (Chambers Group) was retained by Roots Properties to conduct a vernal pool assessment for the San Jacinto Cultivation Farm Project (Project). The purpose of this survey was to document existing and potential areas for vernal pools within the Project site in order to evaluate potential impacts of the Project to these resources. No vernal pools or jurisdictional features were observed within the Project site.

Project Site Location and Description

The approximately 67.72-acre Project site is located on parcels 1, 7, and 8, northwest of Sanderson Avenue and Cottonwood Avenue, in the City of San Jacinto, Riverside County, California. The Project site is surrounded by agriculture and the San Jacinto Valley Regional Water and a canal to the north. A dairy farm is located directly west of the site, and an open lot occurs south and southeast of the site. The elevation at the Project site is approximately 1,500 feet above mean sea level (amsl). Maps of the project location and project vicinity are provided in Figure 1 – Project Location and Vicinity Map. Roots Properties plans to develop an outdoor cultivation farm within lands previously used for agriculture.

Regulatory Background

USACE

Clean Water Act

The purpose of the Clean Water Act (CWA) is to "restore and maintain the chemical, physical, and biological integrity of the nation's waters." Section 404 of the CWA prohibits the discharge of fill material into waters of the United States without a permit from the United States (U.S.) Army Corps of Engineers (USACE). The definition of waters of the United States includes rivers, streams, estuaries, the territorial seas, ponds, lakes, and wetlands. Wetlands are defined as those areas "that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions" (33 Code of Federal Regulations [CFR] § 328.3(b)). The goals and standards of the CWA are enforced through permit provisions. The USACE generally extends its jurisdiction to all areas meeting the criteria for WOUS. WOUS exclude isolated waters that are not hydrologically connected to navigable rivers and streams. Additionally, USACE jurisdiction over wetlands created by artificial means is decided on a case-by-case basis. The USACE generally does not assume jurisdiction over areas that are (1) artificially irrigated and would revert to upland habitat if the irrigation ceased; or, (2) artificial lakes and ponds created by excavating and/or diking of dry land to collect and retain water, used exclusively for such purposes as stock watering, irrigation, settling basins, or rice growing. Other areas that are not considered jurisdictional WOUS include waste treatment ponds, ponds formed by construction activities including borrow pits until abandoned, and ponds created for aesthetic reasons such as reflecting or ornamental ponds (33 CFR Part 328.3).

On April 21, 2020, the U.S. Environmental Protection Agency (EPA) and USACE published the Navigable Waters Protection Rule (NWPR) in the Federal Register to finalize a revised definition of WOUS under the Clean Water Act

(USACE and EPA, 2020). However, the USACE and EPA halted implementation of the NWPR in 2021 and are interpreting waters of the United States consistent with the pre-2015 regulatory definition until further notice.

When a project may create impacts for wetlands, the project requires a permit or a waiver. Substantial impacts to wetlands may require an Individual Permit. Projects that only minimally affect wetlands may meet the conditions of one of the existing Nationwide Permits. A Water Quality Certification or waiver pursuant to Section 401 of the CWA is required from the Regional Water Quality Control Board (RWQCB) for Section 404 permit actions.

Wetlands According to the USACE *Wetland Delineation Manual*, wetlands are defined as "those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances, do support a prevalence of vegetation typically adapted for life in saturated soil conditions." Wetlands are delineated using three parameters: hydrophytic vegetation, wetland hydrology, and hydric soils. According to USACE, all three parameters must be present to qualify as a wetland (USACE 1987).

Hydrophytic Vegetation

Hydrophytic vegetation is defined as "the sum total of macrophytic plant life growing in water or on a substrate that is at least periodically deficient in oxygen as a result of excessive water content" (USACE 1987). The potential wetland areas within the Survey Area were surveyed on foot for those areas exhibiting characteristics of jurisdictional waters or wetlands. Vegetation units with potential wetland areas were examined, and data for each vegetation stratum (i.e., tree, shrub, herb, and vine) were recorded on standardized datasheets from the Arid Supplement (USACE 2008). The absolute cover of each plant species present was visually estimated and recorded.

The wetland indicator status of each species recorded was determined by using the *National Wetland Plant Inventory* (Lichvar et. al. 2014). An obligate (OBL) indicator status refers to plants that are almost always a hydrophyte and rarely in uplands. A facultative wet indicator status refers to plants that usually are a hydrophyte but are occasionally found in non-wetlands. A facultative indicator status refers to plants that commonly occur as either a hydrophyte or non-hydrophyte. Facultative upland species occasionally are a hydrophyte but usually occur in uplands. Upland species almost always occur in uplands and rarely are a hydrophyte. A not indicated (NI) status refers to species that have insufficient data available to determine an indicator status at this time for the local region. Plant species nomenclature follows that contained in *The Jepson Online Interchange* (Regents of the University of California 2015) and *The Checklist of the Vascular Plants of San Diego County, Fifth Edition* (Rebman and Simpson 2014). Dominant species with an indicator status of NI or not listed in the 1997 list were evaluated as either wetland or upland indicator species based on local professional knowledge of where the species are most often observed in habitats characteristic of southern California.

Hydric Soils

A hydric soil is a soil type that is saturated, flooded, or ponded long enough during the growing season to develop anaerobic conditions that favor the growth and regeneration of hydrophytic vegetation (USACE 1987). Hydric soil indicators are formed predominantly by the accumulation or loss of iron, manganese, sulfur, or carbon compounds (USACE 2008). The hydric soil criterion is considered fulfilled at a location if soils in the area can be inferred to have a high groundwater table, evidence of prolonged soil saturation exists, or any indicators suggesting a long-term reducing environment in the upper 18 inches of the soil profile are present.

A sampling point was selected within a potential wetland area where the apparent boundary between wetland and upland was inferred based on changes in the composition of the vegetation and topography. The soil pit was dug to a depth of at least 18 inches or to a depth necessary to determine soil color, evidence of soil saturation, depth to groundwater, and indicators of a reducing soil environment (e.g., mottling, gleying, and sulfidic odor). In areas where

the direct examination of soil pits were precluded by the pretense of federally endangered species (i.e., fairy shrimp in vernal pools), hydric soils were inferred based on the presence of vegetation and hydrology indicators.

Wetland Hydrology

The presence of wetland hydrology indicators confirm that inundation or saturation has occurred on a site but may not provide information about the timing, duration, or frequency of the event. Hydrology features are generally the most ephemeral of the three wetland parameters (USACE 2008).

Hydrologic information for the site was obtained by reviewing USGS topographic maps and by directly observing hydrology indicators in the field. The wetland hydrology criterion is considered fulfilled at a location if, based upon the conclusions inferred from the field observations, an area has a high probability of being periodically inundated or has soils saturated to the surface at some time during the growing season to develop anaerobic conditions in the surface soil environment, especially the root zone (USACE 1987). If at least one primary indicator or at least two secondary indicators are found at a sample point, the wetland hydrology criterion is considered fulfilled.

Vernal Pools

Vernal pools are a type of ephemeral wetland that often support endemic rare, threatened, or endangered plant and animal species. USACE provides a vernal pool guidelines for projects involving compensatory mitigation for unavoidable losses of vernal pools and vernal pool complexes. Specific mitigation for impacts to vernal pool complexes that support Federally listed plants or animals will be determined on a case-by-case basis through the ESA Section 7 consultation process with USFWS. CDFW reviews impacts to wetlands to ensure no net loss and would require consultation for vernal pool habitat supporting state-listed plants or animals, utilizing the USFWS Recovery Plan for Vernal Pool Ecosystems of California and Southern Oregon as a guide.

Atypical Situations

Because there are situations in which one or more of the wetland parameters has been removed or altered due to recent natural events or human activities, the definition of a wetland includes the phrase “under normal circumstances” (USACE, 1987). To describe these conditions, USACE uses definitions for atypical situations and problem areas. They are as follows:

> *Atypical situation*: refers to areas in which one or more parameters (vegetation, soil, and/or hydrology) have been sufficiently altered by recent human activities or natural events to preclude the presence of wetland indicators of the parameter (USACE, 1987).
>
> *Problem areas*: wetland types in which wetland indicators of one or more parameters may be periodically lacking due to normal seasonal or annual variations in environmental conditions that result from causes other than human activities or catastrophic natural events. Representative examples of problem areas include seasonal wetlands, wetlands on drumlins, prairie potholes, and vegetated flats (USACE, 1987).

Atypical situations and problem areas may lack one or more of the three criteria, yet still may be considered wetlands. Background information on the previous condition of the area, field observations and/or the identification of undisturbed reference sites adjacent to atypical sites may indicate that the site met the wetland criteria prior to disturbance. Additional delineation procedures would be employed if normal circumstances did not occur on a site.

RWQCB Jurisdictional Waters

The RWQCB is the regional agency responsible for protecting water quality in California. The jurisdiction of this agency includes waters of the State (WOS) as mandated by both the federal CWA Section 401 and the California Porter-Cologne Water Quality Control Act. On April 6, 2021, the State Water Resources Control Board adopted a resolution to confirm that the “State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to

Waters of the State" is in effect as state policy for water quality control. WOS are defined in State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State (State Water Resources Control Board, 2021) to include any surface water or groundwater, including saline waters, within the boundaries of the state. The RWQCB defines wetlands as:

> An area is wetland if, under normal circumstances, (1) the area has continuous or recurrent saturation of the upper substrate caused by groundwater, or shallow surface water, or both; (2) the duration of such saturation is sufficient to cause anaerobic conditions in the upper substrate; and (3) the area's vegetation is dominated by hydrophytes or the area lacks vegetation.

The following wetlands are identified in the State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State as WOS:

1. Natural wetlands;
2. Wetlands created by modification of a surface water of the state, and
3. Artificial wetlands that meet any of the following criteria:
    a. Approved by an agency as compensatory mitigation for impacts to other WOS, except where the approving agency explicitly identifies the mitigation as being of limited duration;
    b. Specifically identified in a water quality control plan as a wetland or other water of the state;
    c. Resulted from historic human activity, is not subject to ongoing operation and maintenance, and has become a relatively permanent part of the natural landscape; or
    d. Greater than or equal to one acre in size, unless the artificial wetland was constructed, and is currently used and maintained, primarily for one or more of the following purposes (i.e., the following artificial wetlands are not WOS unless they also satisfy the criteria set forth in 2, 3a, or 3b):
        i. Industrial or municipal wastewater treatment or disposal,
        ii. ii. Settling of sediment,
        iii. iii. Detention, retention, infiltration, or treatment of stormwater runoff and
        iv. other pollutants or runoff subject to regulation under a municipal,
        v. construction, or industrial stormwater permitting program,
        vi. iv. Treatment of surface waters,
        vii. v. Agricultural crop irrigation or stock watering,
        viii. vi. Fire suppression,
        ix. vii. Industrial processing or cooling,
        x. viii. Active surface mining – even if the site is managed for interim wetlands
        xi. functions and values,
        xii. ix. Log storage,
        xiii. x. Treatment, storage, or distribution of recycled water, or
        xiv. xi. Maximizing groundwater recharge (this does not include wetlands that
        xv. have incidental groundwater recharge benefits); or
        xvi. xii. Fields flooded for rice growing.

All artificial wetlands that are less than an acre in size and do not satisfy the criteria set forth in 2, 3.a, 3.b, or 3.c are not WOS. If an aquatic feature meets the wetland definition, the burden is on the applicant to demonstrate that the wetland is not a water of the State.

The RWQCB can assert jurisdiction over hydrologically isolated vernal pools as "isolated waters" under the Porter-Cologne Water Quality Act.

Porter-Cologne Water Quality Control Act

The Porter-Cologne Water Quality Control Act of 1966 (California Water Code §§ 13000-13999.10) mandates that activities that may affect waters of the State shall be regulated to attain the highest quality. The State Water Resources Control Board (SWRCB) and the local Regional Water Quality Control Board (RWQCB) are the relevant permitting agencies. RWQCB provides regulations for a "non-degradation policy" that are especially protective of areas with high water quality. Porter-Cologne reserves the right for the State of California (State) to regulate activities that could affect the quantity and/or quality of surface and/or ground waters, including isolated wetlands, within the state. Waters of the State include isolated waters that are no longer regulated by USACE. If the project is proposed to discharge into waters of the State, a Waste Discharge Report (WDR), or a waiver to WDRs, must be filed before beginning discharge.

CDFW Jurisdictional Waters

Under Sections 1600–1607 of the Fish and Game Code, CDFW regulates activities that would divert or obstruct the natural flow or substantially change the bed, channel, or bank of any river, stream, or lake that supports fish or wildlife. CDFW has jurisdiction over riparian habitats (e.g., riparian woodland) associated with watercourses. Jurisdictional waters are delineated by the outer edge of riparian vegetation or at the top of the bank of streams or lakes, whichever is wider. CDFW may also assert jurisdiction over modified or man-made waterways; such jurisdiction is generally based on the value of such features to support riparian or aquatic plant or animal species. For clarification, of features that may be subject to CDFW jurisdiction, the CDFW Legal Advisor has prepared the following opinion (CDFG ESD 1994):

- Natural waterways that have been subsequently modified and which have the potential to contain fish, aquatic insects, and riparian vegetation will be treated like natural waterways.
- Artificial waterways that have acquired the physical attributes of natural stream courses and which have been viewed by the community as natural stream courses should be treated by [CDFW] as natural waterways.
- Artificial waterways without the attributes of natural waterways should generally not be subject to Fish and Game Code provisions.

CDFW jurisdictional limits may also include artificial stock ponds and irrigation ditches constructed within uplands, and outer drip line limits of adjacent riparian habitat supported by a river, stream, or lake regardless of the riparian area's federal status or its location beyond the defined bed, bank or channel.

Though CDFW does not regulate vernal pools under Section 1602 of the Fish and Game Code, CDFW will assert jurisdiction over California state listed threatened and/or endangered species occurring within vernal pools via the California Endangered Species Act (CESA).

MSHCP Other Plan Requirements

Regardless of whether the site is located within any Criteria Cells, Narrow Endemic Plant Species Survey Areas, or proposed Conservation Areas, and whether it is subject to the focused species surveys associated with those areas, all projects within the Multiple Species Habitat Conservation Plan (MSHCP) area require an evaluation of potential impacts on vernal pools and the protected species associated with those habitats. Vernal pools are defined in the MSHCP as follows:

> Vernal pools are seasonal wetlands that occur in depression areas that have wetland indicators of all three parameters (soils, vegetation, and hydrology) during the wetter portion of the growing season, but normally lack wetland indicators of hydrology and/or vegetation during the drier portion of the growing season. Obligate hydrophytes and facultative wetland plant species are

normally dominant during the wetter portion of the growing season, while upland species (annuals) may be dominant during the drier portion of the growing season.

When a site supports suitable vernal pool habitat for the wildlife species covered by the MSHCP listed below, focused surveys are required to determine their presence or absence from the site.

Vernal Pool Invertebrates

- Santa Rosa Plateau fairy shrimp (*Linderiella santarosae*)
- Riverside fairy shrimp (*Streptocephalus woottoni*)
- vernal pool fairy shrimp (*Branchinecta lynchi*)

Methods

The Survey Area encompasses the Project site, which includes the entirety of the 67.72-acre parcel.

Literature Review

Prior to performing the vernal pool assessment survey, Chambers Group staff conducted a literature review for soils and jurisdictional water features that contribute to hydrology known to occur within the Survey Area. In addition, historical aerial imagery was reviewed over the past 15 years in order to determine areas where potential vernal pools may have occurred (Attachment 1: Figure 2 – Historical Aerial Imagery).

Soils

Prior to performing the field survey, soil maps for the Survey Area were referenced in accordance with categories set forth by the U.S. Department of Agriculture (USDA) Soil Conservation Service and the USDA Natural Resources Conservation Service (NRCS) Web Soil Survey (USDA 2022).

Hydrology

Prior to the field survey, Chambers Group conducted a database analysis to identify potential jurisdictional waters within the Study Area. This included a review of the USFWS National Wetlands Inventory (NWI) maps, National Hydrography Dataset (NHD) blue-line drainages, and historical aerial photographs of the Study Area.

Field Survey

A field delineation of vernal pools was conducted within the Survey Area on April 6, 2022. Potential USACE/RWQCB/CDFW jurisdictional areas identified during the literature search were verified in the field for the presence of definable soils, wetland vegetation, riparian habitat, and hydrology. In the absence of a defined wetland, the presence of a bed and bank or the upper limit of the ordinary high water marks (OHWM) was recorded. Plant species observed or detected within the Survey Area were recorded. In addition, site photographs were taken depicting current site conditions (Attachment 2).

Vernal pools are often difficult to characterize as a wetland because one or more of the wetland parameters (soils, hydrology, and vegetation) may be periodically lacking due to variations in environmental conditions (USACE 1987). Furthermore, vernal pools located within access roads are subject to vehicular disturbance and, in the absence of vegetation, constitute an "atypical situation." Alternative methods described in the *Arid West Supplement* were used to delineate wetland areas. Potential vernal pools lacking vegetation were assessed based on presence of hydrology indicators, local relief and landscape position, vegetation within reference sites, aerial imagery, documented or likely presence of USACE vernal pool indicator species, and other background information.

Hydric soils in vernal pools were inferred based on the presence of strong hydrology indicators. Vernal pool watersheds were visually based on changes in the local microtopography and documented using a hand-held Global Positioning System (GPS) unit with sub-meter accuracy.

Results

Chambers Group biologists Paul Morrissey and Heather Franklin conducted the vernal pool assessment survey within the Survey Area to identify existing or potential vernal pools.

Biological Site Conditions

Soils

According to the results from the USDA NRCS Web Soil Survey (USDA 2022), the Project site is located in the Western Riverside Area, CA679 part of the soil map. Six soil types are known to occur within and/or adjacent to the Project site (Attachment 1: Figure 3 – USDA Soils Map). No hydric soils occur within the Project site. These soil types are described below.

- Grangeville loamy fine sand (GoB) occurs in the western portion of the Survey Area. The parent material is alluvium derived from granite. The available water storage is classified as moderate (approximately 7.4 inches) with a depth to the water table of 0 inches.
- Grangeville sandy loam drained, saline-alkali (GpB) occurs in the northwestern portion of the Survey Area. The parent material is alluvium derived from granite. The available water storage is classified as moderate (approximately 7.2 inches) with a depth to the water table of 0 inches.
- Traver fine sandy loam, saline alkali (Ts) occurs in northeastern portion of the Survey Area. The available water storage is classified as moderate (approximately 6.4 inches) with a depth to the water table of more than 80 inches.
- Traver fine sandy loam, strongly saline-alkali eroded (Tt2) occurs in the northeastern, northwestern and southern portions of the Survey Area. The available water storage is classified as moderate (approximately 6.4 inches) with a depth to the water table of more than 80 inches.
- Traver loamy fine sand eroded (Tp2) occurs in the western, middle, and southern portions of the Survey Area. The parent material is alluvium derived from granite. The available water storage is classified as moderate (approximately 6.2 inches) with a depth to the water table of more than 80 inches.
- Traver loamy fine sand saline-alkali eroded (Tr2) occurs in the middle portion and throughout the boundaries of the Survey Area. The parent material is alluvium derived from granite. The available water storage is classified as moderate (approximately 6.2 inches) with a depth to the water table of more than 80 inches.

Hydrology

The NHD and NWI maps showed no wetlands or jurisdictional features such as drainages or swales within the Project site, and no vernal pools or water features were observed during the survey (Attachment 1: Figure 4 – Jurisdictional Waters Map). In addition, no vernal pools or areas that could support vernal pools were observed in the historical aerial images over the past 15 years. Surface flow appears to flow southwest and likely turns into sheet flow once it exits the Project site. A canal runs parallel to the northern boundary outside the Project site just south of the San Jacinto Valley Regional Water Plant, and a man-made roadside ditch occurs between Sanderson Avenue and the Project site. Both features are located outside the Project boundary, and no work will occur within or adjacent to either feature. The non-jurisdictional roadside ditch located between Sanderson Avenue and the Project site directs surface overflow during rain events and runs under an existing access road as the entrance to the Project site. This area can be avoided during construction with the uses of best management practices (BMPs) during ingress/egress to the Project site.

Vegetation Communities and Other Areas

Two vegetation communities or land types were found within the Survey Area during the biological reconnaissance survey: Ruderal and Developed Landscape (Attachment 1: Figure 5 – Vegetation Communities). The majority of the Project site is developed, with some portions of ruderal vegetation occurring along the outer edges of the site. The communities are described in the following subsections.

Ruderal

Areas classified as Ruderal tend to be dominated by pioneering herbaceous species that readily colonize disturbed ground and that are typically found in temporary, often frequently disturbed habitats (Barbour et al. 1999). The soils in ruderal areas are typically characterized as heavily compacted or frequently disturbed. The vegetation in these areas is adapted to compact soils where water does not readily penetrate the soil. Ruderal areas are often dominated by species of the *Centaurea*, *Brassica*, *Malva*, *Salsola*, *Eremocarpus, Amaranthus*, and *Atriplex* genera.

Areas with Ruderal vegetation were present along the fence surrounding the Survey Area. Native plant species identified within this community on site included two dry big saltbush individuals (*Atriplex lentiformis*), fiddleneck (*Amsinckia menziesii*), and immature California buckwheat (*Eriogonum fasciculatum* var. *polifolium*). Non-native plant species identified within this community on site included red-stemmed filaree (*Erodium cicutarium*), stinknet (*Oncosiphon piluliferum*), foxtail (*Hordeum murinum*), Italian rye grass (*Festuca perennis*), Russian-thistle (*Salsola australis*), and cheeseweed (*Malva parviflora*).

Developed

Developed areas have been altered by humans and now display man-made structures such as urban areas, houses, paved roads, buildings, parks, and other maintained areas (Gray and Bramlet 1992). Developed areas are present throughout the Survey Area, including graded soils, assembled frames for greenhouses, and portions surrounding the greenhouse frames were unvegetated. Based on information provided, the site was graded by a previous owner.

Vernal Pool Assessment Results

Historical aerial imagery was reviewed over the past 15 years in order to determine areas where potential vernal pools may have occurred (Attachment 1: Figure 2 – Historical Aerial Imagery). No vernal pools or areas that could support vernal pools were observed in the historical aerial images over the past 15 years.

No playas or basins were observed within the Project site that could support wetland or vernal pool habitat (i.e., fairy shrimp species). One non-jurisdictional roadside ditch located between Sanderson Avenue and the Project site which directs surface overflow during rain events and runs under an existing access road as the entrance to the Project site. The roadside ditch was comprised of bare ground and emergent ruderal species. No wetland plant species were observed within the ditch. Furthermore, the man-made ditch will be avoided during construction activities.

Emergent ruderal vegetative growth found along Sanderson Avenue, especially in the northeast corner of the Survey Area. This area was inspected for vernal pool indicator species such as San Jacinto Valley crownscale (*Atriplex coronate* var. *notatior*), and other species known to occur in vernal pools and wetlands including popcorn flower (*Plagiobothrys nothofulvus*) and wooly marbles (*Psilocarphus brevissimus*). No vernal pool indicator species were observed within the Survey Area.

Conclusions and Recommendations

Hydrology

No vernal pools or jurisdictional features were observed within the Project site. Surface flow exiting the site in a southwest direction does not appear to connect to any offsite water features subject to CDFW, RWQCB or USACE jurisdiction. A canal runs parallel to the northern boundary outside the Project site, just south of the San Jacinto Valley Regional Water Plant. This feature includes a raised berm which would prevent surface runoff from entering

the canal. A non-jurisdictional man-made roadside ditch occurs between Sanderson Avenue and the Project site. No work is anticipated to occur to the canal or the roadside ditch during the construction activities, and both features can be avoided. No playas or basins that would support vernal pool wildlife species including fairy shrimp were observed within the Survey Area. No vernal pool indicator or wetland plant species were observed within the Survey Area. No hydric soils or areas that could potentially support vernal pools were observed within the Project site. With the absence of vernal pools or wetlands within the Project site or immediately adjacent to the Project site, no impacts to vernal pools are anticipated to occur as a result of Project activities.

Please contact me at (949) 261-5414 ext. 7232 if you have any questions or concerns regarding this memo report.

Sincerely,

CHAMBERS GROUP, INC.

Heather Franklin
Senior Biologist
hfranklin@chambersgroupinc.com
(949) 261-5414 ext. 7232

Attachments

Attachment 1: Figure 1 – Project Location and Vicinity Map
Figure 2 – Historical Aerial Imagery
Figure 3 – USDA Soils Map
Figure 4 – Jurisdictional Waters Map
Figure 5 – Vegetation Communities

Attachment 2: Site Photographs

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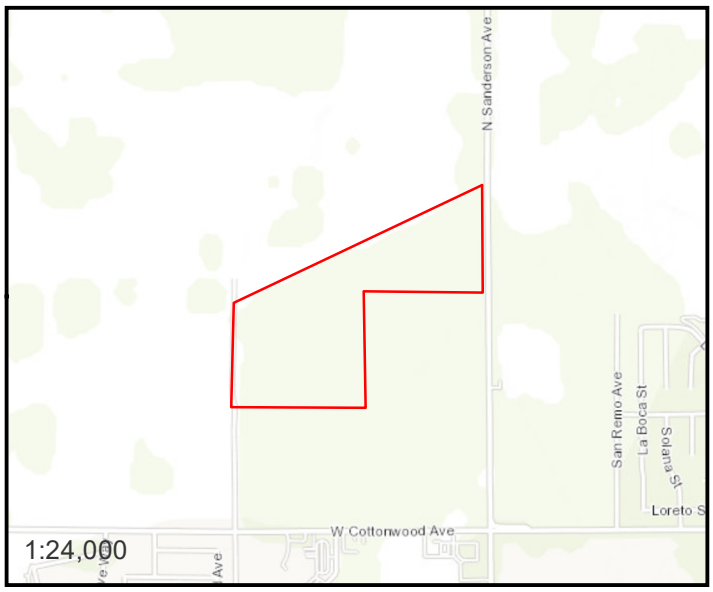
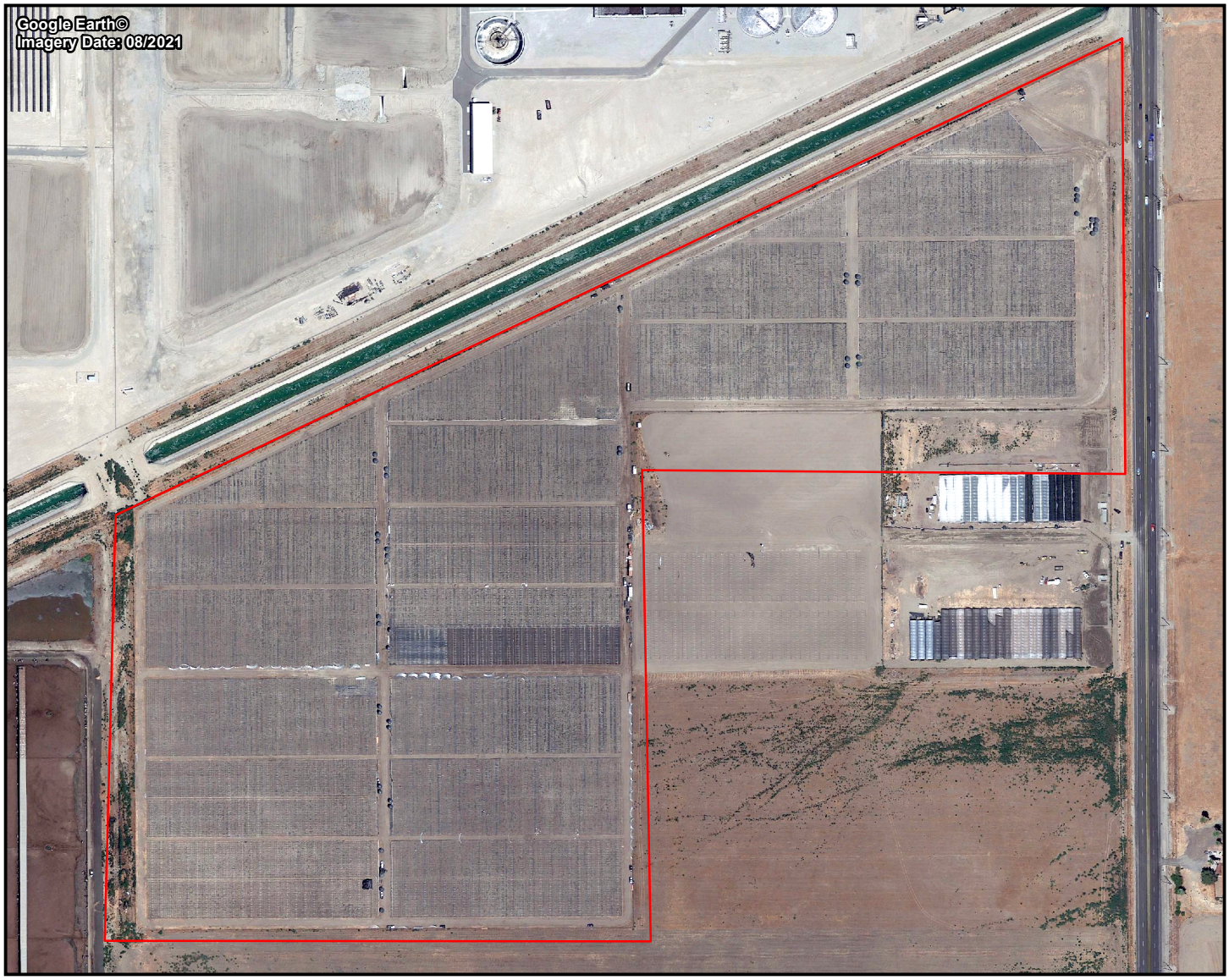
ATTACHMENT 1 – FIGURES





Project Location

Figure 1
San Jacinto Cultivation Farm Project
Project Location and Vicinity

N

0 150 300 600
Feet

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Project Location

N

0 300 600 1,200

Feet

Figure 2

San Jacinto Cultivation Farm Project

Historical Aerial Imagry

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Figure 3
San Jacinto Cultivation Farm Project
USDA Soils

Project Location

USGS Soils

- Grangeville loamy fine sand, drained, 0 to 5 percent slopes
- Grangeville sandy loam, drained, saline-alkali, 0 to 5 percent slopes
- Traver fine sandy loam, saline-alkali
- Traver fine sandy loam, strongly saline-alkali, eroded
- Traver loamy fine sand, eroded
- Traver loamy fine sand, saline-alkali, eroded

N

0 150 300 600

Feet

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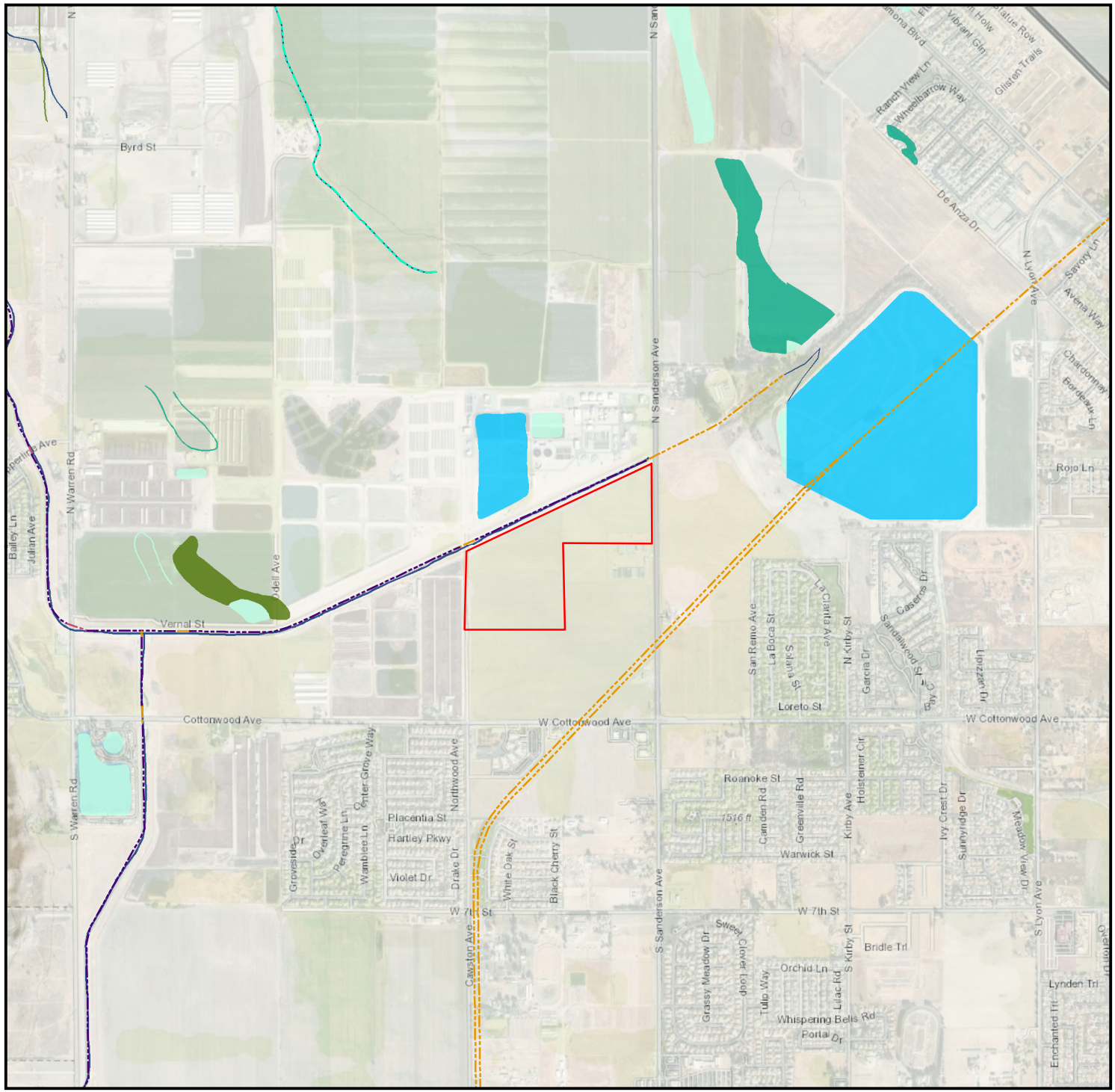

Figure 4

San Jacinto Cultivation Farm Project
NWI and NHD

Project Location

NHD

- Connector
- Pipeline
- Stream/River
- Artificial Path

NWI

- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
- Riverine

N

0 900 1,800 3,600

Feet

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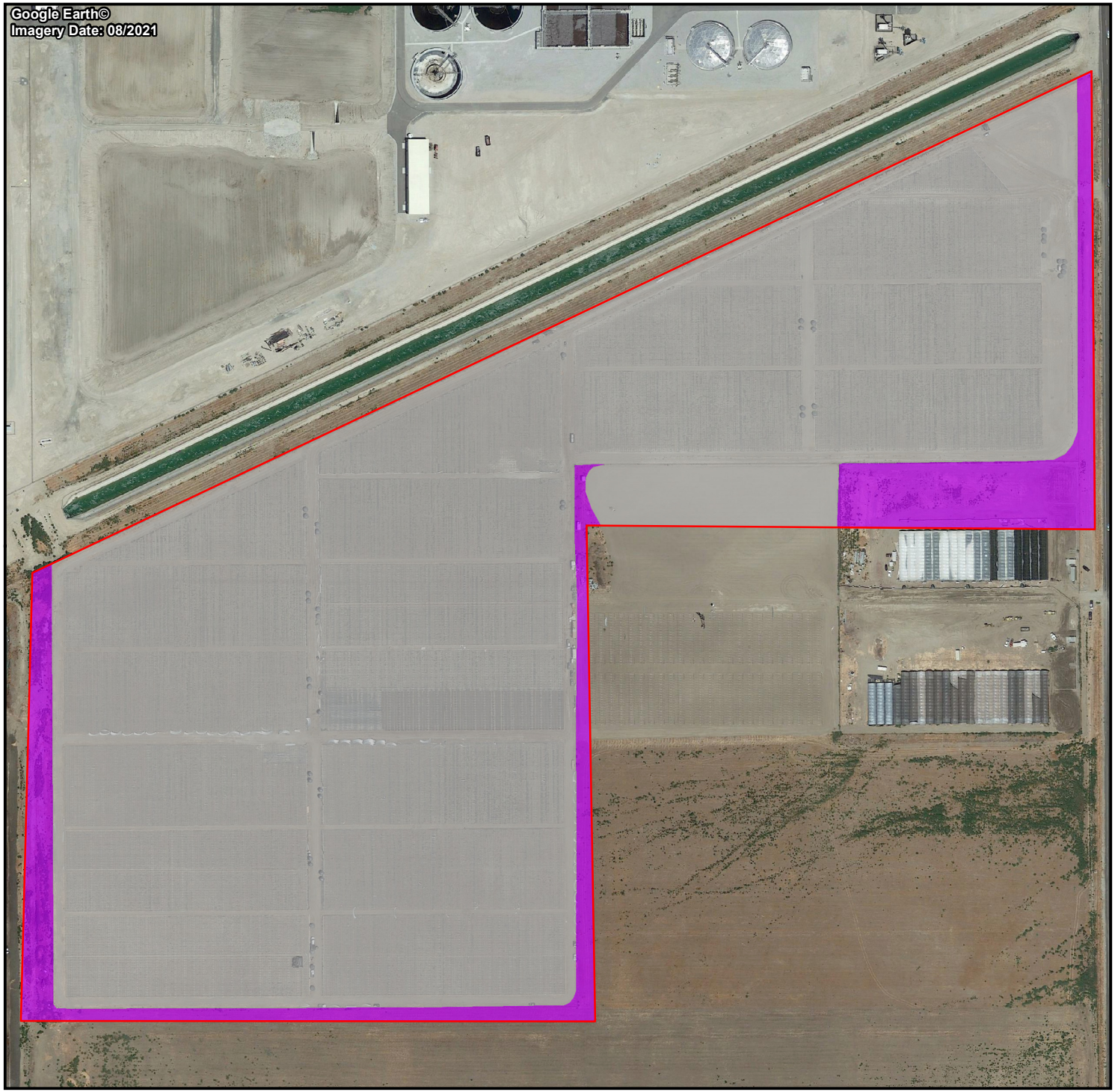

Figure 5
San Jacinto Cultivation Farm Project
Vegetation Communities

Project Location

Vegetation Community

Developed (60.83 ac)

Ruderal (6.94 ac)

N

0 150 300 600

Feet

Name: 21327 BIO Fig 2 Vegetation Communities.Mxd
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ATTACHMENT 2 – SITE PHOTOGRAPHS

ATTACHMENT 2 – SITE PHOTOGRAPHS

Photo 1.

Northern boundary of the Project site between the canal to the north and the site. There is no connectivity from the canal into the site. Photo is facing west.

Photo 2.

Photo showing area along northern access road. No vernal pools or indicative species were observed along the road. Photo is facing northwest.

Photo 3.

Access road along the western boundary of the site. No potential vernal pools were observed throughout the road or adjacent to the road. Photo is facing south.

Photo 4.

Large retention pond located within the dairy farm to the west of the site. There is no connectivity between the pond and the Project site. Photo is facing west.

Photo 5.

Photo showing the lack of connectivity between the retention pond and the Project site. Photo is facing northwest.

Photo 6.

Southwest corner of the Project site. Photo shows no potential vernal pools within or adjacent to the Project site. Photo is facing southwest.

Photo 7.

Overview of Project site and the adjacent lot along the southern portion of the site. No features or connectivity occur within or adjacent to the site. Photo is facing east.

Appendix D – TS Farms San Jacinto Outdoor Cultivation Literature Review Results Letter Report, prepared by Chambers Group, April 26, 2022, updated December 9, 2022.

CULTURAL RESOURCES RECORDS SEARCH AND LITERATURE REVIEW RESULTS LETTER REPORT FOR THE TS FARMS SAN JACINTO OUTDOOR CULTIVATION PROJECT

City of San Jacinto

June 10, 2022; Updated December 12, 2022
9620 Chesapeake Drive, Suite 202
San Diego, CA 92123
(21355)

Kevin White – Planning Manager
Planning Department
City of San Jacinto
595 S. San Jacinto Ave.
San Jacinto, CA 92583

Subject: TS FARMS SAN JACINTO OUTDOOR CULTIVATION LITERATURE REVIEW RESULTS LETTER REPORT

Dear Mr. Kevin White,

Chambers Group, Inc. (Chambers Group) is providing this Letter Report for the cultural resource records search and literature review to City of San Jacinto in support of the TS Farms San Jacinto Outdoor Cultivation Project (Project, Proposed Project) in the City of San Jacinto, Riverside County, California. This assessment included a cultural resources records search and literature review for the Project site and study area (Figure 1). The purpose of the review was to gather and analyze information needed to assess the potential for impacts to cultural resources within the Proposed Project site.

Project Description

The Project Applicant proposes the construction of a three-lot agricultural cultivation facility in the City of San Jacinto, Riverside County, California. The Proposed Project development would include the construction and operation of a cultivation facility that would contain offices, two restrooms, a guard house, and a trash enclosure. In addition, the Project would contain up to 30 parking spaces, and a security fence and gate that would encompass the Project boundary.

The City of San Jacinto is the lead agency for the Proposed Project.

Project Background

With the understanding that the installation of hoop nets on the Project site was considered exempt, TS Farms (Applicant) installed the surrounding fence, and installed the metal framing for the hoop next structures in Quarter 4 of 2021. After discussions with the California Department of Fish and Wildlife (CDFW) in regards to the exemption applicability, further analysis is required to determine the appropriate level of CEQA documentation. Since the meeting with CDFW, the Applicant has stopped any future improvements on the site and has stopped moving the Project forward.

Under CEQA, the impacts of a proposed project must be evaluated by comparing expected environmental conditions after project implementation to conditions at a point in time referred to as the baseline. The changes in environmental conditions between those two scenarios represent the environmental impacts of the proposed project. The description of the environmental conditions in the Project study area under baseline conditions is referred to as the environmental setting. For the purposes of this Initial Study (IS), a baseline was utilized that describes the Project site prior to installation of fencing and the hoop net structures. Additionally, since the site was previously graded under the previous agricultural operations, and no additional grading has occurred, the baseline includes the graded site as it currently exists.

CULTURAL RESOURCES RECORDS SEARCH AND LITERATURE REVIEW RESULTS LETTER REPORT FOR THE TS FARMS SAN JACINTO OUTDOOR CULTIVATION PROJECT

City of San Jacinto

Location and Setting

The Project site is located one-half mile northwest of the N. Sanderson Avenue and Cottonwood Avenue intersection, and approximately 100 feet south of the Casa Loma Canal Aqueduct. The Project site Assessor's Parcel Numbers (APNs) are 342-130-008-7, 342-130-009-8, 342-130-001-0. The Proposed Project site encompasses three previously vacant lots which was previously used as agricultural land. The Project site is approximately 1.5 miles west of the Ramona Expressway Route 79. The Project site is approximately 62 miles east of the Pacific Ocean.

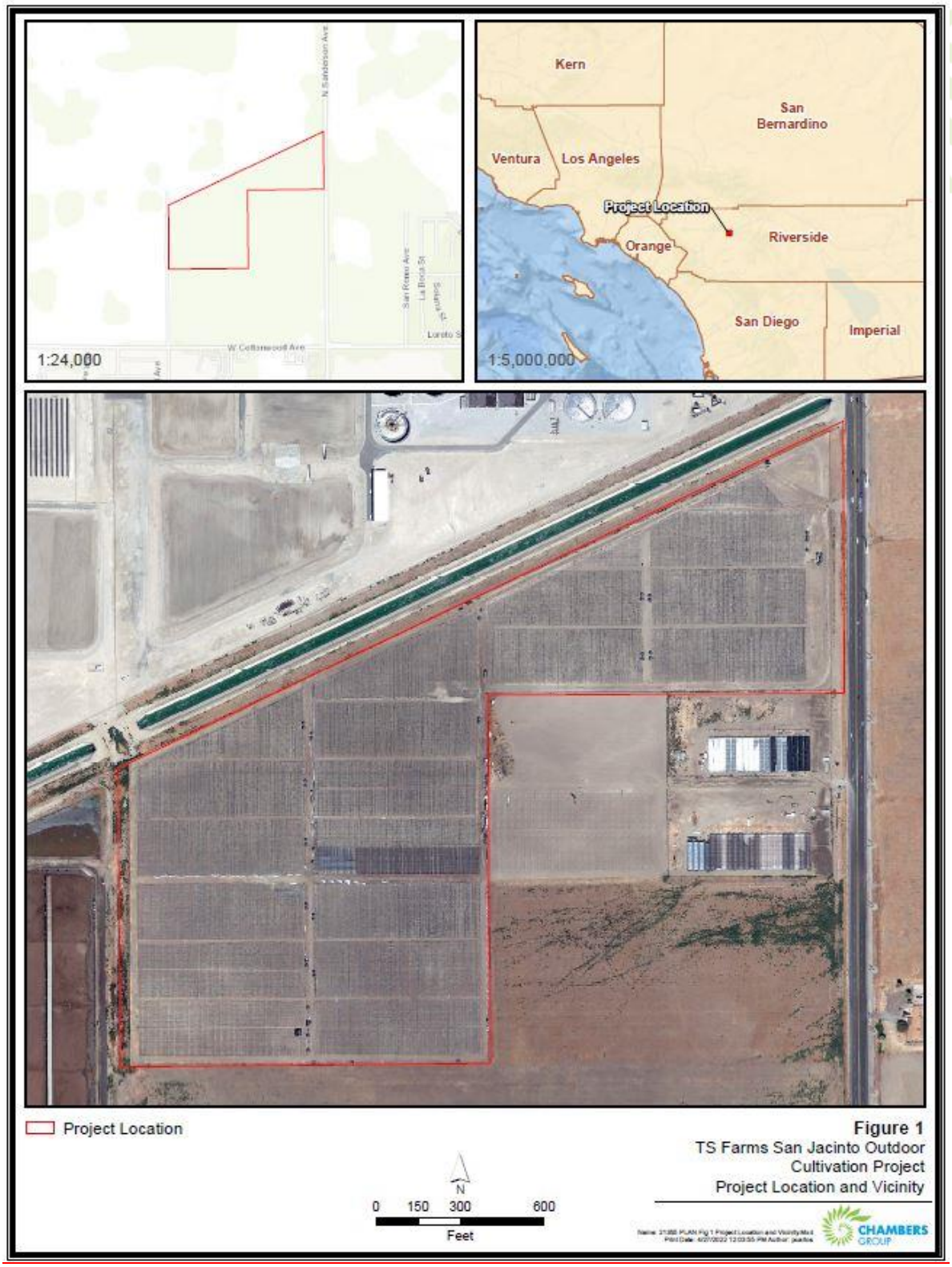

Figure 1: Project Location and Vicinity

Regulatory Context

As the lead agency for the Proposed Project, the City of San Jacinto must comply with the provisions of CEQA, which requires a lead agency to determine whether a project may have a significant effect on historical resources (PRC Section 21084.1). In addition to State regulations, projects built in the City of San Jacinto are subject to a number of local regulations relating to historical resources. The Resources Management Element of the City of San Jacinto General Plan (2006) contains the regulatory framework as it pertains to cultural resources under CEQA and is detailed below.

Under the provisions of CEQA, including the CEQA Statutes (PRC §§ 21083.2 and 21084.1), the CEQA Guidelines (Title 14 CCR § 15064.5), and PRC § 5024.1 (Title 14 CCR § 4850 et seq.), properties expected to be directly or indirectly affected by a proposed project must be evaluated for eligibility for listing in the California Register of Historical Resources (CRHR, PRC § 5024.1).

The purpose of the CRHR is to maintain listings of the State's historical resources and to indicate which properties are to be protected, to the extent prudent and feasible, from material impairment and substantial adverse change. The term *historical resources* includes a resource listed in or determined to be eligible for listing in the CRHR; a resource included in a local register of historical resources; and any object, building, structure, site, area, place, record, or manuscript that a lead agency determines to be historically significant (CCR § 15064.5[a]). The criteria for listing properties in the CRHR were expressly developed in accordance with previously established criteria developed for listing in the National Register of Historic Places (NRHP). The California Office of Historic Preservation (OHP 1995:2) regards "any physical evidence of human activities over 45 years old" as meriting recordation and evaluation.

California Register of Historic Resources

A cultural resource is considered "historically significant" under CEQA if the resource meets one or more of the criteria for listing in the CRHR. The CRHR was designed to be used by State and local agencies, private groups, and citizens to identify existing cultural resources within the state and to indicate which of those resources should be protected, to the extent prudent and feasible, from substantial adverse change. The following criteria have been established for the CRHR. A resource is considered significant if it:

1. is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;
2. is associated with the lives of persons important in our past;
3. 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
4. has yielded, or may be likely to yield, information important in prehistory or history.

In addition to meeting one or more of the above criteria, historical resources eligible for listing in the CRHR must retain enough of their historic character or appearance to be able to convey the reasons for their significance. Such integrity is evaluated in regard to the retention of location, design, setting, materials, workmanship, feeling, and association.

Under CEQA, if an archeological site is not a historical resource but meets the definition of a "unique archeological resource" as defined in PRC § 21083.2, then it should be treated in accordance with the provisions of that section. A *unique archaeological resource* is defined as follows:

- An archaeological artifact, object, or site about which it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that it meets any of the following criteria:
    - Contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information

- Has a special and particular quality, such as being the oldest of its type or the best available example of its type
- Is directly associated with a scientifically recognized important prehistoric or historic event or person

Resources that neither meet any of these criteria for listing in the CRHR nor qualify as a "unique archaeological resource" under CEQA PRC § 21083.2 are viewed as not significant. Under CEQA, "A non-unique archaeological resource need be given no further consideration, other than the simple recording of its existence by the lead agency if it so elects" (PRC § 21083.2[h]).

Impacts that adversely alter the significance of a resource listed in or eligible for listing in the CRHR are considered a significant effect on the environment. Impacts to historical resources from a proposed project are thus considered significant if the project:

(1) physically destroys or damages all or part of a resource;

(2) changes the character of the use of the resource or physical feature within the setting of the resource, which contributes to its significance; or

(3) introduces visual, atmospheric, or audible elements that diminish the integrity of significant features of the resource.

Assembly Bill 52

Assembly Bill (AB) 52 was enacted in 2015 and expands CEQA by defining a new resource category: tribal cultural resources. AB 52 establishes that "a project with an effect that may cause a substantial adverse change in the significance of a tribal cultural resource is a project that may have a significant effect on the environment" (PRC Section 21084.2). AB 52 also establishes a formal consultation process for California tribes regarding those resources. The consultation process must be completed before a CEQA document can be certified. AB 52 requires that lead agencies "begin consultation with a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the proposed project." Native American tribes to be included in the process are those that have requested notice of projects proposed in the jurisdiction of the lead agency. It further states that the lead agency shall establish measures to avoid impacts that would alter the significant characteristics of a tribal cultural resource, when feasible (PRC Section 21084.3). PRC Section 21074 (a)(1)(A) and (B) defines tribal cultural resources as "sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe" and meets either of the following criteria:

- Listed or eligible for listing in the CRHR, or in a local register of historical resources as defined in PRC Section 5020.1(k)
- 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 PRC Section 5024.1 (in applying the criteria set forth in subdivision (c) of PRC Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe)

Local

In addition to State regulations, projects proposed in the City of San Jacinto are also subject to a number of local regulations, these regulations are included in the Resources Management Element (Heritage Resources) of the City of San Jacinto General Plan (City 2022), this section contains the Resource Management Element which expresses community goals to protect and enhance environmental resources and open space and encourages the protection and enhancement of these resources for generations to come.

Resource Management Goal 3: Heritage Resources: A community that celebrates and preserves its rich culture and historic assets.

> **Policy RM-3.1 Preservation.** Protect areas containing significant historic, archaeological, and paleontologic resources, as defined by the California Public Resources Code.
>
> **Policy RM-3.4 Tribal Consultation.** Consult with Native American tribes that may be impacted by proposed development, as necessary, and in accordance with state, local, and tribal intergovernmental consultation requirements.
>
> **Policy RM-3.6 Historic Preservation.** Identify, designate, and protect buildings, districts, and sites of historic importance within San Jacinto

The Implementation Program provides actions to implement the adopted policies and plans identified in the Resource Management Element. The Resource Management Element Implementation Program is a series of actions, procedures and techniques that includes a description of the responsible agency/department, funding source, time frame and related policies in the Resource Management Element.

RM-3a Continue to assess development proposals for potential impacts to sensitive historic, archaeological, and paleontological resources pursuant to the California Environmental Quality Act (CEQA).

RM-3b For structures that potentially have historic significance, the City shall require that a study be conducted by a professional archaeologist or historian to determine the actual significance of the structure and potential impacts of the proposed development in accordance with CEQA Guidelines Section 15064.5. The City may require modification of the project and/or mitigation measures to avoid any impact to a historic structure, when feasible, such as retaining or rehabilitating historic buildings pursuant to City of San Jacinto guidelines or relocating the historic building as feasible.

RM-3c For all development proposals within areas with the potential to contain prehistoric/historic resources, the City shall require a study to be conducted by a professional archaeologist. The objective of the study will be to determine if significant archaeological resources are potentially present and if the project will significantly impact these resources. If significant impacts are identified, the City may require the project to be modified to avoid the impacts, or require mitigation measures to mitigate the impacts. Mitigation may involve archaeological investigation and resources recovery.

RM-3d For projects that involve ground disturbing activities on native soil, prior to the issuance of a grading permit, the developer shall enter a Treatment and Disposition Agreement (TDA) with the Soboba Band of Luiseño Indians to address treatment and disposition of archaeological/cultural resources and human remains associated with Soboba Band of Luiseño Indians that may be uncovered or otherwise discovered during construction of the project. The TDA may establish provisions for tribal monitors. Following execution of the TDA by the developer and Soboba Band of Luiseño Indians, the TDA will be incorporated by reference into the grading permit.

RM-3e The City shall require an assessment of the potential for development proposals to significantly impact paleontological resources pursuant to the California Environmental Quality Act Guidelines. If the project involves earthworks, the City may require a study conducted by a professional paleontologist to determine if paleontological assets are present, and if the project will significantly impact the resources. If significant impacts are identified, the City may require the project to be modified to avoid impacting the paleontological materials, require monitoring of rock units with high potential to contain significant nonrenewable paleontologic resources, or require mitigation measures to mitigate the impacts, such as recovering the paleontological resources for preservation.

RM-3f The City shall make provisions for archeological resources accidentally discovered during construction for projects where the City has approval authority over the project. These provisions shall include an immediate evaluation of the find and contingency funding and time allotment sufficient to allow for the recovery of the archeological resource or implement measures to avoid disturbing the resource if the archeological resource is determined to be unique.

RM-3g In the event of discovery or recognition of any human remains in any location other than a dedicated cemetery, the City shall halt excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent human remains until the County Coroner has been informed and has determined that no investigation of the cause of death is required. If the remains are of Native American origin, there shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent human remains until the descendants from the deceased Native Americans have made a recommendation to the landowner or the persons responsible for the excavation work, for means of treating or disposing of, with appropriate dignity, the human remains and any associated grave goods as provided in Public Resources Code section 5097.98, or the Native American Heritage Commission was unable to identify a descendant or the descendant failed to make a recommendation within 24 hours after being granted access to the site.

Environmental Setting

The City of San Jacinto is located at the north end of the San Jacinto Valley, with the City of Hemet to its south and City of Beaumont to the north. It is bounded to the north by the San Bernardino Mountains (transverse ranges geomorphic province), to the west by the Elsinore fault zone, to the east by the San Jacinto fault zone. As such, this area is characterized by the presence of decomposing granite derived from the nearby hillsides and windborne or water-borne alluvial deposits.

The University of California, Davis SoilWeb database was consulted to identify soils that underlie the Project site. The database indicates that the property is underlain by the Travor soil association, which consists of alluvium derived from granite. A loamy fine sand, with saline-alkali properties. The valley fill deposits are generally divided into younger and older alluvium (Techlink 2002). Maximum depths of valley fill reach about 900 feet in the western and northern parts of the basin but may not exceed 5,000 feet in the eastern part of the basin between Casa Loma and Claremont faults (Techlink 2002).

The geologic units underlying this Project are mapped entirely as alluvial sand and clay from the Holocene period (Dibblee and Minch 2003). Holocene alluvial units are considered to be of high preservation value, but material found is unlikely to be fossil material due to the relatively modern associated dates of the deposits. If excavation activity disturbs deeper sediment dating to the earliest parts of the Holocene or Late Pleistocene periods, the material could be scientifically significant.

In Southern California, the middle Pleistocene is generally associated with a pre-human presence, although recent research suggests early human exploration of North America earlier in the Late Pleistocene than previously documented. Fossil specimens are also associated with the Pleistocene, particularly in areas where deposits are referred to as “older Alluvium.” The Holocene is the most recent geologic period and one that is directly associated with human activity. The Holocene is also generally associated with “younger Alluvium,” which tend not to be fossil bearing, except in instances where fossils have been redeposited (Dibblee and Minch 2003).

Cultural Setting

Prehistoric Overview

During the twentieth century, many archaeologists developed chronological sequences to explain prehistoric cultural changes within all or portions of Southern California (Moratto 1984; Jones and Klar 2007). A prehistoric chronology was devised for the Southern California coastal region based on early studies and focused on data synthesis that included four horizons: Early Man, Milling Stone, Intermediate, and Late Prehistoric (Wallace 1955, 1978). Though initially lacking the chronological precision of absolute dates (Moratto 1984:159), Wallace’s 1955 synthesis has been modified and improved using thousands of radiocarbon dates obtained by Southern California researchers over recent decades (Byrd and Raab 2007:217; Koerper and Drover 1983; Koerper et al. 2002).

CULTURAL RESOURCES RECORDS SEARCH AND LITERATURE REVIEW RESULTS LETTER REPORT FOR THE TS FARMS SAN JACINTO OUTDOOR CULTIVATION PROJECT

City of San Jacinto

Ethnographic Overview

The Cahuilla, along with the Luiseño and the Gabrielino, are one of the most southwesterly of the Shoshonean or Uto-Aztecan speakers. They are members of the Takic branch of this large language family. Traditional Cahuilla territory originally included western and part of central Riverside County and extended into northeastern San Diego and northwestern Imperial counties. The western boundary generally followed the Santa Ana, Elsinore, and Palomar Mountains. The northern boundary extended north of Riverside to the San Gabriel and San Bernardino Mountains and includes the area encompassing the current Project site. Cahuilla territory extended east to include the Coachella Valley and down the valley as far south as the approximate middle of the Salton Sea. The approximate southern territorial limits included Borrego springs and the south end of the Santa Rosa Mountains. The Cahuilla territory consisted of the Mountain, the Pass or Western, and the Desert divisions (Bean 1978; Hooper 1920:316; Strong 1929).

Cahuilla

The Cahuilla traditional territory originally included the San Jacinto region. According to Kroeber (1925), Cahuilla society consisted of two ceremonial divisions or moieties: wildcat and coyote. People were further divided into somewhat localized, patrilineal clans. Each clan had a chief: *net* in Cahuilla (Kroeber 1925). Some villages contained people of only one clan, but other villages had more than one clan. Also, people of one clan might live in more than one village. Chiefs were usually chosen by heredity. The chief typically was a religious leader of the larger social group, from which the chief drew certain wealth. A chief ordered ceremonies, but it was his assistant, the paha', who executed them. Choice hunting and gathering areas were owned by the clan. The clan chief also settled intraclan disputes and met with other *nets* to solve interclan problems and organize ceremonies among clans.

The Cahuilla sustained themselves through hunting, gathering, and fishing. Major villages were fully occupied during the winter; but, during other seasons, task groups made periodic forays to collect various plant foods, with larger groupings from several villages organizing for the annual acorn harvest (Bean and Saubel 1972). Bean and Saubel (1972) have recorded the use of several hundred species of plants used for food, building/artifact materials, and medicines. The major plant foods included acorns, pinyon nuts, and various seed-producing legumes. Agave, wild fruits and berries, tubers, cactus bulbs, roots and greens, and seeds complemented these.

Hunting focused on both small and medium-sized mammals, such as rodents and rabbits, and large mammals, such as pronghorn sheep, mountain sheep, and mule deer. Hunting was done using the throwing stick or the bow and arrow, although nets and traps were also used for small animals (Bean 1972).

Cahuilla material culture included dome-shaped to rectangular type houses; aboveground granaries; baskets, pottery, and grinding implements; throwing sticks, clubs, nets, traps, dead falls with seed triggers, spring-poled snares, arrows and self-backed and sinew-backed bows. They sometimes fired bush clumps to drive game out in the open and flares to attract birds at night. Baskets of various kinds were used for winnowing, leaching, grinding, transporting, parching, storing, and cooking. Pottery vessels were used for carrying water, for storage, cooking, and serving food and drink.

Cahuilla tools included mortars and pestles; manos and metates; fire drills; awls; arrow-straighteners; flint knives; wood, horn, and bone spoons and stirrers; scrapers; and hammerstones. Woven rabbit-skin blankets served to keep people warm in cold weather. Feathered costumes were worn for ceremonial events; and at these events the Cahuilla made music using rattles derived from insect cocoon, turtle and tortoise shell, and deer-hoofs, along with wood rasps, bone whistles, bull-roarers, and flutes, to make music. They wove bags, storage pouches, cords, and nets from the fibers of yucca, agave, and other plants (Drucker 1937; Bean 1972, 1978).

Luiseño

Additionally, Luiseño Indians inhabited the San Jacinto region prior to European contact. Luiseño Indians sustained themselves by cultivating small crops and utilizing the local natural resources, including the San Jacinto River. After the establishment of the Mission San Luis Rey, Luiseño and Cahuilla Indians worked at the mission as ranch laborers. In 1842, the land encompassing the Mission San Luis Rey was granted to José Antonio Estudillo and turned into the Rancho

San Jacinto Viejo with the stipulation that he continued to allow the Native population to live and inhabit the land. When the United States took control of California, the Estudillo family began to sell off portions of their land to private parties. The division and dispersal of the Rancho left native peoples without land or resources. After a lengthy legal battle, the United States reserved 3,172 acres of the old Rancho to the Soboba people and the Soboba Indian Reservation was finally established in 1911. The Soboba Reservation has since expanded to 7,000 acres, but the residents have had to mitigate the loss of several natural resources which they once relied upon.

The land surrounding and encompassing the present-day city of San Jacinto was initially inhabited by the Luiseño Indians. European contact within the region was probably first made in 1774 when The Anza Expedition passed through the San Jacinto Valley on their way to the San Gabriel Mission. At the time of European contact, the Luiseño Indians were inhabiting the region and organized in patrilocal villages consisting of several patrilineal related families (Soboba Band of Luiseño Indians 2013). The village site of "Savabo" was an important prehistoric village site because it was used as an exchange site between the surrounding tribes of Cahuilla, Gabrielino, and Serrano (CRM TECH 2014). While firm and defining borders cannot be known, there is archaeological, ethnographic, and historic evidence to support prehistoric use by both groups. Following European contact, members of the Luiseño and Cahuilla tribes coalesced into the Soboba band (of the Luiseño Indians) (The Soboba Band of Luiseño Indians 2015).

Historic Overview

Post-European contact history for the state of California is generally divided into three periods: the Spanish Period (1769–1822), the Mexican Period (1822–1848), and the American Period (1848– present). Briefly, and in very general terms, the Spanish Period encompassed the earliest historic-period explorations of the West, colonization, missionization and proselytization across the western frontier, the establishment of major centers such as Los Angeles and Monterey and a line of missions and presidios with attendant satellite communities, minor prospecting, and a foundational economic structure based on the rancho system.

The Mexican Period initiated with a continuation of the same structures; however, commensurate with the political changes that led to the establishment of the Mexican state the missions and presidios were secularized, the lands parceled, and Indian laborers released. Increased global trade introduced both foreign and American actors into the Mexican economic and political sphere, and both coincidentally, and purposefully, smoothing the transition to the American Period.

The American Period was ushered in with a momentous influx of people seeking fortune in the Sierra foothills where gold was "discovered" in 1848. By the early 1850s people from all over the globe had made their way to California. Expansive industries were required to supply the early mining operations, such as forestry products, food networks such as grains, poultry, cattle, water systems, which intensified the early Mexican Period systems of ranches and supply chains, as well as the development and expansion of port cities to supply hard goods and clothes, animals, and people along improved trail and road networks. California cycled through boom and bust for several decade until World War I when the Department of the Navy began porting war ships along the west coast. Subsequently, California has grown, and contracted, predominantly around military policy along the west coast, and the Pacific Ocean. Following the industrial expansion related to World War II and the Cold War, technology and systems associated have come to fore as economic drivers.

City of San Jacinto

The first native people settled in the San Jacinto Valley thousands of years ago. Later, the Serrano and Cahuilla people arrived. Their villages were located along and near streams and springs. They were hunters and gatherers and they subsisted primarily on small game and acorns.

The first Spanish explorers entered the San Jacinto Valley in the early 1770s. In 1774, and again in 1775, Col. Juan Bautista de Anza led two expeditions up from Mexico, crossing the Colorado River at Yuma and continuing across the Borrego Desert and up Coyote Canyon. For a few years, the Valley was on the main overland route to California.

Between 1820 and 1870 San Jacinto began with cattle ranches in the valley, which was named St. Hyacinth (San Jacinto in Spanish). After 1834, the government began giving land grants to private individuals and the community began to develop.

The City was founded in 1870 and incorporated in 1888, making San Jacinto the oldest incorporated city in Riverside County. For more than 100 years the fertile valley supported businesses and ranches with jobs, good resources and bumper crops such as grains apricots, peaches, walnuts and citrus. In the early 1900s, the local hot springs and mild climate attracted many visitors and new residents to the area. Being the oldest incorporated city in Riverside County, San Jacinto contains many late 19th and early 20th century homes, including a number of Victorian houses and California bungalows. In addition, the City contains several late 19th and early 20th century commercial structures in the downtown area (City 2022).

Methods of Review

Chambers Group requested a records search from the California Historical Resources Information System (CHRIS) Information Center (EIC) at on April 7, 2022. The EIC returned the records search results on April 19, 2022, providing information on all documented cultural resources and previous archaeological investigations within one-half-mile of the Project site. A one-half-mile study area was requested to provide additional context to the Project site and surrounding area and more information on which to base this review. Resources consulted during the records search conducted by the EIC included the NRHP, California Historical Landmarks (CHL), California Points of Historical Interest (CPHI), Caltrans Historic Highway Bridge Inventory, the California State Historic Resources Inventory, local registries of historic properties, and a review of available Sanborn Fire Insurance maps as well as historic photographs, maps, and aerial imagery. The task also included a search for potential prehistoric and/or historic burials (human remains) evident in previous site records and/or historical maps. In addition, Chambers Group submitted a request to the Native American Heritage Commission (NAHC) for a review of the Sacred Land Files (SLF) for the Project site and surrounding vicinity. Results of the records search and additional research are detailed below and included in Attachment B.

Additionally, on April 7, 2022, Chambers Group requested a paleontological records search from the Western Science Center (WSC). This information was requested with the intent to provide further context related to the paleontological sensitivity of the area based on known fossil locations identified within the Project site or one-half mile study area. The paleontological records provide insight into what associated geological formations are more likely to contain fossils as well as the associated depths and placement of the known fossil locals relative to the geological formations in the area. On April 22, 2022, Chambers Group received the results of the records search. Results of the records search are detailed below.

Cultural Resources Reports within the Study Area

Based on the records search conducted by the EIC, 26 cultural resource studies have previously been completed within the one-half-mile records search radius. Table 1 provides further details of these 26 studies. Of these 26 reports, four are located within the Project site (i.e., RI-06590, RI-08495, RI-09689, RI-09690). These projects are bolded and italicized in the table.

Table 1: Previously Cultural Resources Studies within the One-Half-Mile Study Area

Report Number	Year	Author	Title	Resources	Within Project Boundary?
RI-02885	1990	Arkush, Brooke	An Archaeological Assessment of Five Potential Sites for The Perris Water Treatment Plant, Located Near	33-000397, 33-000402, 33-000403, 33-000405,	No

Report Number	Year	Author	Title	Resources	Within Project Boundary?
			Lakeview in Western Riverside County, California.	33-000407, 33-000551, 33-000575, 33-001138, 33-001842, 33-002916, 33-002920, 33-002921, 33-002922, 33-002924, 33-002925, 33-002926, 33-002927, 33-003309, 33-003310, 33-003311, 33-003312, 33-003313, 33-003314, 33-003315, 33-003316, 33-003318, 33-003319, 33-003958	
RI-03791	1991	Drover, Christopher.	A Cultural Resources Assessment of the 800 Acre Sunrise Ranch, Lakeview And San Jacinto USGS Quad, Riverside County		No
RI-04404	2000	Jones and Stokes Associates, Inc	Final Cultural Resources Inventory Report for The Williams Communications, Inc., Fiber Optic Cable System Installation Project, Riverside to San Diego, California Vol I-IV.	33-000816, 33-000817, 33-000862, 33-001845, 33-002970, 33-003081, 33-003839, 33-004202, 33-004624, 33-004744, 33-004768, 33-007587, 33-007601, 33-008105,	No

Report Number	Year	Author	Title	Resources	Within Project Boundary?
				33-008172, 33-009772, 33-009773, 33-009774, 33-009775, 33-009776	
RI-04856	2001	Dice, Michael and Leslie Nay Irish	A Phase I Archaeological Survey of The De Anza Temporary Lift Station Project, City of San Jacinto, California		No
RI-05161	2004	Moslak, Ken and John Cook	Cultural Resources Study of The Proposed Villages of San Jicinto Project, San Jacinto, Riverside County, California	33-007322, 33-014888, 33-014889	No
RI-06590	***2006***	***Bai Tang, Michael Hogan, and Thomas J. Melzer***	***Historical/Archaeological Resources Survey Report: Tentative Tract Map No. 33141, City of San Jacinto, Riverside County, California***		***Yes***
RI-06591	2005	Tang, Bai, Michael Hogan, Adrian Sanchez Moreno, And Daniel Ballester	Historical/Archaeological Resources Survey Report, Tentative Tract Map No. 31555, City ff San Jacinto, Riverside County, CA		No
RI-06743	2006	Austerman, Virginia	Cultural Resources Assessment: Valle Reseda Project, City of San Jacinto, Riverside County, California		No
RI-06819	2006	McKenna, Jeanette A.	A Phase I Cultural Resources Survey of the Proposed Valle Reseda, L.P. Project Area, Located in the San Jacinto Area of Riverside County, California		No
RI-06824	2007	Austerman, Virginia	Cultural Resources Assessment, Sanderson		No

Report Number	Year	Author	Title	Resources	Within Project Boundary?
			Avenue Widening Project, City of San Jacinto, Riverside County, California		
RI-06871	2005	Hunt, Kevin, Alex Wesson, and Joan Brown	Cultural Resources Survey for the San Jacinto Fire Station Project, Riverside County, California		No
RI-07197	2002	Duke, Curt	Cultural Resource Assessment: AT&T Wireless Services, Facility No. D454B, Riverside County, California		No
RI-07415	2007	Patterson, Joshua D. and Tsunoda, Koji	Archaeological Survey Report for Southern California Edison Company Deteriorated Pole Replacement Project for a Total of Six Poles on Winery 12 kV (Pole #222333S), Chawa 12 kV (Pole #218260S), Easter 12 kV (Pole #2177996E) and Corsair 12 kV (Poles #1894778E, 1894779E, and 1894788E) Circuits in Riverside County, California	56-001265, 56-001267, 56-001269	No
RI-07558	2008	George, Joan	Phase-I Cultural Resources Survey KZ Holdings Project, San Jacinto, California	19-001041, 19-001402, 19-002075, 19-002076, 19-120027, 56-000137, 56-000140, 56-000192, 56-000193, 56-001109, 56-001265, 56-001266, 56-100048, 56-100049, 56-152750	No
RI-07670	2007	Smallwood, Josh, Harry M. Quinn, Daniel Ballester, and John J. Eddy	Identification And Evaluation of Historic Properties San Jacinto Valley Regional Water District Reclamation Facility Expansion Project		No

Report Number	Year	Author	Title	Resources	Within Project Boundary?
			700 N Sanderson Avenue, City of San Jacinto, Riverside County, California		
RI-07672	2007	Clowery-Moreno, Sara and Brian F. Smith	A Phase 1 Archaeological Assessment for the Silverleaf Center Project San Jacinto, Riverside County, California APN 436-360-001		No
RI-07883	2008	Smallwood, Josh and Laura Hensley Shaker	Historical/Archaeological Resources Survey Report: Cottonwood Avenue Mixed-Use Project, City of San Jacinto, Riverside County, California	33-015734	No
RI-08160	2008	Michael Hogan and Bai Tang	Historical/Archaeological Resources Survey Report San Jacinto Master Drainage Plan In and near the City of San Jacinto Riverside County, California		No
RI-08350	2009	Deidre Encarnacion, Daniel Ballester, and Laura H. Shaker	Historical / Archaeological Resources Survey Report: EMWD Citrus In-Lieu Northern Alignment Reach 1, City of San Jacinto, Riverside County, California.		No
RI-08427	2001	Laurie S. White	Letter Report: Records Search Results for Nextel Communications Facility CA6750D (Sanderson), City of San Jacinto, Riverside County, California.		No
RI-08495	***2010***	***Joan George, Vanessa Mirro, and Elizabeth Dennison***	***Supplemental Cultural Resources Survey Report: Cultural Resources in Southern San Jacinto Valley: Realign State Route 79 between***	***33-009014, 33-009632, 33-009712, 33-014251, 33-014815, 33-014818,***	***Yes***

Report Number	Year	Author	Title	Resources	Within Project Boundary?
			Domenigoni Parkway and Gilman Springs Road in the Cities of Hemet and San Jacinto and the County of Riverside. Riverside County, California	*33-014819, 33-014821, 33-014822, 33-014823, 33-014826, 33-014827, 33-014829, 33-014830, 33-014831, 33-014832, 33-014833, 33-014834, 33-014835, 33-014836, 33-014837, 33-014838, 33-015446, 33-015447, 33-015661, 33-017631, 33-017632, 33-017633, 33-017634, 33-017635*	
RI-09689	*2014*	*Antonina M. Delu, John J. Eddy, and Gabrielle Duff*	*First Supplemental Historic Property Survey Report Realign State Route 79 between Domenigoni Parkway and Gilman Springs Road in the Cities of Hemet and San Jacinto and the County of Riverside, Riverside County, California, District 8-RIV-79-KP R25.4/R54.4 (PM R15.78/R33.80), PN 0800000784/EA 08-49400*	*33-005461, 33-005462, 33-006884, 33-007266, 33-007267, 33-007836, 33-007837, 33-014814, 33-014816, 33-014817, 33-014820, 33-014824, 33-014825, 33-014839, 33-014840, 33-014841, 33-015442, 33-015443, 33-015444, 33-015445, 33-015448, 33-015449,*	*Yes*

Report Number	Year	Author	Title	Resources	Within Project Boundary?
				33-015450, 33-015658, 33-015659, 33-015662, 33-015664, 33-015676	
RI-09690	***2014***	***Antonina Delu and Gabrielle Duff***	***First Supplemental Archaeological Survey Report Realign State Route 79 between Domenigoni Parkway and Gilman Springs Road in the Cities of Hemet and San Jacinto and the County of Riverside, Riverside County, California, District 8RIV-79-KP R25.4/R54.4 (PM R15.78/R33.80), PN 0800000784/EA 08-49400***		***Yes***
RI-10462	2018	Andrew D. Miller	Historic Property Survey Report for the Sanderson Avenue Safety Improvements Project City of San Jacinto, Riverside County, California HSJPL 5075(021)		No
RI-10463	2018	Andrew D. Miller	Archaeological Survey Report for the Sanderson Avenue Safety Improvements Project City of San Jacinto, Riverside County, California HSIPL 5075(021)		No
RI-10695	2015	Don C. Perez	Cultural Resources Survey Blaze / Ensite #22117 (284939)		No

Previously Recorded Cultural Resources within the Study Area

Based upon the records search conducted by the EIC, seven previously recorded cultural resources are recorded within the one-half-mile records search radius (Table 2). Of those seven previously recorded resources, none are located within the Project site. A map of the record search results is included in Confidential Attachment B.

Table 1: Previously Recorded Cultural Resources within the One-Half-Mile Study Area

Primary Number	Trinomial	Resource Names	Site Description	Within Project Boundary?
P-33-007322			Historic Site	No
P-33-009697		Russian Trans-Polar Landing Site	Historic landmark Site	No
P-33-011265	CA-RIV-006726H	Casa Loma Canal	Historic Site	No
P-33-014888			Prehistoric Isolate	No
P-33-014889			Prehistoric Isolate	No
P-33-015734	CA-RIV-008195		Historic Site	No
P-33-015735			Historic Site	No

Casa Loma Canal

The Casa Loma Canal parallels the northern boundary of the Project site today. The SCCIC records search provided two site records that include portions of the Casa Loma Canal, CA-RIV-006726H & CA- RIV-008195. The former, CA-RIV-006726H, included portions of the San Diego Canal Aqueduct and the Colorado River Aqueduct but do not appear to address any portion directly adjacent to the current Project site. The site record CA-RIV-008195 addresses a portion of the Casa Loma Canal that is nearest to the current Project site. In this site record, The San Diego Aqueduct/ Casa Loma Canal was investigated by Applied Earthworks in 2005 for California Department of Transportation as part of the proposed State Route 79 Realignment between Domenigoni Parkway and Gilman Springs Road in the cities of Hemet and San Jacinto and the County of Riverside. Further site record updates were included in 2011 and 2014. The CA-RIV-008195 site record was also updated in 2008 by Jones and Stokes for a project by Southern California Edison Company. Both the 2005 and 2008 studies included field surveys on both sides of the canal with negative results. While the portions of the Casa Loma Canal addressed in the 2008 study were recommended eligible for inclusion on the NRHP and CRHR, the current proposed Project will not impact this eligible resource. There is a fenced boundary at the margin of the current Project site as well as another fence that bounds the canal, both of which completely restrict any access or impacts from the current Project site.

Background Research Results

In addition to the records search review, Chambers Group archaeologists completed extensive background research to determine if any additional historic properties, landmarks, bridges, or other potentially significant or listed properties are located within the Project site or one-half-mile study area. This background research included, but was not limited to, the NRHP, California State Historic Property Data Files, California State Historical Landmarks, California Points of Historical Interest, Office of Historic Preservation Archaeological Determinations of Eligibility, historic aerial imagery accessed via NETR Online, Historic U.S. Geological Survey topographic maps, Built Environment Resource Directory (BERD), and California Department of Transportation (Caltrans) State and Local Bridge Surveys. Additionally, Chambers Group archaeologists reviewed the Riverside County Historical Landmarks inventory designated by the County of Riverside Cultural Heritage Board, as well as the San Jacinto Historical Society and local historical newspaper clippings via Newspapers.com, ProQuest Historical Newspapers.com, and the California Digital Newspaper Collection.

As a result of the records search review and archival research, no previously recorded resources or any other listed or potentially significant properties are located within the Project site. However, one listed property does exist outside of the Project site but within the one-half-mile study area. A California Point of Interest and Historical Landmark site is located near the southwest portion of the current Proposed Project site. The site listed in the California Historical Landmark inventory is the site of the 1937 Russian Trans-Polar flight landing. See below for further details (Table 3).

Additionally, based on the review of available historic maps and imagery, Chambers Group archaeologists observed that the Project site is previously undeveloped, and was used as agricultural land until recently. Sometime between August 2019 and August 2021, a large section of the property in the southeastern portion was developed. The site has a history of being used for farming barley, and various types of irrigation equipment are on the site. (NETRonline 2022).

Table 2: Historic Properties Listed on the BERD within the One-Half-Mile Study Area

Landmark Description	APN	Occupant/Street Address	Year Built (Per County Assessor)	Owner	NRHP/CRHR/Local Status	Within Project Boundary
1937 Russian Trans-Polar flight landing	N/A	Cottonwood Ave & Sanderson Ave	1937	Unavailable	California Landmark Site marker: 989	No

NO. 989 Soviet Trans-Polar Landing Site

On July 14, 1937, three Soviet aviators completed a transpolar flight from Moscow in 62 hours and 17 minutes, establishing a new world nonstop distance record of 6,305 miles. The huge single-engine aircraft, an Ant-25 Military Reconnaissance Monoplane, was shipped back to the Soviet Union and placed in a museum. Aircraft commander Mikhail Gromov, co-pilot Andrei Yumashev and navigator Sergei Danilin became generals in World War II. The marker for this landmark is physically located three miles east of the actual landing site location. Neither the location of the original landing or the physical landmark are within the Project site (Riverside County Historical Commission 1988).

Native American Heritage Commission Sacred Lands File Search

On April 7, 2022, Chambers Group requested that the Native American Heritage Commission (NAHC) conduct a search of its Sacred Lands File (SLF) to determine if Tribal Cultural Resources (TCR) important to Native Americans have been recorded in the Project footprint and buffer area. Additional consultation with the tribes indicated in the NAHC SLF letter (Attachment A) would be required to determine the nature of any existing resources located during ground-disturbing activities. PRC Section 21074 defines a resource as a TCR if it meets either of the following criteria:

1. sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a tribe that are listed, or determined to be eligible for listing, in the national or state register of historical resources, or listed in a local register of historic resources; or
2. a resource that the lead agency determines, in its discretion, is a tribal cultural resource

On May 18, 2022, Chambers Group received a response from the NAHC stating that the search of its Sacred Lands File was **negative** for the presence of Native American cultural resources within Project site and the record search study area. These response from the NAHC is included in Attachment A.

The NAHC provided a list of 21 Native American tribal contacts that may have knowledge of cultural resources near the Project area (Attachment A). The 21 Native American contacts identified by the NAHC include contacts from the Agua Caliente Band of Cahuilla Indians, the Augustine Band of Cahuilla Mission Indians, the Cabazon Band of Mission Indians, the Cahuilla Band of Indians, the Los Coyotes Band of Cahuilla and Cupeño Indians, the Morongo Band of Mission Indians, the Pala Band of Mission Indians, the Pechanga Band of Indians, the Quechan Tribe of the Fort Yuma Reservation, the Ramona Band of Cahuilla, the Rincon Band of Luiseno Indians, the Santa Rosa Band of Cahuilla Indians, the Soboba Band of Luiseno Indians, and the Torres-Martinez Desert Cahuilla Indians.

AB 52 Consultation

The City of San Jacinto as the Lead Agency is responsible to complete the initial AB 52 outreach for the Project, if required. As of the date of this report, Chambers Group archaeologists have not been requested to support AB 52 consultation efforts.

Paleontological Resources

On April 22, 2022, Chambers Group received the results of the paleontological records search from the Western Science Center (WSC). The results show that no known fossil localities have been identified or recorded within the Proposed Project site. However, records show there is one fossil locality recorded just outside the one mile range from the same sedimentary deposits that occur in the Proposed Project site, either at the surface or at depth. The records search covered only the records of the Western Science Center. It is not intended as a paleontological assessment of the Project site for the purposes of CEQA. Based on the records search results the paleontological sensitivity could be considered low to moderate in the overall area considering the fossil localities within the one-half mile radius. No fossils are mapped within the Project site and the proposed Project does not include excavation to depths that would potentially impact intact sedimentary deposits that are known to bear fossil localities in the region.

As mentioned in the environmental setting section, the overall San Jacinto area is located at the north end of the San Jacinto Valley, with Hemet to its south and Beaumont to the north. It is bounded to the north by the San Bernardino Mountains (transverse ranges geomorphic province), to the west by the Elsinore fault zone, and to the east by the San Jacinto fault zone. As such, this area is characterized by the presence of decomposing granite derived from the nearby hillsides and windborne or water-borne alluvial deposits. Additional information from California Geological Survey indicates that the Project site is situated atop geological formations of Holocene age sediments and is largely comprised of slightly dissected deposits below canyon mouths in the northeastern part of quadrangle.; and sandy, cobble-boulder, gravel and light gray, poorly sorted gravelly sand.

Discussion

Chambers Group conducted a cultural resources records search and literature review within the TS Farms San Jacinto Outdoor Cultivation Project site and surrounding one-half-mile study area in April 2022. In addition, Chambers Group evaluated whether the Project would impact cultural resources and if additional studies, including a site visit or field survey, are warranted. The purpose of the review was to gather and analyze information needed to assess the potential for impacts to cultural and paleontological resources within the Proposed Project site.

An archival records search through the CHRIS database at the SCCIC and background study of the Project site were conducted as part of the study. In addition, Chambers Group submitted a record search request of the NAHC SLF to determine the presence or absence of data regarding any known tribal cultural resources previously reported within the Project site or surrounding vicinity. The SCCIC records search identified four cultural resources reports within or that intersected with the Project site, and no cultural resources documented within the Project site. The NAHC SLF search results received were negative within the Project site.

A paleontological record search was requested and conducted by the Western Science Center and resulted in negative findings within the Project site.

In addition, historic maps and aerial imagery revealed that the Project site was not previously occupied and was mostly used as agricultural land, until sometime between 2019 and 2021. Between August 2019 and August 2021, a large section of the property in the southeastern portion was developed. The site has a history of being used for farming barley, and various types of irrigation equipment are on the site. (NETRonline 2022). Thus, the nature of previous agricultural disturbance of the majority of the Project site may still allow for intact native soils and geologic formations to be impacted by the current Proposed Project construction if planned excavation were to impact deeper deposits. However, the proposed Project activities do not currently include excavation, to depths that would disturb potentially intact native soil formations, or any further ground disturbance beyond that required to erect hoop net structures to aid in outdoor cultivation.

Conclusions

Based on the results of the records search review and background research, Chambers Group archaeologists observed that the Proposed Project site is previously disturbed and was previously vacant and agricultural parcels of land located within a largely urban and industrial area with existing development to the east, west and north. Further, the cultural resources records search from the EIC was negative for previously recorded cultural resources within the Project site. Prior to this study, four cultural resources studies were completed that included the Project site. Based on the research completed for this study and the associated records search data available at this time, the Project site is considered to have low potential for cultural resources. The one nearby National Register site, the Casa Loma Canal, which is located adjacent to the northern margin of the Project site, has a set-back from the parcel boundary as well as a fenced boundary of the current Project site and another fence bounding the canal that completely restricts access or impacts from the Project site. Thus, this adjacent resource will not be impacted by the proposed Project. That conclusion, as well as the minimal ground disturbance proposed with the Project, is consistent with the determination that the likelihood of encountering previously unknown cultural resources is low.

However, if any potential cultural resources are identified during Project development or related construction activities, the Applicant or Applicant's contractor would be required to comply with the City's General Plan Resources Management Goal 3 and related Policies (3.1, 3.4, and 3.6) regarding cultural resources and historic preservation. In particular, the General Plan Resource Management Implementation Program includes actions and procedures related to the Goals and Policies pertaining to cultural resources and historic preservation that outline responsibilities and protocols in the event of encountering cultural resources during construction activity (RM 3d, RM 3f, and RM 3g). Generally, if potential cultural resources are encountered during ground disturbing activity, a qualified archaeologist would be retained to assess the find. If the resources are determined significant, they would need to be further evaluated. Evaluation for archaeological sites consists of an archaeological testing program. For historical structures, evaluation by an architectural historian may be necessary. If determined eligible for inclusion on the CRHR by the CEQA lead agency or the State Historic Preservation Office; mitigation, consisting of data recovery for archaeological sites and documentation for historical structures, would be required if avoidance or preservation is not feasible. These procedures also require that a TDA with the Soboba Band of Luiseño Indians be implemented for projects involving ground disturbance prior to obtaining a grading permit to address treatment and disposition of archaeological/cultural resources and human remains associated with Soboba Band of Luiseño Indians that may be uncovered or otherwise discovered during construction of the project.

Unanticipated discovery of Human Remains: In the unlikely event that human remains are discovered during ground-disturbing activities, then the Proposed Project would be subject to California Health and Safety Code 7050.5, CEQA Section 15064.5, and California Public Resources Code Section 5097.98. If human remains are found during ground-disturbing activities, State of California Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the Ventura County Coroner has made a determination of origin and disposition pursuant to Public Resources Code Section 5097.98. In the event of an unanticipated discovery of human remains, the County Coroner shall be notified immediately. If the human remains are determined to be prehistoric, the County Coroner shall notify

the NAHC, which shall notify a most likely descendant (MLD). The MLD shall complete the inspection of the site within 48 hours of notification and may recommend scientific removal and nondestructive analysis of human remains and items associated with Native American burials.

Chambers Group is available to assist with any further support or document preparation related to Cultural Resources, including tribal consultation. Please contact Victoria Boyd, Senior Project Manager, at (760) 685-4838, or the contact information below if you have any questions or comments regarding this report.

Sincerely,

CHAMBERS GROUP, INC.

Lucas Tutschulte

Cultural Department Lead
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San Diego, CA 92123

Attachments

Attachment A: NAHC SLF Records Search Results Letter

Attachment B (Confidential): Record Search Results

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1972 *Temalpakh (from the Earth): Cahuilla Indian Knowledge and Usage of Plants.* Malki Museum Press, Banning, California.

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ATTACHMENT A – NAHC SLF RECORDS SEARCH RESULTS LETTER

Attachment A: NAHC SLF Records Search Results Letter

STATE OF CALIFORNIA — Gavin Newsom, *Governor*

NATIVE AMERICAN HERITAGE COMMISSION

May 18, 2022

Kellie Kandybowicz
The Chambers Group, Inc.

Via Email to: kkandybowicz@chambersgroupinc.com

Re: San Jacinto Outdoor Cultivation (21355) Project, Riverside County

Dear Ms. Kandybowicz:

A record search of the Native American Heritage Commission (NAHC) Sacred Lands File (SLF) was completed for the information you have submitted for the above referenced project. The results were negative. However, the absence of specific site information in the SLF does not indicate the absence of cultural resources in any project area. Other sources of cultural resources should also be contacted for information regarding known and recorded sites.

Attached is a list of Native American tribes who may also have knowledge of cultural resources in the project area. This list should provide a starting place in locating areas of potential adverse impact within the proposed project area. I suggest you contact all of those indicated; if they cannot supply information, they might recommend others with specific knowledge. By contacting all those listed, your organization will be better able to respond to claims of failure to consult with the appropriate tribe. If a response has not been received within two weeks of notification, the Commission requests that you follow-up with a telephone call or email to ensure that the project information has been received.

If you receive notification of change of addresses and phone numbers from tribes, please notify me. With your assistance, we can assure that our lists contain current information.

If you have any questions or need additional information, please contact me at my email address: Cody.Campagne@nahc.ca.gov.

Sincerely,

Cody Campagne

Cody Campagne
Cultural Resources Analyst

Attachment

NAHC HEADQUARTERS
1550 Harbor Boulevard
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West Sacramento,
California 95691
(916) 373-3710
nahc@nahc.ca.gov
NAHC.ca.gov

Native American Heritage Commission
Native American Contact List
Riverside County
5/18/2022

Agua Caliente Band of Cahuilla Indians
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Palm Springs, CA, 92264
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ACBCI-THPO@aguacaliente.net

Agua Caliente Band of Cahuilla Indians
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Palm Springs, CA, 92264
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Fax: (760) 699-6919

Augustine Band of Cahuilla Mission Indians
Amanda Vance, Chairperson
P.O. Box 846 — Cahuilla
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hhaines@augustinetribe.com

Cabazon Band of Mission Indians
Doug Welmas, Chairperson
84-245 Indio Springs Parkway — Cahuilla
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Phone: (760) 342 - 2593
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Cahuilla Band of Indians
Daniel Salgado, Chairperson
52701 U.S. Highway 371 — Cahuilla
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Phone: (951) 763 - 5549
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Chairman@cahuilla.net

Los Coyotes Band of Cahuilla and Cupeño Indians
Ray Chapparosa, Chairperson
P.O. Box 189 — Cahuilla
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Fax: (760) 782-0712

Morongo Band of Mission Indians
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Pechanga Band of Indians
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epreston@pechanga-nsn.gov

This list is current only as of the date of this document. Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resource Section 5097.98 of the Public Resources Code.

This list is only applicable for contacting local Native Americans with regard to cultural resources assessment for the proposed San Jacinto Outdoor Cultivation (21355) Project, Riverside County.

Native American Heritage Commission
Native American Contact List
Riverside County
5/18/2022

Pechanga Band of Indians
Paul Macarro, Cultural Resources Coordinator
P.O. Box 1477 — Luiseno
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Quechan Tribe of the Fort Yuma Reservation
Jill McCormick, Historic Preservation Officer
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historicpreservation@quechantribe.com

Quechan Tribe of the Fort Yuma Reservation
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Ramona Band of Cahuilla
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Ramona Band of Cahuilla
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Rincon Band of Luiseno Indians
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Santa Rosa Band of Cahuilla Indians
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Soboba Band of Luiseno Indians
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This list is current only as of the date of this document. Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resource Section 5097.98 of the Public Resources Code.

This list is only applicable for contacting local Native Americans with regard to cultural resources assessment for the proposed San Jacinto Outdoor Cultivation (21355) Project, Riverside County.

Native American Heritage Commission
Native American Contact List
Riverside County
5/18/2022

Torres-Martinez Desert Cahuilla Indians
Cultural Committee,
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Thermal, CA, 92274
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Fax: (760) 397-8146
Cultural-Committee@torresmartinez-nsn.gov

This list is current only as of the date of this document. Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resource Section 5097.98 of the Public Resources Code.

This list is only applicable for contacting local Native Americans with regard to cultural resources assessment for the proposed San Jacinto Outdoor Cultivation (21355) Project, Riverside County.

Appendix E – Geotechnical Investigation Proposed Cultivation Facility Parking Lot and Guard House APN' s 432-130-002, 008 & 009 prepared by Sladden Engineering, revised July 22, 2019.

GEOTECHNICAL INVESTIGATION
PROPOSED CULTIVATION FACILITY
PARKING LOT AND GUARD HOUSE
APN'S 432-130-002, 008 & 009
SAN JACINTO, CALIFORNIA

-Prepared By-

Sladden Engineering

450 Egan Avenue
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800 E. Florida Avenue, Hemet, CA 92543 (951) 766-8777 Fax (951) 766-8778

April 30, 2019
(Revised July 22, 2019)

Project No. 644-19012
19-04-030

Innovative Cultivation Group
26400 La Alameda, Suite 100
Mission Viejo, California 92691

Subject: Geotechnical Investigation

Project: Proposed Cultivation Facility
Parking Lot and Guard House
APN's 432-130-02, 008 & 009
San Jacinto, California

Sladden Engineering is pleased to present the results of the geotechnical investigation performed for the cultivation facility buildings, parking lot and guard house proposed for the project site (APN's 432-130-02, 008 & 009) located on the west side of North Sanderson Avenue north of Cottonwood Avenue in the City of San Jacinto, California. Our services were completed in accordance with our revised proposal for geotechnical engineering services dated August 3, 2018 and your authorization to proceed with the work. The purpose of our investigation was to explore the subsurface conditions at the site in order to provide recommendations for foundation design and site preparation. Evaluation of environmental issues and hazardous wastes was not included within the scope of services provided.

The opinions, recommendations and design criteria presented in this report are based on our field exploration program, laboratory testing and engineering analyses. Based on the results of our investigation, it is our professional opinion that the proposed project should be feasible from a geotechnical perspective provided that the recommendations presented in this report are implemented into design and carried out through construction.

We appreciate the opportunity to provide service to you on this project. If you have any questions regarding this report, please contact the undersigned.

Respectfully submitted,
SLADDEN ENGINEERING

Matthew J. Cohrt
Principal Geologist

James W. Minor III
Project Geologist

Brett L. Anderson
Principal Engineer

SER/jm
Copies: 4/Addressee

GEOTECHNICAL INVESTIGATION
PROPOSED CULTIVATION FACILITY
PARKING LOT AND GUARD HOUSE
APN'S 432-130-002, 008 & 009
SAN JACINTO, CALIFORNIA

April 30, 2019
(Revised July 22, 2019)
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INTRODUCTION

This report presents the results of the geotechnical investigation performed by Sladden Engineering (Sladden) for the future cultivation facility parking lot and guard house proposed for the property located on the west side of North Sanderson Avenue (APN's 432-130-002, 008 & 009) in the City of San Jacinto, California. The site is located at approximately 33.7932 degrees north latitude and 117.0079 degrees west longitude. The approximate location of the site is indicated on the Site Location Map (Figure 1).

Our investigation was conducted in order to evaluate the engineering properties of the subsurface materials, to evaluate their *in-situ* characteristics, and to provide engineering recommendations and design criteria for site preparation, foundation design and the design of various site improvements. This study also includes a review of published and unpublished geotechnical and geological literature regarding seismicity at and near the subject site.

PROJECT DESCRIPTION

Based on the provided site plan (Herron Rumansoff, 2019), it is our understanding that the project will consist of constructing a new parking lot and guard house for the proposed cultivation facility. Sladden anticipates that the proposed project will also include concrete flatwork, landscaped areas and various associated site improvements. For our analyses we expect that any new proposed structures will consist of relatively lightweight wood-frame or steel-frame structures supported on conventional shallow spread footings and concrete slabs on grade.

Sladden anticipates that grading will be limited to minor cuts and fills in order to accomplish the desired elevations and provide adequate gradients for site drainage. This does not include the removal and re-compaction of the primary foundation bearing soil within the building envelope. Upon completion of precise grading plans, Sladden should be retained in order to ensure that the recommendations presented within in this report are incorporated into the design of the proposed project

Structural foundation loads for any new structures were not available at the time of production of this report. Based on our experience with relatively lightweight commercial structures, we expect that isolated column loads will be less than 30 kips and continuous wall loads will be less than 3.0 kips per linear foot. If these assumed loads vary significantly from the actual loads, we should be consulted to verify the applicability of the recommendations provided.

SCOPE OF SERVICES

The purpose of our investigation was to determine specific engineering characteristics of the surface and near surface soil in order to develop foundation design criteria and recommendations for site preparation. Exploration of the site was achieved by drilling three (3) exploratory boreholes to depths of approximately 21 and 51 feet below the existing ground surface (bgs). Specifically, our site characterization consisted of the following tasks:

- Site reconnaissance to assess the existing surface conditions on and adjacent to the site.
- Advancing three (3) exploratory boreholes to depths of approximately 21 and 51 feet bgs in order to characterize the subsurface soil conditions. Representative samples of the soil were classified in the field and retained for laboratory testing and engineering analyses.
- Performing laboratory testing on selected samples to evaluate their engineering characteristics.
- Reviewing geologic literature and evaluating potential geologic hazards.
- Performing engineering analyses to develop recommendations for foundation design and site preparation.
- The preparation of this report summarizing our work at the site.

SITE CONDITIONS

The project site (APN's 432-130-002, 008 & 009) is located on the west side of North Sanderson Avenue north of Cottonwood Avenue in the City of San Jacinto, California. At the time of our investigation, the site was vacant and utilized for agricultural purposes. The site is bounded by an Eastern Municipal Water District (EMWD) wastewater treatment facility to the north, Cottonwood Avenue to the south, agricultural property to the west and by North Sanderson Avenue to the east.

The project site is relatively level with minimal surface gradients. According to the USGS 7.5' Lakeview Quadrangle map (2012), the site is at an approximate elevation of 1500 feet above mean sea level (MSL).

No natural ponding of water or surface seeps were observed at or near the site during our investigation conducted on April 2, 2019. Site drainage appears to be controlled via sheet flow and surface infiltration.

GEOLOGIC SETTING

The project site is located in the Peninsular Ranges Physiographic Province of California. The Peninsular Ranges are mountainous areas that extend from the western edge of the continental borderland to the Salton Trough and from the Transverse Ranges Physiographic Province in the north to the tip of Baja California in the south. The Peninsular Ranges Physiographic Province is characterized by northwest-trending topographic and structural features. The province is characterized by elongated, northwest-southeast trending mountain ranges and valleys and is truncated at its northern margin by the east-west grain of the Transverse Ranges. Mountainous areas of the Peninsular Ranges Physiographic Province generally consist of Igneous, metasedimentary and metavolcanic rocks. However, plutonic rocks of the Southern California Batholith are the dominant basement rock exposed (Jahns, 1954).

The site is situated within a Perris structural block of the northern Peninsular Ranges batholith. Generally, the Perris structural block is a northwest-southeast trending fault bound block bounded by the San Jacinto Fault Zone to the northeast and the Elsinore and Whittier Fault Zones to the southwest.

The site has been mapped by Dibblee (2003) to be immediately underlain by Quaternary-age alluvial sand and clay (Qa). The geologic setting for the site and site vicinity is illustrated on the Regional Geologic Map, Figure 2.

SUBSURFACE CONDITIONS

The subsurface conditions at the site were investigated by drilling three (3) exploratory boreholes throughout the project site to depths between 21 and 51 feet below the existing ground surface (bgs). The approximate locations of the boreholes are illustrated on the Borehole Location Plan (Figure 3). The boreholes were advanced using a Mobile B-61 drill rig equipped with 8-inch outside diameter hollow-stem augers. A representative of Sladden was present to log the materials encountered and retrieve samples for laboratory testing and engineering analysis.

During our field investigation a thin mantle of fill/disturbed soil was encountered to a depth of less than approximately three (3) feet below existing grade in the area of our bores. Underlying the fill soil and extending to the maximum depth explored, native alluvium was encountered. The site soil consists primarily of sandy silt (ML) and silty sand (SM) with minor portions of clayey sand (SC) and sand (SP). Generally, the native earth materials appeared grayish brown, moist to very moist, fine-grained with soil densities generally increasing with depth. Cohesive sediments exhibited low to medium plasticity characteristics.

The final logs represent our interpretation of the contents of the field logs, and the results of the laboratory observations and tests of the field samples. The final logs are included in Appendix A of this report. The stratification lines represent the approximate boundaries between soil types although the transitions may be gradual and variable across the site.

Groundwater was not encountered to a maximum explored depth of 51.0 feet bgs during our field investigation. Based on groundwater depths reported in the vicinity (CDWR, 2019), it is our opinion that groundwater should not be a factor during construction of the proposed project.

SEISMICITY AND FAULTING

The southwestern United States is a tectonically active and structurally complex region, dominated by northwest trending dextral faults. The faults of the region are often part of complex fault systems, composed of numerous subparallel faults which splay or step from main fault traces. Strong seismic shaking could be produced by any of these faults during the design life of the proposed project.

We consider the most significant geologic hazard to the project to be the potential for moderate to strong seismic shaking that is likely to occur during the design life of the project. The proposed project is located in the highly seismic Southern California region within the influence of several fault systems that are considered to be active or potentially active. An active fault is defined by the State of California as a "sufficiently active and well defined fault" that has exhibited surface displacement within the Holocene epoch (about the last 11,000 years). A potentially active fault is defined by the State as a fault with a history of movement within Pleistocene time (between 11,000 and 1.6 million years ago).

As previously stated, the site has been subjected to strong seismic shaking related to active faults that traverse through the region. Some of the more significant seismic events near the subject site within recent times include: M6.0 North Palm Springs (1986), M6.1 Joshua Tree (1992), M7.3 Landers (1992), M6.2 Big Bear (1992) and M7.1 Hector Mine (1999).

The project site is situated within a State of California Designated Fault Zone (Figure 4). Table 1 lists the closest known potentially active faults that was generated in part using the EQFAULT computer program (Blake, 2000), as modified using the fault parameters from The Revised 2002 California Probabilistic Seismic Hazard Maps (Cao et al, 2003). This table does not identify the probability of reactivation or the on-site effects from earthquakes occurring on any of the other faults in the region.

TABLE 1
CLOSEST KNOWN ACTIVE FAULTS

Fault Name	Distance (Km)	Maximum Event
San Jacinto – San Jacinto Valley	0.0*	6.9
San Jacinto – Anza	10.3	7.2
San Andreas – Southern	27.3	7.5
San Andreas – San Bernardino	27.3	7.5
Elsinore – Temecula	32.7	6.8
San Jacinto – San Bernardino	33.8	6.7
Elsinore – Glen Ivy	35.6	6.8
Pinto Mountain	39.5	7.2
Elsinore – Julian	46.3	7.1

* The project site is situated within the San Jacinto fault zone.

2016 CBC SEISMIC DESIGN PARAMETERS

Sladden has reviewed the 2016 California Building Code (CBC) and summarized the current seismic design parameters for the proposed structures. The seismic design category for a structure may be determined in accordance with Section 1613 of the 2016 CBC or ASCE7. According to the 2016 CBC, Site Class D may be used to estimate design seismic loading for the proposed structure. The 2016 CBC Seismic Design Parameters are summarized below. The project Design Map Reports are included within Appendix C (SEAC, 2019).

Risk Category (Table 1.5-1): II
Site Class (Table 1613.3.2): D
S_S (Figure 1613.3.1): 2.467g
S_1 (Figure 1613.3.1): 1.074g
F_a (Table 1613.3.3(1)): 1.0
F_v (Table 1613.5.3(2)): 1.5
S_{MS} (Equation 16-37 {F_a X S_S}): 2.467g
S_{M1} (Equation 16-38 {F_v X S_1}): 1.612g
S_{DS} (Equation 16-39 {2/3 X S_{MS}}): 1.645g
S_{D1} (Equation 16-40 {2/3 X S_{M1}}): 1.074g
Seismic Design Category: E

GEOLOGIC HAZARDS

The subject site is located in an active seismic zone and will likely experience strong seismic shaking during the design life of the proposed project. In general, the intensity of ground shaking will depend on several factors including: the distance to the earthquake focus, the earthquake magnitude, the response characteristics of the underlying materials, and the quality and type of construction. Geologic hazards and their relationship to the site are discussed below.

I. Surface Rupture. Surface rupture is expected to occur along preexisting, known active fault traces. However, surface rupture could potentially splay or step from known active faults or rupture along unidentified traces. Based on our review of Dibblee (2003), Jennings (1994), CDMG (1988) and RCPR (2019), the project site is situated within a State of California Designated Fault Zone (Figure 4).

Previous subsurface exploration by Converse Consultants (2004) identified active faulting within three (3) of five (5) exploratory trenches. Converse provided setback recommendations from the identified fault traces. The County of Riverside Building and Safety Department reviewed and approved Converse Consultants report after County of Riverside comments were addressed (2006). Based on the project site being situated within a State of California designated fault zone, is our opinion that risks associated with primary surface ground rupture should be considered "high". All structures intended for habitable use should be located outside of established restricted use zones.

II. Ground Shaking. The site has been subjected to past ground shaking by faults that traverse through the region and the subject site. Strong seismic shaking from active faults is expected to produce strong seismic shaking during the design life of the proposed project. A probabilistic approach was employed to the estimate the peak ground acceleration (a_{max}) that could be experienced at the site. Based on the USGS Unified Hazard Tool (USGS, 2018) and shear wave velocity (Vs30) of 259 m/s, the site could be subjected to ground motions on the order of 0.615g. The peak ground acceleration at the site is judged to have a 475 year return period and a 10 percent chance of exceedance in 50 years.

III. Liquefaction. Liquefaction is the process in which loose, saturated granular soil loses strength as a result of cyclic loading. The strength loss is a result of a decrease in granular sand volume and a positive increase in pore pressures. Generally, liquefaction can occur if all of the following conditions apply: liquefaction-susceptible soil, groundwater within a depth of 50 feet or less, and strong seismic shaking. Based on the depth to groundwater in the site vicinity (CDWR, 2019), risks associated with liquefaction are considered negligible.

IV. Tsunamis and Seiches. Because the site is situated at an elevated inland location and is not immediately adjacent to any impounded bodies of water, risk associated with tsunamis and seiches is considered negligible.

V. Slope Failure, Landsliding, Rock Falls. The site is located on relatively flat ground and not immediately adjacent to any slopes or hillsides. Therefore, it is our professional opinion that risks associated with slope instability should be considered "negligible".

VI. Expansive Soil. Generally, the surface soil consists of sandy silt (ML) overlying silty sand. Based on the results of our laboratory testing (EI=33), the sandy silt materials are considered to have a "low" expansion potential. Because the recommended remedial grading will result in significant mixing of the surface soil, the expansion potential should be re-evaluated after grading. Final foundation and slab design should be based on "post-grading" expansion test results.

VII. Static Settlement. Static settlement resulting from the anticipated foundation loads should be minimal provided that the recommendations included in this report are considered in foundation design and construction. The estimated ultimate static settlement is calculated to be approximately 1 inch when using the recommended bearing pressures. As a practical matter, differential static settlement between footings can be assumed as one-half of the total settlement.

VIII. Subsidence. Land subsidence can occur in valleys where aquifer systems have been subjected to extensive groundwater pumping, such that groundwater pumping exceeds groundwater recharge. Generally, pore water reduction can result in a rearrangement of skeletal grains and could result in elastic (recoverable) or inelastic (unrecoverable) deformation of an aquifer system.

According to the County of Riverside (RCPR, 2019), the site is situated in a "Active" Subsidence zone. No fissures or other surficial evidence of subsidence were observed at or near the subject site.

IX. Debris Flows. Debris flows are viscous flows consisting of poorly sorted mixtures of sediment and water and are generally initiated on slopes steeper than approximately six horizontal to one vertical (6H:1V) (Boggs, 2001). Based on the flat nature of the site and the composition of the surface soil, we judge that risks associated with debris flows should be considered remote.

X. Flooding and Erosion. Soil erosion was observed on the south side of the existing building during our field investigation. However, risks associated with flooding and erosion should be evaluated and mitigated by the project design Civil Engineer.

CONCLUSIONS

Based on the results of our geotechnical investigation, it is our opinion that the project should be feasible from a geotechnical perspective provided that fault setbacks previously determined by Converse Consultants and the recommendations provided in this report are incorporated into design and carried out through construction. The main geotechnical concerns are the proximity to the San Jacinto fault zone and the presence of loose and compressible near surface soil.

The near-surface soil is considered loose, potentially compressible and not suitable for support of shallow foundations or concrete slabs in the existing condition. Due to the loose and potentially compressible condition of the near-surface soil, we recommend that remedial grading within the proposed building areas include the over-excavation and re-compaction of the primary foundation bearing soil. Specific recommendations for site preparation are presented in the Earthwork and Grading section of this report.

Caving did occur to varying degrees within each of our exploratory bores and the surface soil may be susceptible to caving within deeper excavations. All excavations should be constructed in accordance with the normal CalOSHA excavation criteria. On the basis of our observations of the materials encountered, we anticipate that the subsoil will conform to that described by CalOSHA as Type C. Soil conditions should be verified in the field by a "Competent person" employed by the Contractor.

The following recommendations present more detailed design criteria that have been developed on the basis of our field and laboratory investigation.

EARTHWORK AND GRADING

All earthwork including excavation, backfill and preparation of the subgrade soil, should be performed in accordance with the geotechnical recommendations presented in this report and portions of the local regulatory requirements, as applicable. All earthwork should be performed under the observation and testing of a qualified soil engineer. The following geotechnical engineering recommendations for the proposed project are based on observations from the field investigation program, laboratory testing and geotechnical engineering analyses.

a. Stripping. Areas to be graded should be cleared of any existing fill soil, vegetation, associated root systems, and debris. All areas scheduled to receive fill should be cleared of any unsuitable matter. The strippings should be removed off site. Voids left by obstructions should be properly backfilled in accordance with the compaction recommendations of this report.

b. Preparation of New Building Areas: In order to provide for firm and uniform foundation bearing conditions, the primary bearing soil should be over-excavated and re-compacted. Over-excavation should extend to a minimum depth of 3 feet below existing grade or 3 feet below the bottom of the footings, whichever is deeper. Once adequate removals have been verified, the exposed native soil should be scarified, moisture-conditioned and compacted to a minimum of 90 percent relative compaction. The previously removed soil may then be replaced as engineered fill soil in accordance with the recommendations below.

c. Fill Placement and Compaction: Soil to be used as engineered fill should be free of organic material, debris, and other deleterious substances, and should not contain irreducible matter greater than three inches in maximum dimension. All fill materials should be placed in thin lifts, not exceeding six inches in a loose condition. If import fill is required, the material should be of a low to non-expansive nature and should meet the following criteria:

Plastic Index	Less than 12
Liquid Limit	Less than 35
Percent Soil Passing #200 Sieve	Between 15% and 35%
Maximum Aggregate Size	3 inches

The subgrade and all fills should be compacted with acceptable compaction equipment, to at least 90 percent relative compaction. The bottom of the exposed subgrade should be observed by a representative of Sladden Engineering prior to fill placement. Compaction testing should be performed on all lifts in order to ensure proper placement of the fill materials. Table 3 provides a summary of the excavation and compaction recommendations.

Table 2
SUMMARY OF RECOMMENDATIONS

*Remedial Grading	Over-excavation and re-compaction within the building envelope and extending laterally for 5 feet beyond the building limits and to a minimum of 3 feet below existing grade or 2 feet below the bottom of the footings, whichever is deeper
Native / Import Engineered Fill	Place in thin lifts not exceeding 6 inches in the loose condition and compact to a minimum of 90 percent relative compaction within 2 percent of the optimum moisture content.

*Actual depth may vary and should be determined by a representative of Sladden Engineering in the field during construction.

d. Shrinkage and Subsidence. Volumetric shrinkage of the material that is excavated and replaced as controlled compacted fill should be anticipated. We estimate that this shrinkage should be between 10 and 20 percent. Subsidence of the surfaces that are scarified and compacted should be between 1 tenth and 2 tenths of a foot. This will vary depending upon the type of equipment used, the moisture content of the soil at the time of grading and the actual degree of compaction attained.

CONVENTIONAL SHALLOW SPREAD FOOTINGS

Conventional spread footings are expected to provide adequate support for the proposed structure. All footings should be founded upon properly compacted engineered fill and should have a minimum embedment depth of 12 inches measured from the lowest adjacent finished grade for single-story structures and 18 inches below lowest adjacent grade for 2-story structures. Continuous and isolated pad footings should have minimum widths of 12 inches and 24 inches, respectively. Continuous and isolated footings supported upon properly compacted engineered fill soil may be designed using allowable (net) bearing pressures of 1800 and 2000 pounds per square foot (psf), respectively. Allowable increases of 250 psf for each additional 1 foot in width and 250 psf for each additional 6 inches in depth may be utilized, if desired. The maximum allowable bearing pressure should be 2500 psf. The allowable bearing pressure applies to combined dead and sustained live loads. The allowable bearing pressures may be increased by one-third when considering transient live loads, including seismic and wind forces.

Based on the recommended allowable bearing pressures, the total static settlement of the shallow footings is anticipated to be less than one-inch, provided foundation preparations conform to the recommendations described in this report. Differential static settlement is anticipated to be approximately one-half of the total settlement for similarly loaded footings spaced up to approximately 50 feet apart.

Lateral load resistance for the spread footings will be developed by passive pressure against the sides of the footings below grade and by friction acting at the base of the footings. An allowable passive pressure of 250 psf per foot of depth may be used for design purposes. An allowable coefficient of friction 0.40 may be used for dead and sustained live loads to compute the frictional resistance of the footing placed directly on compacted fill. Under seismic and wind loading conditions, the passive pressure and frictional resistance may be increased by one-third.

All footing excavations should be observed by a representative of the project geotechnical consultant to verify adequate embedment depths prior to placement of forms, steel reinforcement or concrete. The excavations should be trimmed neat, level and square. All loose, disturbed, sloughed or moisture-softened soils and/or any construction debris should be removed prior to concrete placement. Excavated soil generated from footing and/or utility trenches should not be stockpiled within the building envelope or in areas of exterior concrete flatwork. All footings should be reinforced in accordance with the project Structural Engineer's recommendations.

SLABS-ON-GRADE

In order to provide uniform and adequate support for any new structures, concrete slabs-on-grade must be placed on properly compacted engineered fill as outlined in the previous sections of this report. The slab subgrade should remain near optimum moisture content and should not be permitted to dry prior to concrete placement. Slab subgrade should be firm and unyielding. Disturbed soil should be removed and replaced with engineered fill soil compacted to a minimum of 90 percent relative compaction.

Slab thickness and reinforcement should be determined by the Structural Engineer based upon "post grading" expansion test results. We recommend a minimum slab thickness of 5.0 inches and a minimum reinforcement consisting of #4 bars at 24 inches on center in each direction. All slab reinforcement should be supported on concrete chairs to ensure that reinforcement is placed at slab mid-height.

Slabs with moisture sensitive surfaces should be underlain with a moisture vapor retarder consisting of a polyvinyl chloride membrane such as 10-mil visqueen, or equivalent. All laps within the membrane should be sealed and at least 2 inches of clean sand should be placed over the membrane to promote uniform curing of the concrete. To reduce the potential for punctures, the membrane should be placed on a pad surface that has been graded smooth without any sharp protrusions. If a smooth surface can not be achieved by grading, consideration should be given to placing a 1-inch thick leveling course of sand across the pad surface prior to placement of the membrane.

PRELIMINARY PAVEMENT DESIGN

Asphalt concrete pavements should be designed in accordance with Topic 610 of the Caltrans Highway Design Manual based on R-Value and Traffic Index. On-site soil and any imported soil should be tested for R-Value prior to establishing final pavement design sections.

For preliminary pavement design, an assumed R-Value of 40 and Traffic Indices (TI) of 4.5 and 6.0 were used for the light duty and heavy duty pavements, respectively. We assumed Asphalt Concrete (AC) over Class II Aggregate Base (AB). Final pavement sections should be based on R-Value testing of the subgrade soil performed after grading. The preliminary flexible pavement layer thickness is as follows:

RECOMMENDED ASPHALT PAVEMENT SECTION LAYER THICKNESS		
Pavement Material	Recommended Thickness	
	TI=5.0	TI=6.5
Asphalt Concrete Surface Course	3.0 inches	4.0 inches
Class II Aggregate Base Course	6.0 inches	8.0 inches
Compacted Subgrade Soil	12 inches	12 inches

Asphalt concrete should conform to Sections 203 and 302 of the latest edition of the Standard Specifications for Public Works Construction (Caltrans or Greenbook). Class II aggregate base should conform to Section 26 of the Caltrans Standard Specifications or Greenbook, latest edition. The aggregate base course should be compacted to at least 95 percent of the maximum dry density as determined by ASTM Method D 1557.

CORROSION SERIES

The soluble sulfate concentrations of the surface soil were determined to be 220 parts per million (ppm). The soil is considered to have a "negligible" corrosion potential with respect to concrete. The use of Type V cement and special sulfate resistant concrete mixes may be necessary.

The pH level of the surface soil was 9.1. Based on soluble chloride concentration testing (180 ppm) the soil is considered to have a "low" corrosion potential with respect to normal grade steel. The minimum resistivity of the surface soil was found to be 900 ohm-cm, which suggests that the site soil is considered to have a "severe" corrosion potential with respect to ferrous metal installations. A corrosion expert should be consulted regarding appropriate corrosion protection measures for corrosion sensitive installations.

UTILITY TRENCH BACKFILL

All utility trench backfill should be compacted to a minimum relative compaction of 90 percent. Trench backfill materials should be placed in lifts no greater than six inches in a loose condition, moisture conditioned (or air-dried) as necessary to achieve near optimum moisture conditions, and then mechanically compacted in place to a minimum relative compaction of 90 percent. A representative of the project soil engineer should test the backfill to verify adequate compaction.

EXTERIOR CONCRETE FLATWORK

To minimize cracking of concrete flatwork, the subgrade soil below concrete flatwork areas should first be compacted to a minimum relative compaction of 90 percent. A representative of the project geotechnical consultant should observe and verify the density and moisture content of the soil prior to concrete placement.

DRAINAGE

All final grades should be provided with positive gradients away from foundations to provide rapid removal of surface water runoff to an adequate discharge point. No water should be allowed to be pond on or immediately adjacent to foundation elements. In order to reduce water infiltration into the subgrade soil, surface water should be directed away from building foundations to an adequate discharge point. Subgrade drainage should be evaluated upon completion of the precise grading plans and in the field during grading.

LIMITATIONS

The findings and recommendations presented in this report are based upon an interpolation of the soil conditions between the exploratory bore locations and extrapolation of these conditions throughout the proposed building areas. Should conditions encountered during grading appear different than those indicated in this report, this office should be notified.

The use of this report by other parties or for other projects is not authorized. The recommendations of this report are contingent upon monitoring of the grading operation by a representative of Sladden Engineering. All recommendations are considered to be tentative pending our review of the grading operation and additional testing, if indicated. If others are employed to perform any soil testing, this office should be notified prior to such testing in order to coordinate any required site visits by our representative and to assure indemnification of Sladden Engineering.

We recommend that a pre-job conference be held on the site prior to the initiation of site grading. The purpose of this meeting will be to assure a complete understanding of the recommendations presented in this report as they apply to the actual grading performed.

ADDITIONAL SERVICES

Once completed, final project plans and specifications should be reviewed by use prior to construction to confirm that the full intent of the recommendations presented herein have been applied to design and construction. Following review of plans and specifications, observation should be performed by the Soil Engineer during construction to document that foundation elements are founded on/or penetrate into the recommended soil, and that suitable backfill soil is placed upon competent materials and properly compacted at the recommended moisture content.

Tests and observations should be performed during grading by the Soil Engineer or his representative in order to verify that the grading is being performed in accordance with the project specifications. Field density testing shall be performed in accordance with acceptable ASTM test methods. The minimum acceptable degree of compaction should be 90 percent for engineered fil soil and 95 percent for Class II aggregate base as obtained by ASTM Test Method D1557. Where testing indicates insufficient density, additional compactive effort shall be applied until retesting indicates satisfactory compaction.

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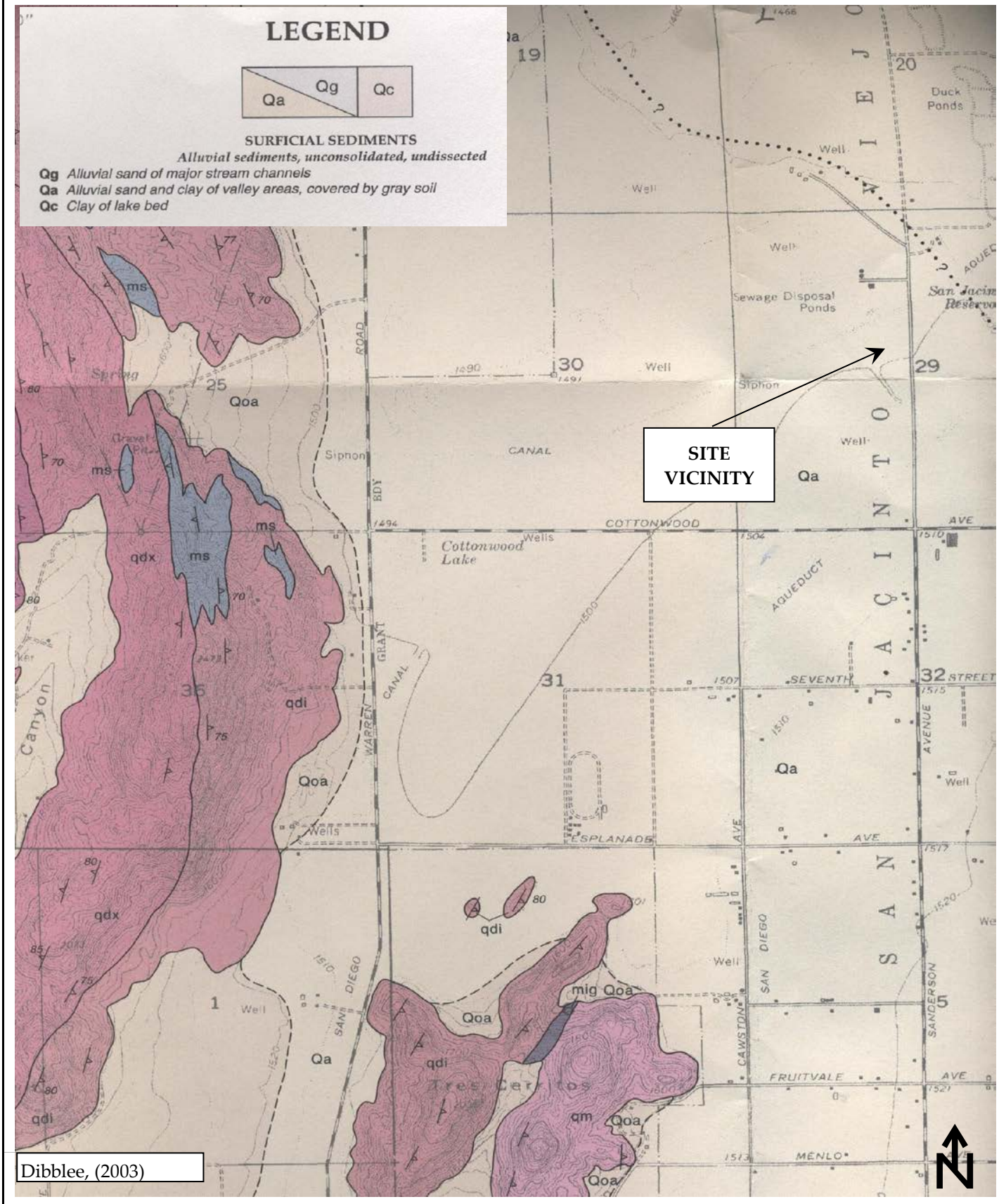
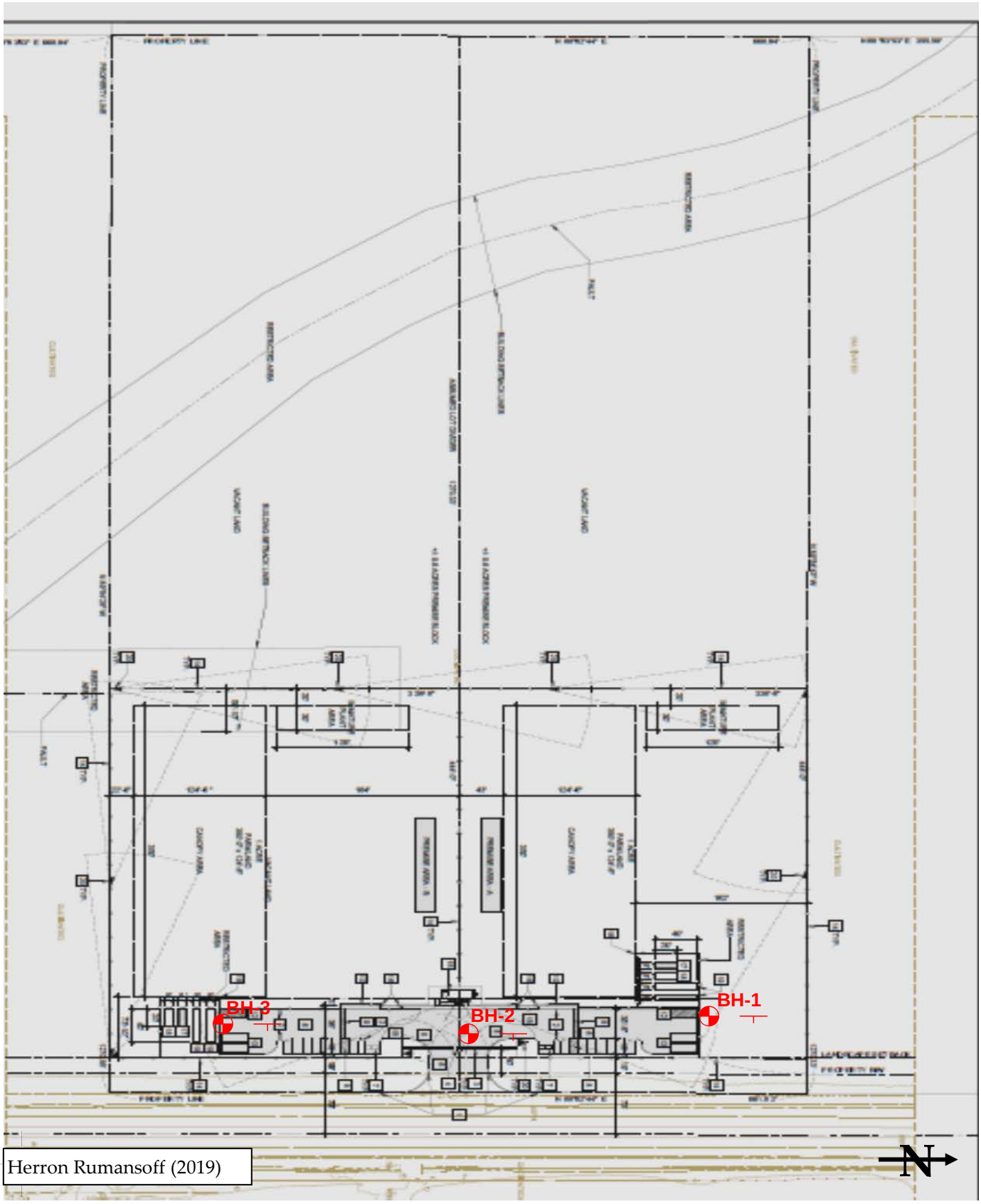
FIGURES

SITE LOCATION MAP
REGIONAL GEOLOGIC MAP
BOREHOLE LOCATION PLAN
FAULT ZONE MAP

Sladden Engineering	SITE LOCATION MAP	FIGURE 1
	Project Number: 644-19012	
	Report Number: 19-04-030	
	Date: April 30, 2019	



Sladden Engineering	REGIONAL GEOLOGIC MAP	FIGURE 2
	Project Number: 644-19012	
	Report Number: 19-04-030	
	Date: April 30, 2019	



Herron Rumansoff (2019)

Sladden Engineering	BOREHOLE LOCATION PLAN		FIGURE 3
	Project Number:	644-19012	
	Report Number:	19-04-030	
	Date:	April 30, 2019	

MAP EXPLANATION

Potentially Active Faults

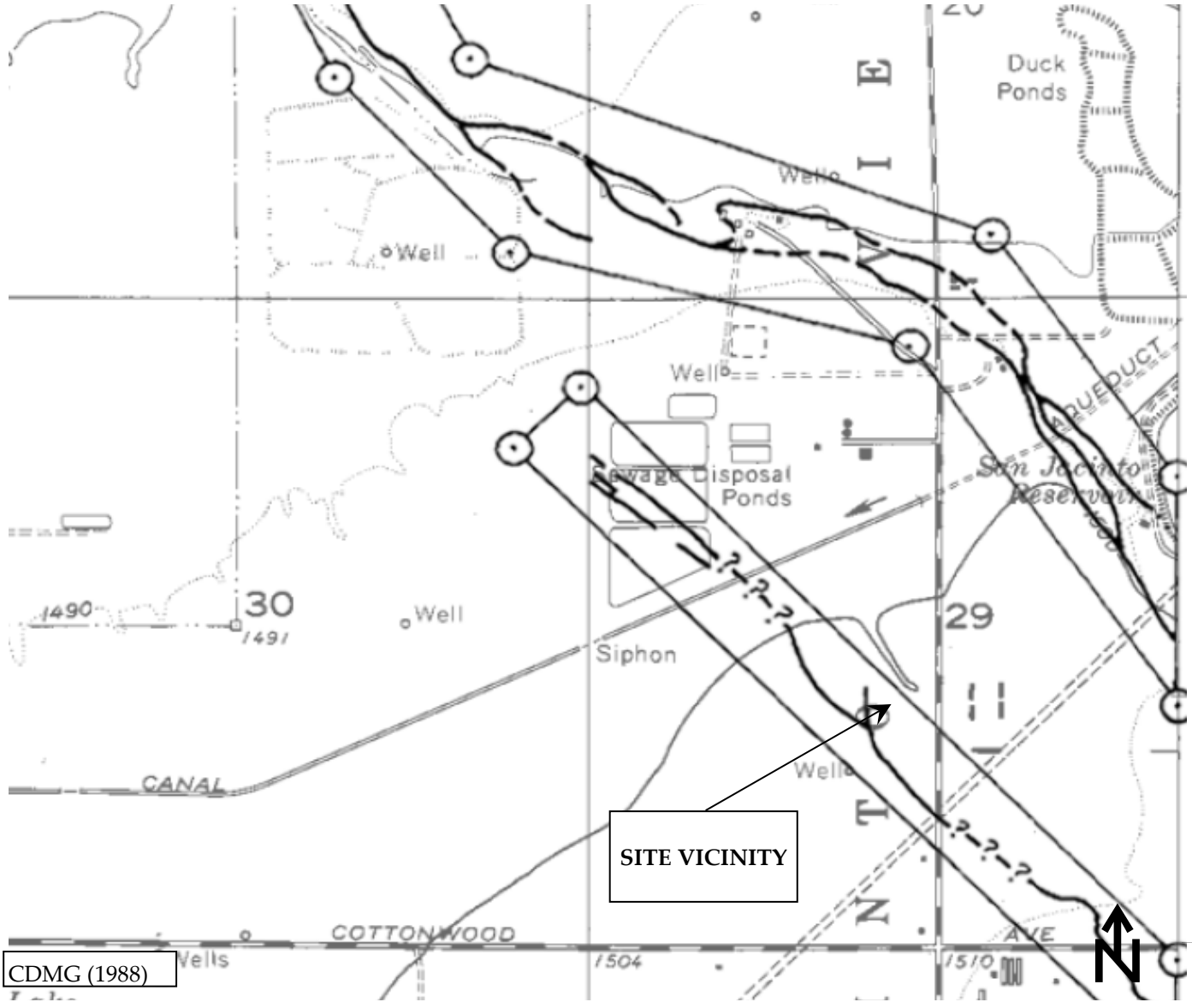
1906 C ?

Faults considered to have been active during Holocene time and to have a relatively high potential for surface rupture; solid line where accurately located, long dash where approximately located, short dash where inferred, dotted where concealed; query (?) indicates additional uncertainty. Evidence of historic offset indicated by year of earthquake-associated event or C for displacement caused by creep or possible creep.

Special Studies Zone Boundaries

These are delineated as straight-line segments that connect encircled turning points so as to define special studies zone segments.

Seaward projection of zone boundary.



CDMG (1988)

Sladden Engineering	SITE LOCATION MAP		FIGURE 4
	Project Number:	644-19012	
	Report Number:	19-04-030	
	Date:	April 30, 2019	

APPENDIX A

FIELD EXPLORATION

SLADDEN ENGINEERING

BORE LOG

Drill Rig:	Mobil B-61	Date Drilled:	4/2/2019
Elevation:	1503 Feet (MSL)	Boring No:	BH-1

Sample	Blow Counts	Bulk Sample	Expansion Index	% Minus #200	% Moisture	Density, pcf	Depth (Feet)	Graphic Lithology	Description
	4/7/9	1	33	64.8	20.8	103.1	2		Sandy Silt (ML); grayish brown, moist, stiff, low to medium plasticity with clay (Fill/Disturbed).
	4/7/9			45.7	12.9	98.6	4		Clayey Sand (SC); grayish brown, moist, loose, fine-grained (Qa).
	5/6/7			45.0	12.5		6		Clayey Sand (SC); grayish brown, moist, medium dense, fine-grained (Qa).
	7/11/14			72.2	24.9	101.9	8		Sandy Silt (ML); grayish brown, moist, very stiff, low to medium plasticity with clay (Qa).
	9/12/18			4.5	2.9		10		Sand (SP); grayish brown, slightly moist, medium dense, fine-grained (Qa).
	10/14/10			3.8	1.9	97.7	12		Sand (SP); grayish brown, slightly moist, medium dense, fine-grained (Qa).
	10/11/13			49.3	13.5		14		Silty Sand (SM); grayish brown, moist, medium dense, fine- grained with clay (Qa).
	10/15/17			34.1	13.9	108.3	16		Silty Sand (SM); grayish brown, moist, medium dense, fine- grained with clay (Qa).
	14/15/15			46.7	11.9		18		Clayey Sand (SM); grayish brown, moist, medium dense, fine-grained (Qa).
	10/15/17			77.7	25.8	100.6	20		Sandy Silt (ML); grayish brown, moist, very stiff, low to medium plasticity with clay (Qa).
	8/12/12			62.4	17.9		22		Sandy Silt (ML); grayish brown, moist, stiff, low to medium plasticity with clay (Qa).
							24		
							26		
							28		
							30		
							32		
							34		
							36		
							38		
							40		
							42		
							44		
							46		
							48		
							50		

Completion Notes:
Terminated at ~51.5 Feet bgs.
No Bedrock Encountered.
No Groundwater or Seepage Encountered

PROPOSED CULTIVATION FACILITY
APNS 432-130-002, 008 & 009

Project No: 644-19012
Report No: 19-04-030

SLADDEN ENGINEERING

BORE LOG

Drill Rig:	Mobil B-61	Date Drilled:	4/2/2019
Elevation:	1503 Feet (MSL)	Boring No:	BH-3

Sample	Blow Counts	Bulk Sample	Expansion Index	% Minus #200	% Moisture	Density, pcf	Depth (Feet)	Graphic Lithology	Description
							0–4		Sandy Silt (ML); grayish brown, moist, low to medium plasticity with clay (Fill/Disturbed).
	7/9/11			58.4	16.6	106.6	4–10		Sandy Silt (ML); grayish brown, moist, stiff, low to medium plasticity with clay (Qa).
	5/5/8			31.4	8.5		10–16		Clayey Sand (SC); grayish brown, moist, medium dense, fine-grained (Qa).
	9/12/14			7.6	3.8	103.8	16–20		Sand (SP); grayish brown, slightly moist, medium dense, fine-grained (Qa).
	5/7/9			59.0	16.7		20–22		Sandy Silt (ML); grayish brown, moist, stiff, low to medium plasticity with clay (Qa).
							22–50		Terminated at ~21.5 Feet bgs. No Bedrock Encountered. No Groundwater or Seepage Encountered.

Completion Notes:

PROPOSED CULTIVATION FACILITY
APNS 432-130-002, 008 & 009

Project No: 644-19012

Report No: 19-04-030

APPENDIX B

LABORATORY TESTING

APPENDIX B

LABORATORY TESTING

Representative bulk and relatively undisturbed soil samples were obtained in the field and returned to our laboratory for additional observations and testing. Laboratory testing was generally performed in two phases. The first phase consisted of testing in order to determine the compaction of the existing natural soil and the general engineering classifications of the soils underlying the site. This testing was performed in order to estimate the engineering characteristics of the soil and to serve as a basis for selecting samples for the second phase of testing. The second phase consisted of soil mechanics testing. This testing including consolidation, shear strength and expansion testing was performed in order to provide a means of developing specific design recommendations based on the mechanical properties of the soil.

CLASSIFICATION AND COMPACTION TESTING

Unit Weight and Moisture Content Determinations: Each undisturbed sample was weighed and measured in order to determine its unit weight. A small portion of each sample was then subjected to testing in order to determine its moisture content. This was used in order to determine the dry density of the soil in its natural condition. The results of this testing are shown on the Boring Logs.

Maximum Density-Optimum Moisture Determinations: Representative soil types were selected for maximum density determinations. This testing was performed in accordance with the ASTM Standard D1557-91, Test Method A. Graphic representations of the results of this testing are presented in this appendix. The maximum densities are compared to the field densities of the soil in order to determine the existing relative compaction to the soil.

Classification Testing: Soil samples were selected for classification testing. This testing consists of mechanical grain size analyses. This provides information for developing classifications for the soil in accordance with the Unified Soil Classification System which is presented in the preceding appendix. This classification system categorizes the soil into groups having similar engineering characteristics. The results of this testing is very useful in detecting variations in the soil and in selecting samples for further testing.

SOIL MECHANIC'S TESTING

Expansion Testing: One (1) bulk sample was selected for Expansion testing. Expansion testing was performed in accordance with the UBC Standard 18-2. This testing consists of remolding 4-inch diameter by 1-inch thick test specimens to a moisture content and dry density corresponding to approximately 50 percent saturation. The samples are subjected to a surcharge of 144 pounds per square foot and allowed to reach equilibrium. At that point the specimens are inundated with distilled water. The linear expansion is then measured until complete.

Direct Shear Testing: One (1) bulk sample was selected for Direct Shear testing. This test measures the shear strength of the soil under various normal pressures and is used to develop parameters for foundation design and lateral design. Tests were performed using a recompacted test specimen that was saturated prior to tests. Tests were performed using a strain controlled test apparatus with normal pressures ranging from 800 to 2300 pounds per square foot.

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Maximum Density/Optimum Moisture

ASTM D698/D1557

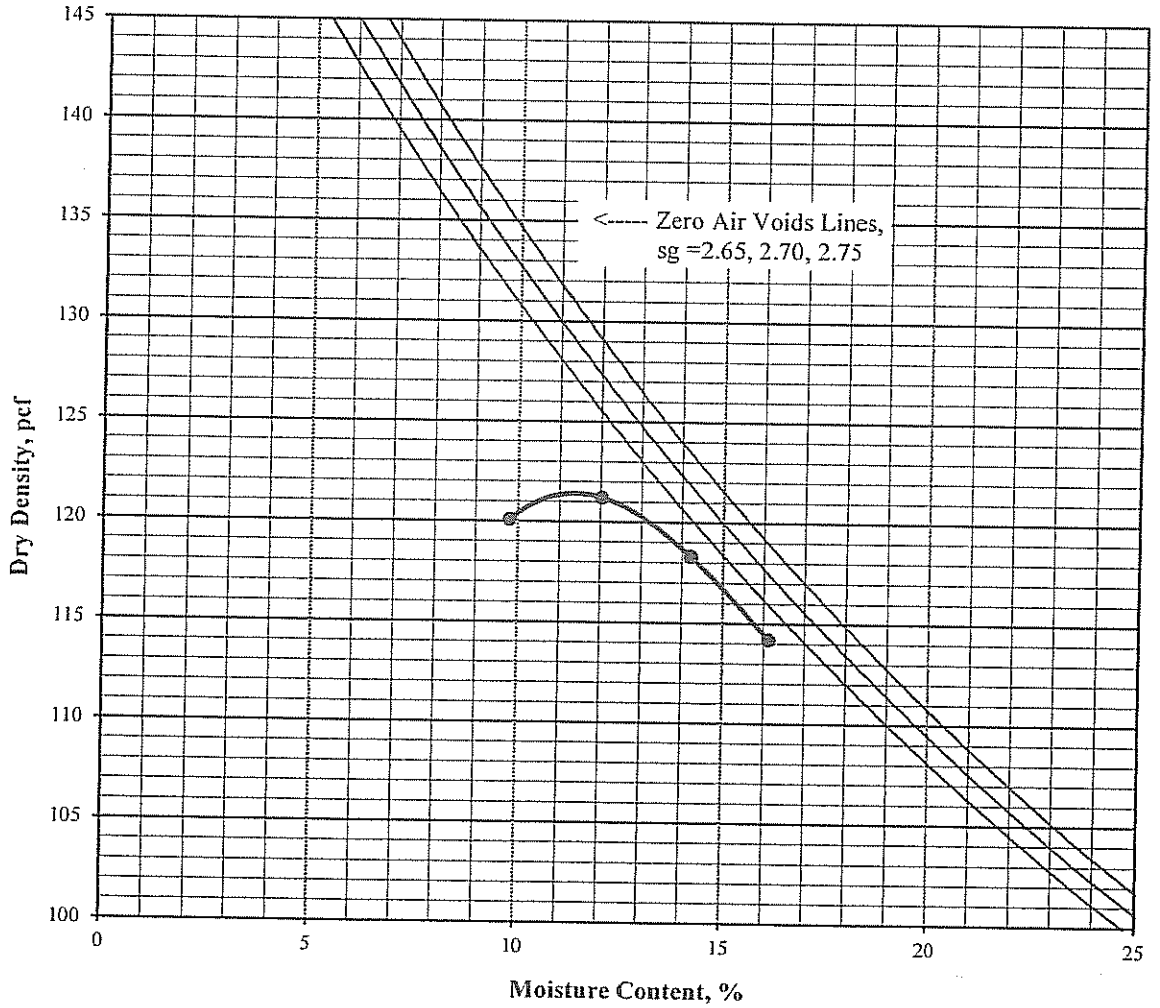
Project Number: 644-19012
Project Name: Cultivation Facility
Lab ID Number: LN6-19177
Sample Location: BH-1 Bulk 1 @ 0-5'
Description: Olive Brown Sandy Silt (ML)

April 25, 2019

ASTM D-1557 A
Rammer Type: Machine

Maximum Density: **121.5 pcf**
Optimum Moisture: **12.5%**

Sieve Size	% Retained
3/4"	
3/8"	
#4	1.0



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Expansion Index

ASTM D 4829

Job Number: 644-19012 April 25, 2019
Job Name: Cultivation Facility
Lab ID Number: LN6-19177
Sample ID: BH-1 Bulk 1 @ 0-5'
Soil Description: Olive Brown Sandy Silt (ML)

Wt of Soil + Ring:	552.9
Weight of Ring:	192.1
Wt of Wet Soil:	360.8
Percent Moisture:	11.5%
Sample Height, in	0.95
Wet Density, pcf:	115.1
Dry Denstiy, pcf:	103.2

% Saturation:	49.1

Expansion **Rack # 1**

Date/Time	4/22/2019	4:32 PM
Initial Reading	0.0000	
Final Reading	0.0325	

Expansion Index **33**

(Final - Initial) x 1000

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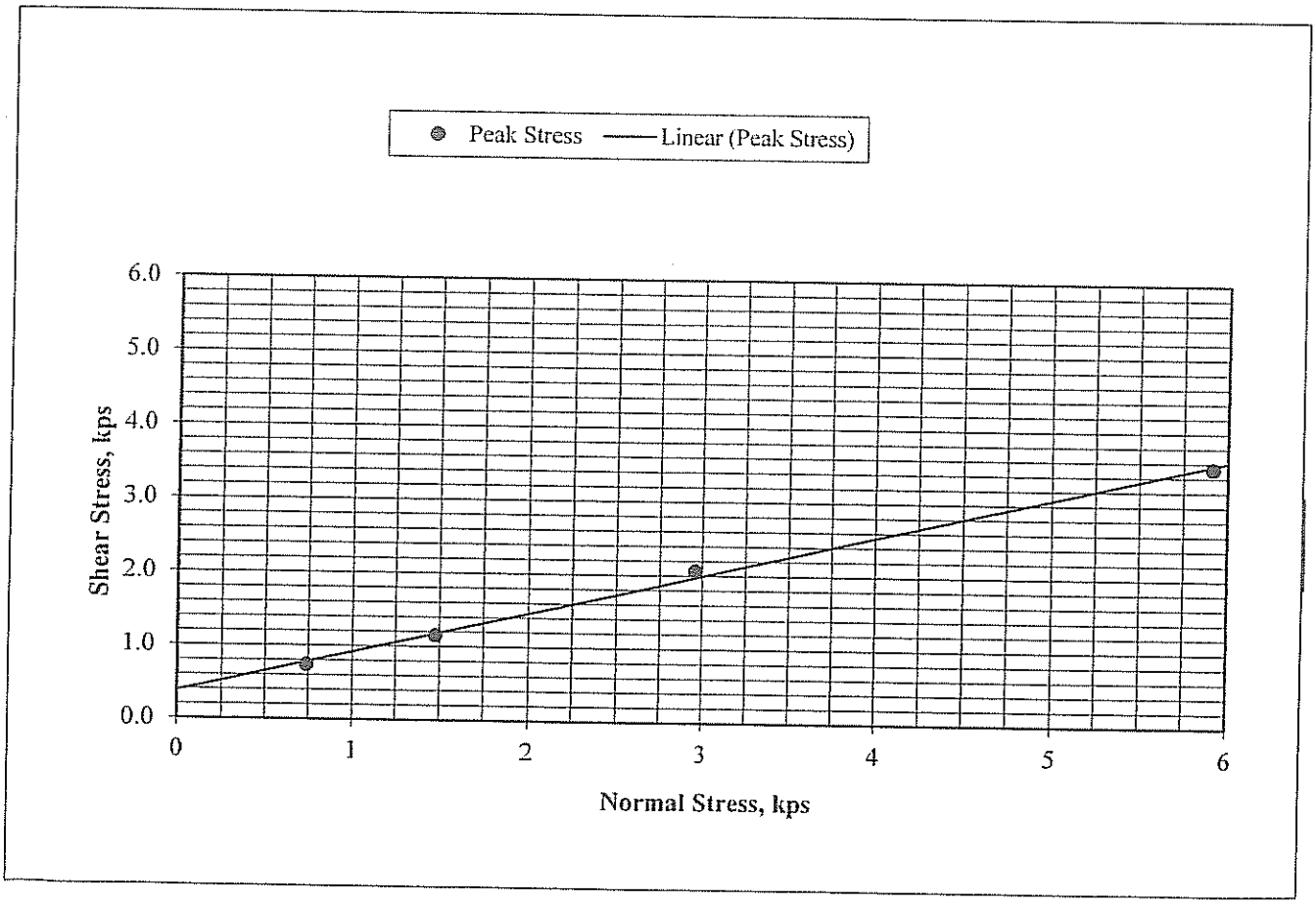
Direct Shear ASTM D 3080-04
(modified for unconsolidated condition)

Job Number:	644-19012
Job Name	Cultivation Facility
Lab ID No.	LN6-19177
Sample ID	BH-1 Bulk 1 @ 0-5'
Classification	Olive Brown Sandy Silt (ML)
Sample Type	Remolded @ 90% of Maximum Density

April 25, 2019
Initial Dry Density: 109.7 pcf
Initial Mosture Content: 12.2 %
Peak Friction Angle (Ø): 28°
Cohesion (c): 380 psf

Test Results	1	2	3	4	Average
Moisture Content, %	21.4	21.4	21.4	21.4	21.4
Saturation, %	107.7	107.7	107.7	107.7	107.7
Normal Stress, kps	0.739	1.479	2.958	5.916	
Peak Stress, kps	0.740	1.153	2.066	3.524	



Job Number:	644-19012
Job Name:	Cultivation Facility
Date:	4/25/2019

Moisture Adjustment

Wt of Soil:	1,000
Moist As Is:	7.8
Moist Wanted:	12.5

ml of Water to Add: 43.6

Remolded Shear Weight

Max Dry Density:	121.5
Optimum Moisture:	12.5

Wt Soil per Ring, g: 147.9

UBC

Sladden Engineering
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Gradation

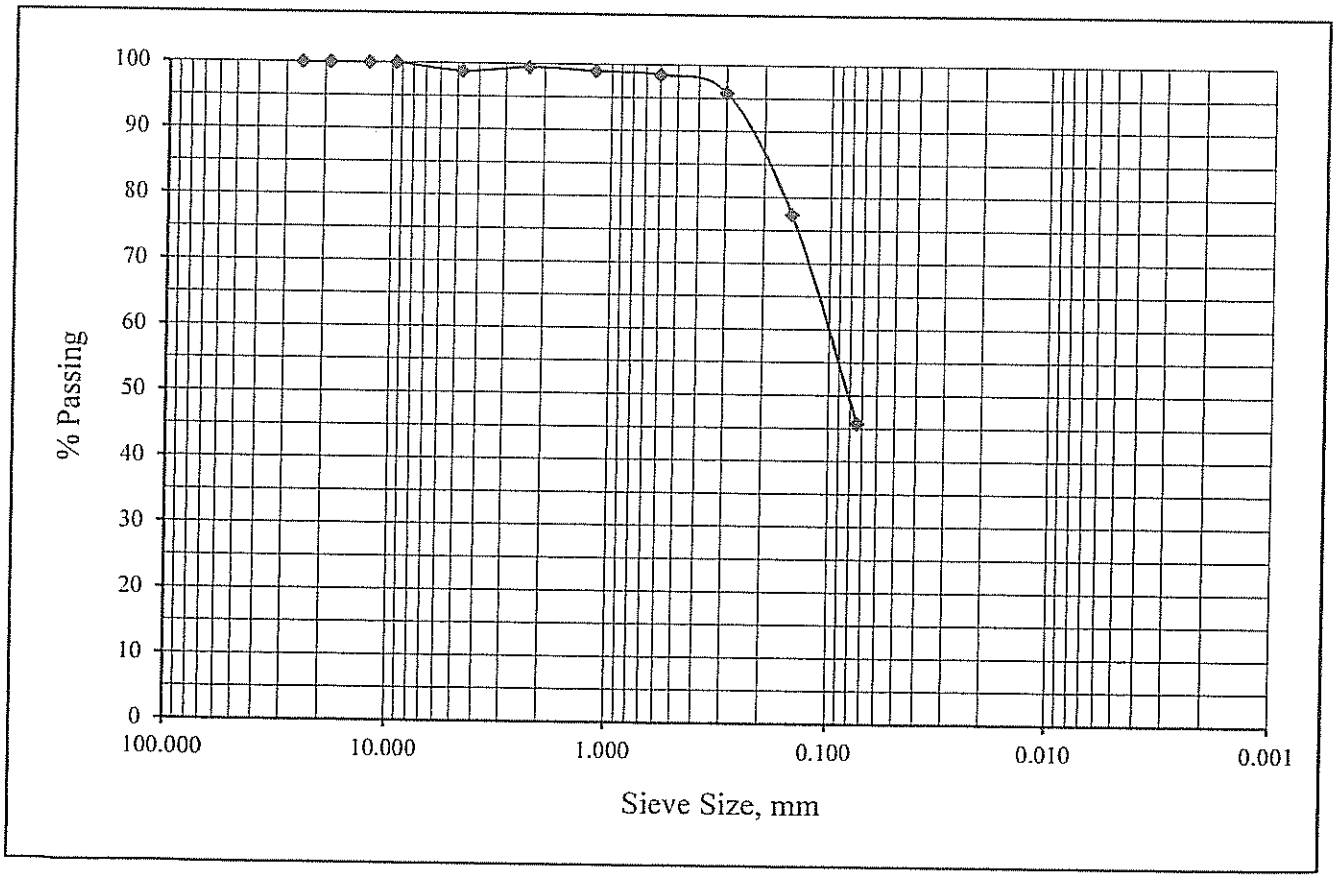
ASTM C117 & C136

Project Number: 644-19012
Project Name: Cultivation Facility
Lab ID Number: LN6-19177
Sample ID: BH-1 R-2 @ 5'

April 25, 2019

Soil Classification: SC

Sieve Size, in	Sieve Size, mm	Percent Passing
1"	25.4	100.0
3/4"	19.1	100.0
1/2"	12.7	100.0
3/8"	9.53	100.0
#4	4.75	98.8
#8	2.36	99.5
#16	1.18	99.0
#30	0.60	98.5
#50	0.30	95.8
#100	0.15	77.5
#200	0.074	45.7



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Gradation

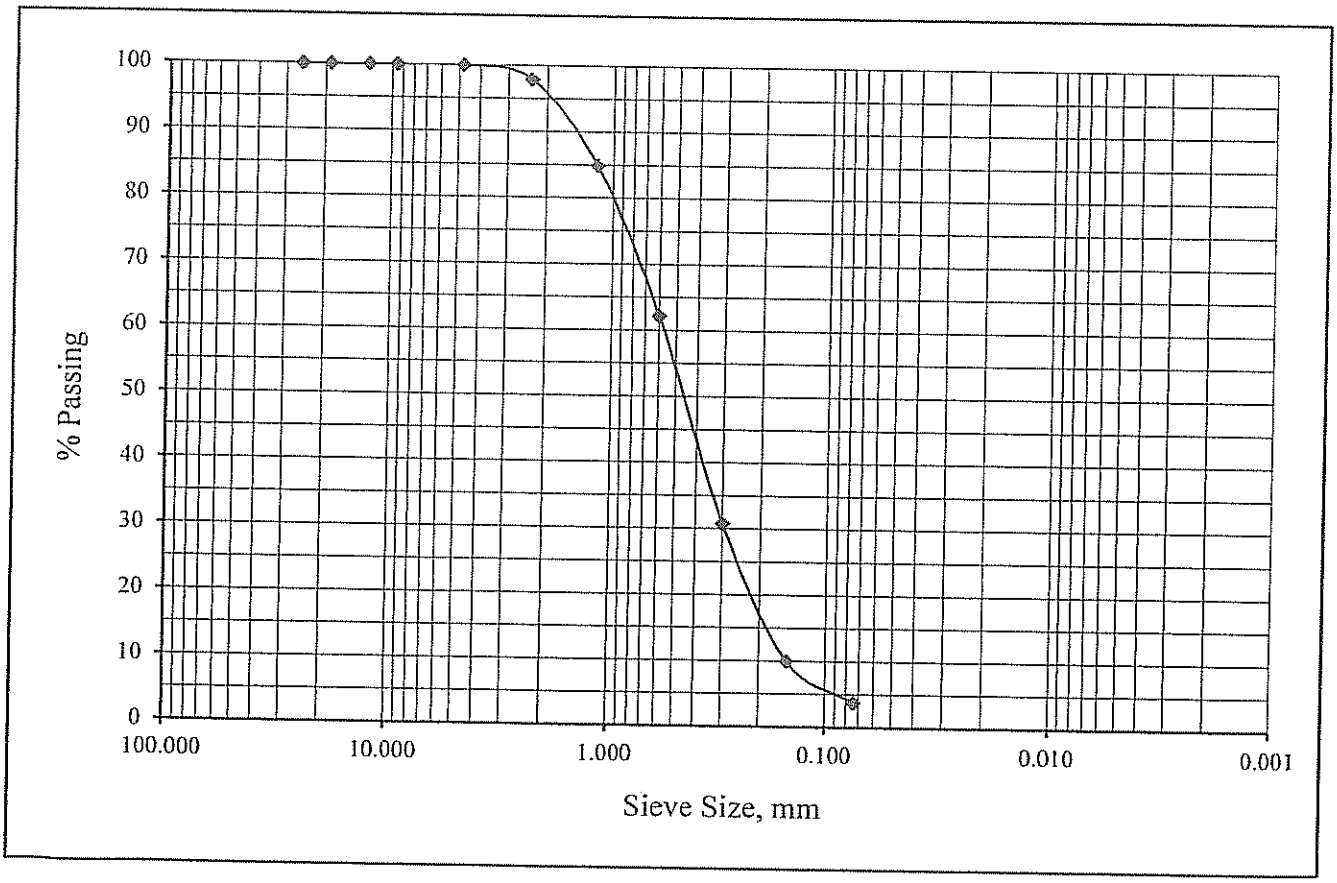
ASTM C117 & C136

Project Number: 644-19012
Project Name: Cultivation Facility
Lab ID Number: LN6-19177
Sample ID: BH-1 R-6 @ 25'

April 25, 2019

Soil Classification: SP

Sieve Size, in	Sieve Size, mm	Percent Passing
1"	25.4	100.0
3/4"	19.1	100.0
1/2"	12.7	100.0
3/8"	9.53	100.0
#4	4.75	100.0
#8	2.36	97.9
#16	1.18	84.9
#30	0.60	62.2
#50	0.30	30.8
#100	0.15	10.0
#200	0.074	3.8



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Gradation

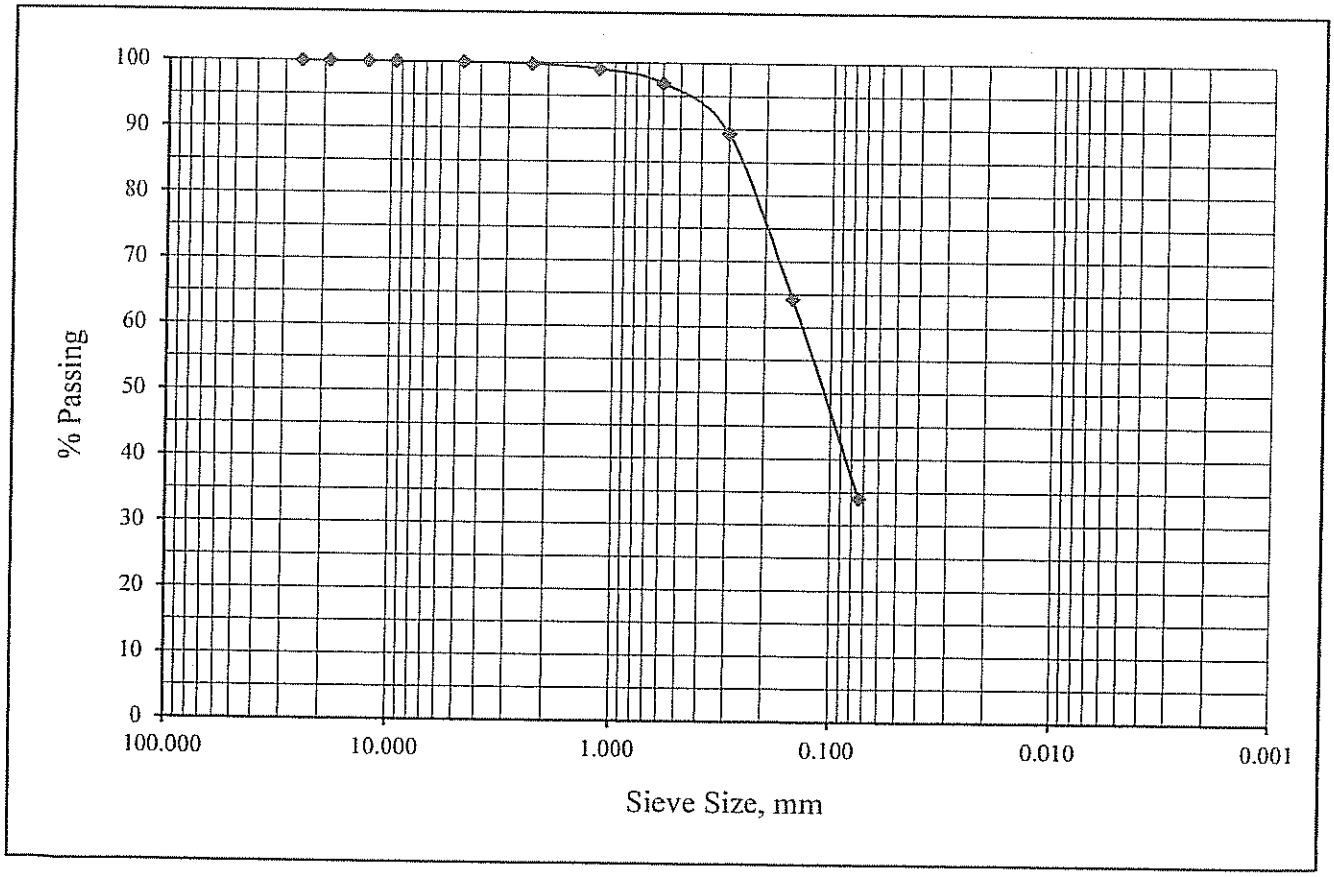
ASTM C117 & C136

Project Number: 644-19012
Project Name: Cultivation Facility
Lab ID Number: LN6-19177
Sample ID: BH-1 R-8 @ 35'

April 25, 2019

Soil Classification: SM

Sieve Size, in	Sieve Size, mm	Percent Passing
1"	25.4	100.0
3/4"	19.1	100.0
1/2"	12.7	100.0
3/8"	9.53	100.0
#4	4.75	100.0
#8	2.36	99.8
#16	1.18	99.1
#30	0.60	96.9
#50	0.30	89.4
#100	0.15	64.3
#200	0.074	34.1



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Gradation

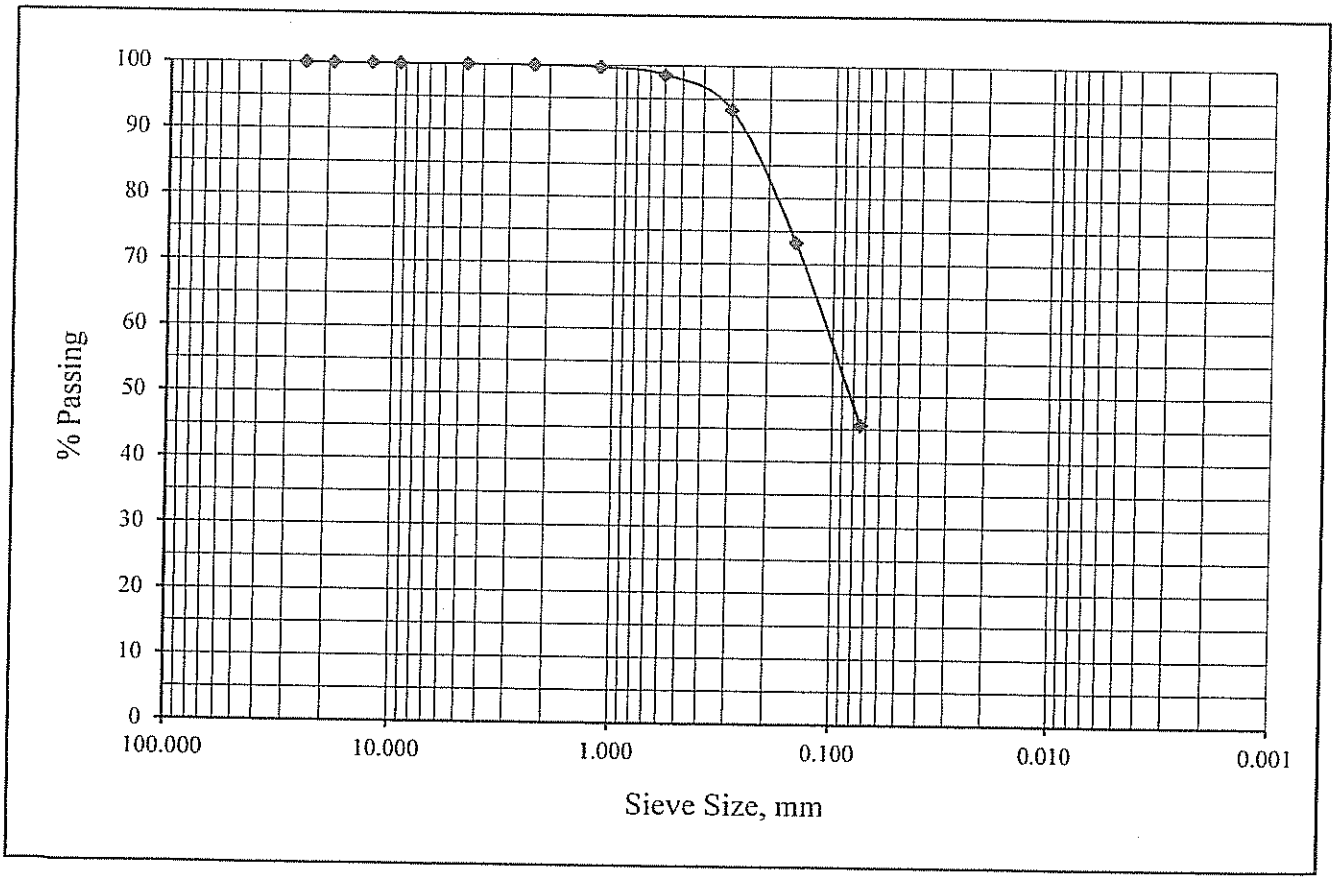
ASTM C117 & C136

Project Number: 644-19012
Project Name: Cultivation Facility
Lab ID Number: LN6-19177
Sample ID: BH-2 R-2 @ 10'

April 25, 2019

Soil Classification: SM

Sieve Size, in	Sieve Size, mm	Percent Passing
1"	25.4	100.0
3/4"	19.1	100.0
1/2"	12.7	100.0
3/8"	9.53	100.0
#4	4.75	100.0
#8	2.36	99.9
#16	1.18	99.7
#30	0.60	98.6
#50	0.30	93.4
#100	0.15	73.3
#200	0.074	45.6



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Gradation

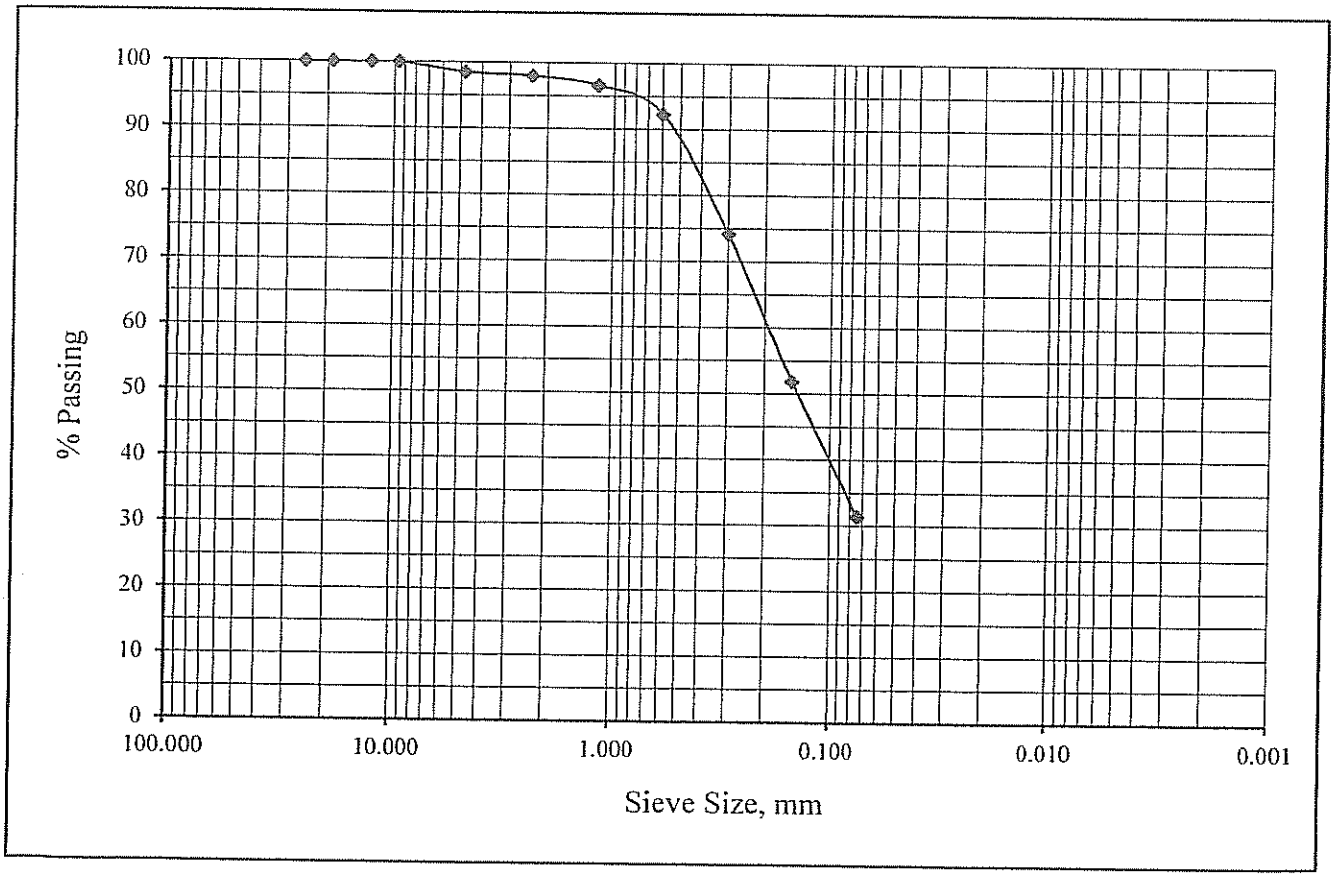
ASTM C117 & C136

Project Number: 644-19012
Project Name: Cultivation Facility
Lab ID Number: LN6-19177
Sample ID: BH-3 S-2 @ 10'

April 25, 2019

Soil Classification: SM

Sieve Size, in	Sieve Size, mm	Percent Passing
1"	25.4	100.0
3/4"	19.1	100.0
1/2"	12.7	100.0
3/8"	9.53	100.0
#4	4.75	98.5
#8	2.36	98.0
#16	1.18	96.6
#30	0.60	92.3
#50	0.30	74.2
#100	0.15	51.9
#200	0.074	31.4



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One Dimensional Consolidation

ASTM D2435 & D5333

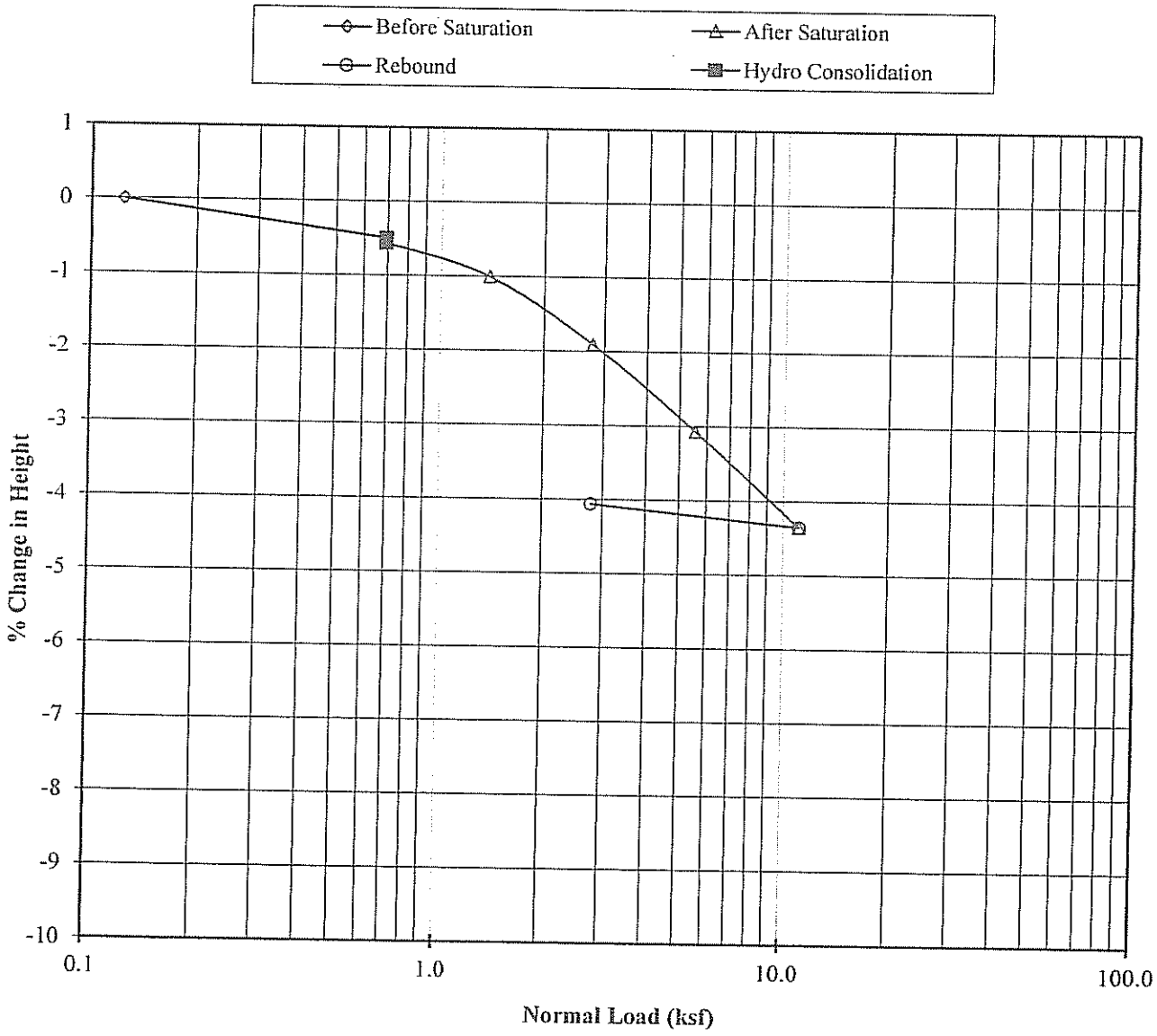
Job Number: 644-19012
Job Name: Cultivation Facility

April 25, 2019

Lab ID Number: LN6-19177
Sample ID: BH-1 R-2 @ 5'
Soil Description: Olive Clayey Sand (SC)

Initial Dry Density, pcf:	98.0
Initial Moisture, %:	12.9
Initial Void Ratio:	0.701
Specific Gravity:	2.67

% Change in Height vs Normal Presssure Diagram



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One Dimensional Consolidation

ASTM D2435 & D5333

Job Number: 644-19012
Job Name: Cultivation Facility

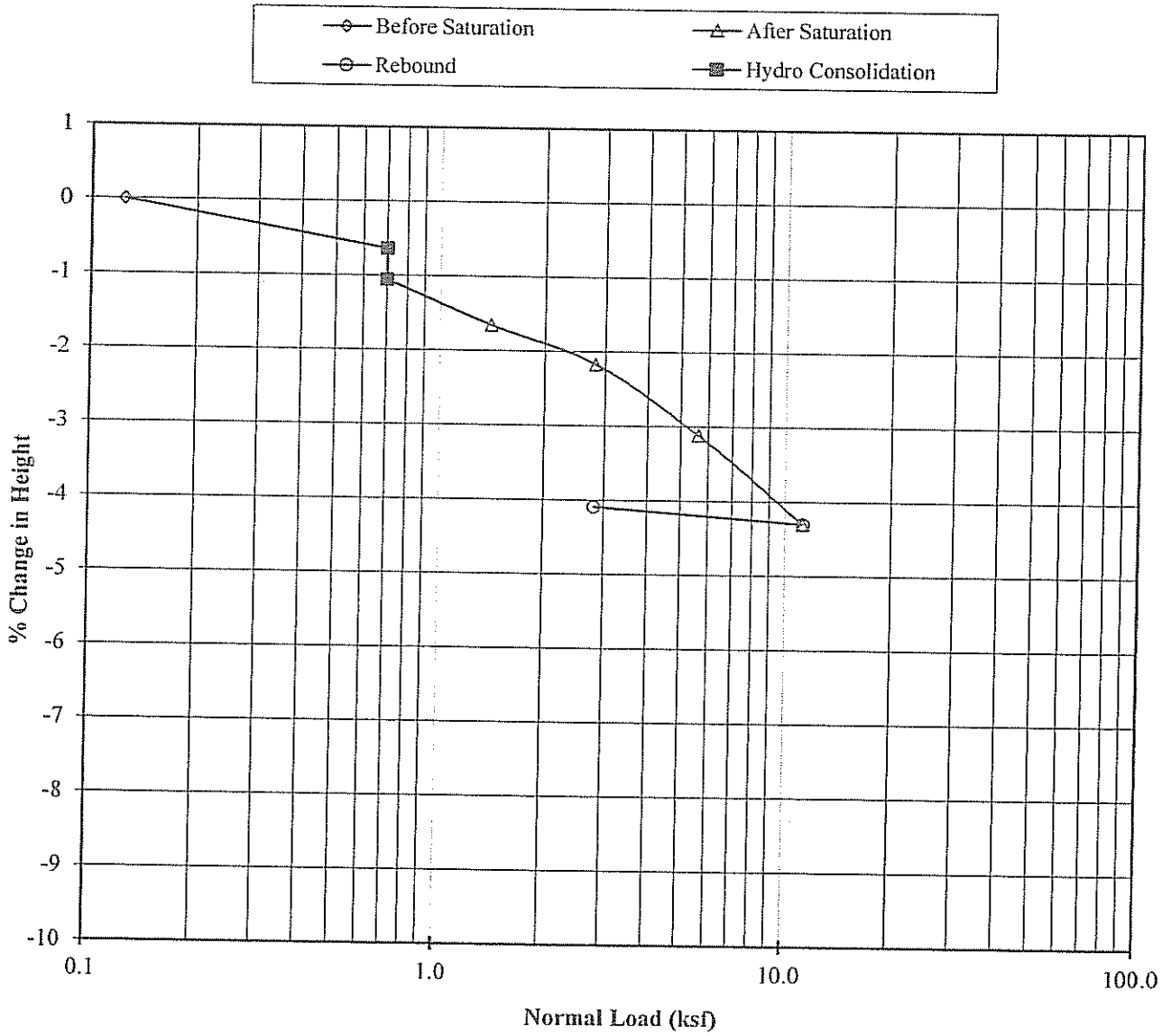
April 25, 2019

Lab ID Number: LN6-19177
Sample ID: BH-2 R-2 @ 10'
Soil Description: Olive Brown Silty Sand (SM)

Initial Dry Density, pcf:	89.0
Initial Moisture, %:	10.9
Initial Void Ratio:	0.873
Specific Gravity:	2.67

Hydrocollapse: 0.4% @ 0.702 ksf

% Change in Height vs Normal Presssure Diagram



Sladden Engineering

6782 Stanton Ave., Suite A, Buena Park, CA 90621 (714) 523-0952 Fax (714) 523-1369
45090 Golf Center Pkwy, Suite F, Indio CA 92201 (760) 863-0713 Fax (760) 863-0847
450 Egan Avenue, Beaumont, CA 92223 (951) 845-7743 Fax (951) 845-8863

Date: April 25, 2019

Account No.: 644-19012

Customer: Innovative Culture Group

Location: APN's 432-130-002, 008 & 009, San Jacinto

Analytical Report

Corrosion Series

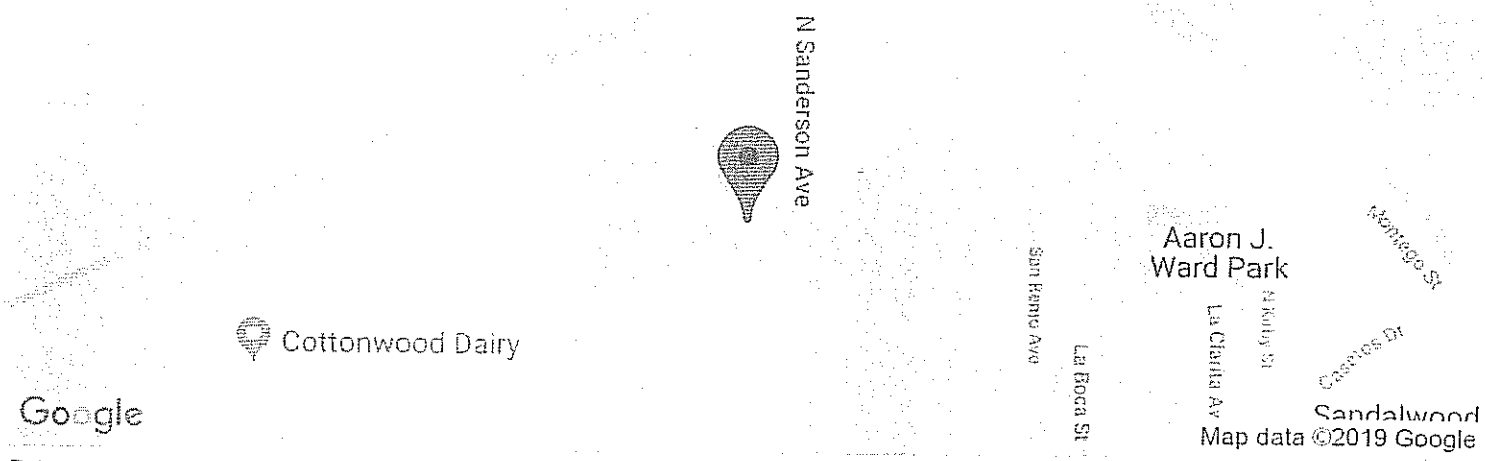
	pH per CA 643	Soluble Sulfates per CA 417 ppm	Soluble Chloride per CA 422 ppm	Min. Resistivity per CA 643 ohm-cm
BH-1 @ 0-5'	9.1	220	180	900

APPENDIX C

SEISMIC DESIGN MAP AND REPORT
DEAGGREGATION OUPUT

OSHPD

Latitude, Longitude: 33.793155, -117.007893

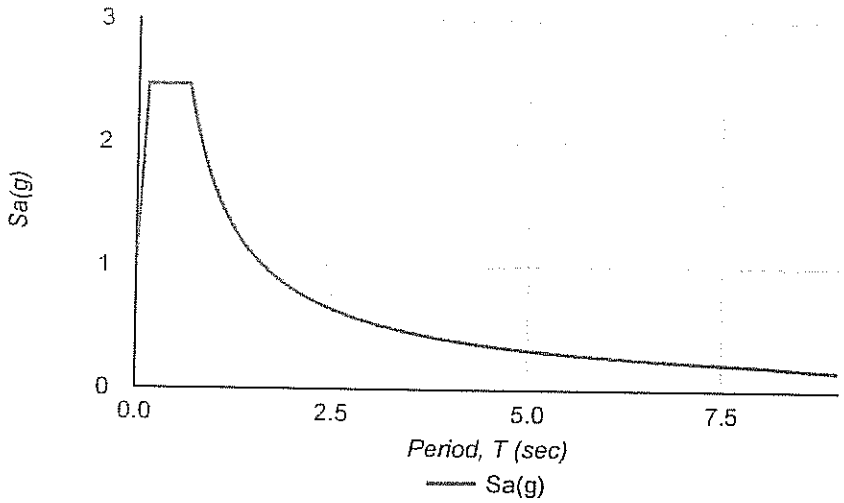


Date	4/29/2019, 1:12:10 PM
Design Code Reference Document	ASCE7-10
Risk Category	II
Site Class	D - Stiff Soil

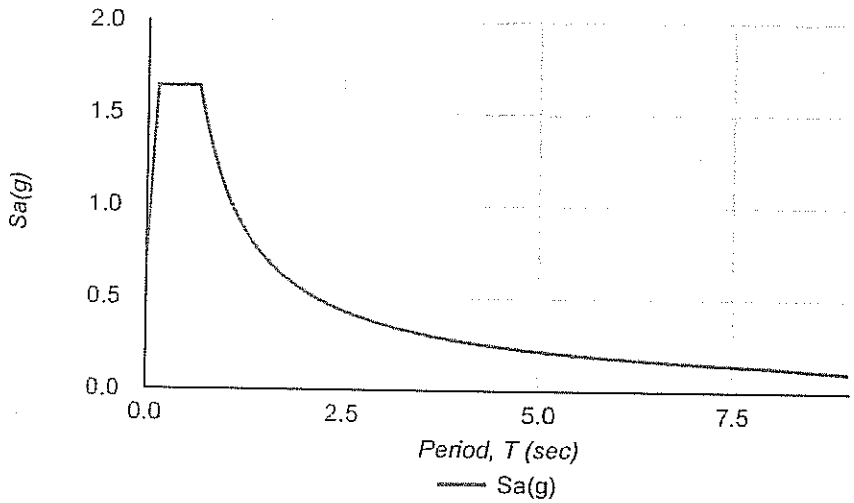
Type	Value	Description
S_S	2.467	MCE_R ground motion. (for 0.2 second period)
S_1	1.074	MCE_R ground motion. (for 1.0s period)
S_{MS}	2.467	Site-modified spectral acceleration value
S_{M1}	1.612	Site-modified spectral acceleration value
S_{DS}	1.645	Numeric seismic design value at 0.2 second SA
S_{D1}	1.074	Numeric seismic design value at 1.0 second SA

Type	Value	Description
SDC	E	Seismic design category
F_a	1	Site amplification factor at 0.2 second
F_v	1.5	Site amplification factor at 1.0 second
PGA	0.95	MCE_G peak ground acceleration
F_{PGA}	1	Site amplification factor at PGA
PGA_M	0.95	Site modified peak ground acceleration
T_L	8	Long-period transition period in seconds
SsRT	3.094	Probabilistic risk-targeted ground motion. (0.2 second)
SsUH	3.266	Factored uniform-hazard (2% probability of exceedance in 50 years) spectral acceleration
SsD	2.467	Factored deterministic acceleration value. (0.2 second)
S1RT	1.34	Probabilistic risk-targeted ground motion. (1.0 second)
S1UH	1.457	Factored uniform-hazard (2% probability of exceedance in 50 years) spectral acceleration.
S1D	1.074	Factored deterministic acceleration value. (1.0 second)
PGAd	0.95	Factored deterministic acceleration value. (Peak Ground Acceleration)
C_{RS}	0.947	Mapped value of the risk coefficient at short periods
C_{R1}	0.92	Mapped value of the risk coefficient at a period of 1 s

MCER Response Spectrum



Design Response Spectrum



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U.S. Geological Survey - Earthquake Hazards Program

Unified Hazard Tool

Please do not use this tool to obtain ground motion parameter values for the design code reference documents covered by the U.S. Seismic Design Maps web tools (e.g., the International Building Code and the ASCE 7 or 41 Standard). The values returned by the two applications are not identical.

Input

Edition

Dynamic: Conterminous U.S. 2014 (v4.1.

Spectral Period

Peak ground acceleration

Latitude

Decimal degrees

33.793155

Time Horizon

Return period in years

475

Longitude

Decimal degrees, negative values for western longitudes

-117.007893

Site Class

259 m/s (Site class D)

Hazard Curve

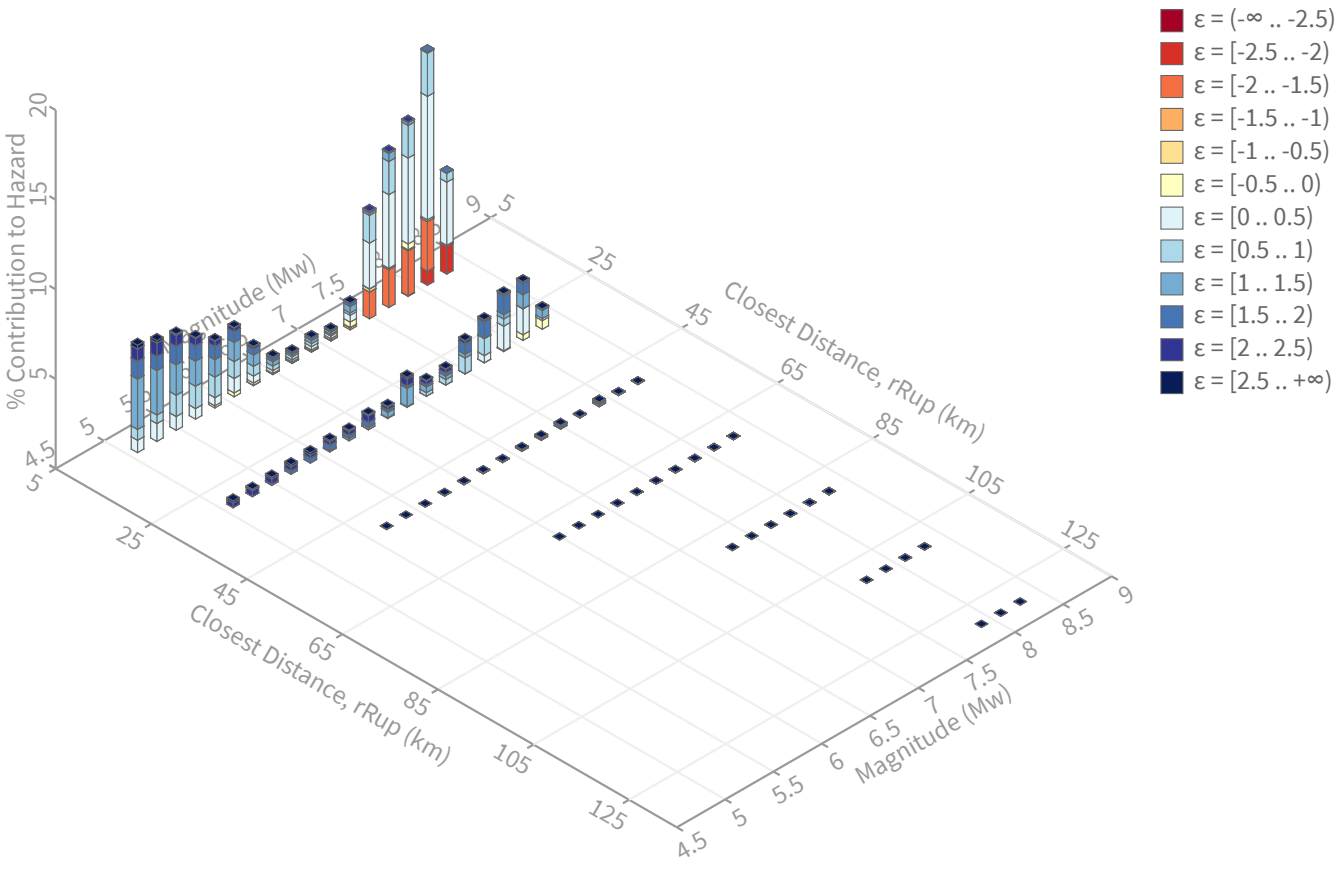
Please select “Edition”, “Location” & “Site Class” above to compute a hazard curve.

Compute Hazard Curve

Deaggregation

Component

Total



Summary statistics for, Deaggregation: Total

Deaggregation targets

Return period: 475 yrs
Exceedance rate: 0.0021052632 yr^{-1}
PGA ground motion: 0.61557634 g

Recovered targets

Return period: 514.27127 yrs
Exceedance rate: 0.001944499 yr^{-1}

Totals

Binned: 100 %
Residual: 0 %
Trace: 0.25 %

Mean (for all sources)

r: 10.85 km
m: 7.01
ε_0: 0.59 σ

Mode (largest r-m bin)

r: 2.64 km
m: 8.1
ε_0: -0.32 σ
Contribution: 13 %

Mode (largest ε_0 bin)

r: 2.47 km
m: 8.11
ε_0: 0.15 σ
Contribution: 6.88 %

Discretization

r: min = 0.0, max = 1000.0, Δ = 20.0 km
m: min = 4.4, max = 9.4, Δ = 0.2
ε: min = -3.0, max = 3.0, Δ = 0.5 σ

Epsilon keys

ε0: [-∞ .. -2.5)
ε1: [-2.5 .. -2.0)
ε2: [-2.0 .. -1.5)
ε3: [-1.5 .. -1.0)
ε4: [-1.0 .. -0.5)
ε5: [-0.5 .. 0.0)
ε6: [0.0 .. 0.5)
ε7: [0.5 .. 1.0)
ε8: [1.0 .. 1.5)
ε9: [1.5 .. 2.0)
ε10: [2.0 .. 2.5)
ε11: [2.5 .. +∞]

Deaggregation Contributors

Source Set ↳ Source	Type	r	m	ε_0	lon	lat	az	%
UC33brAvg_FM31	System							31.34
San Jacinto (Stepovers Combined) [2]		2.47	7.91	-0.29	116.989°W	33.809°N	45.14	20.58
San Andreas (San Bernardino S) [6]		25.37	7.67	1.00	116.820°W	33.959°N	43.21	5.03
UC33brAvg_FM32	System							31.26
San Jacinto (Stepovers Combined) [2]		2.47	7.91	-0.29	116.989°W	33.809°N	45.14	20.51
San Andreas (San Bernardino S) [6]		25.37	7.67	1.00	116.820°W	33.959°N	43.21	5.04
UC33brAvg_FM31 (opt)	Grid							18.70
PointSourceFinite: -117.008, 33.807		5.33	5.51	0.81	117.008°W	33.807°N	0.00	3.38
PointSourceFinite: -117.008, 33.807		5.33	5.51	0.81	117.008°W	33.807°N	0.00	3.38
PointSourceFinite: -117.008, 33.879		10.56	5.60	1.37	117.008°W	33.879°N	0.00	1.03
PointSourceFinite: -117.008, 33.879		10.56	5.60	1.37	117.008°W	33.879°N	0.00	1.03
UC33brAvg_FM32 (opt)	Grid							18.69
PointSourceFinite: -117.008, 33.807		5.33	5.51	0.81	117.008°W	33.807°N	0.00	3.38
PointSourceFinite: -117.008, 33.807		5.33	5.51	0.81	117.008°W	33.807°N	0.00	3.38
PointSourceFinite: -117.008, 33.879		10.56	5.60	1.37	117.008°W	33.879°N	0.00	1.03
PointSourceFinite: -117.008, 33.879		10.56	5.60	1.37	117.008°W	33.879°N	0.00	1.03