



Sativa Well #5

Initial Study – Mitigated Negative Declaration Administrative Draft

prepared for

Water Replenishment District of Southern California

4040 Paramount Boulevard

Lakewood, California 90712

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Chapter 1: Introduction

1.1 Project Title

Sativa Well #5

1.2 Lead Agency Name and Address

Water Replenishment District of Southern California
4040 Paramount Boulevard
Lakewood, California 90712

1.3 Contact Person and Phone Number

Charlene King
Associate Engineer, Construction & Operations
Water Replenishment District of Southern California
(562) 275-4252

1.4 Project Sponsor's Name and Address

Water Replenishment District of Southern California
4040 Paramount Boulevard
Lakewood, California 90712

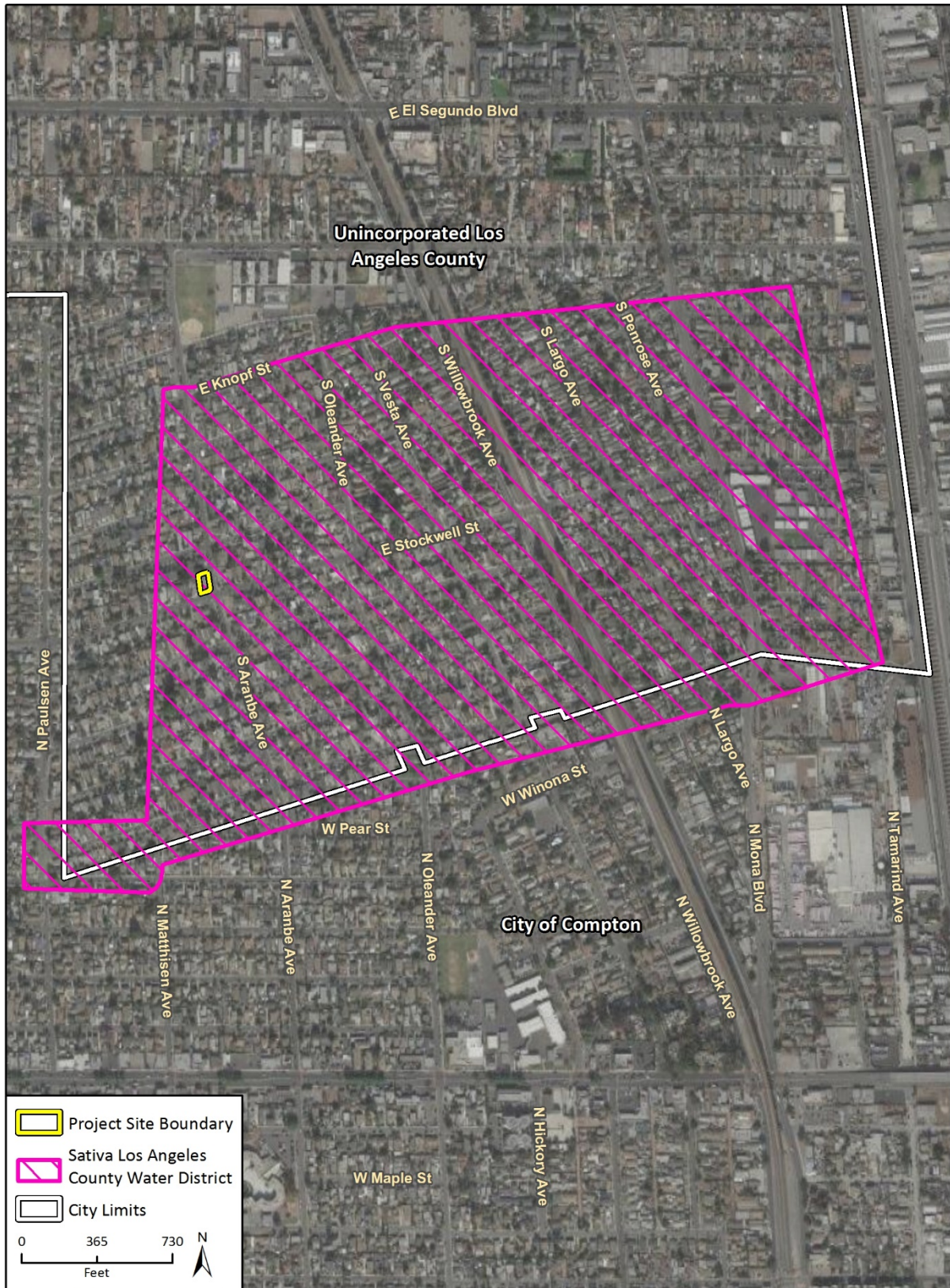
1.5 Project Background and Overview

The Sativa Los Angeles County Water District (Sativa) was incorporated in 1938 and provides domestic water services. Sativa's service area includes a portion of the community of Willowbrook and a small area of the city of Compton in Los Angeles County (see Figure 1). Willowbrook is an unincorporated urbanized community, located adjacent to the cities of Compton, Lynwood, and Los Angeles. Sativa serves an area of approximately 0.5 square mile, with a population of 6,837 and 1,642 water service connections. The Sativa water supply entirely consists of groundwater drawn from two wells, identified as Well #3 and Well #5. This water is pumped then disinfected with chlorine gas before being delivered to Sativa customers.

In 1993, Well #5 was drilled to serve daily water demands within Sativa's service area. Well #5 is a 16-inch diameter well that extends to a depth of approximately 910 feet (ft) with perforations at 200 to 240 ft, 380 to 510 ft, 550 to 670 ft, and 750 to 890 ft. The well head motor is sized at 100 horsepower with dimensions of three feet by three ft and a height of 58 inches.

Well #5 was rehabilitated in spring of 2015 to improve well capacity and production; the well currently produces 650 gallons per minute (gpm) with a drawdown (dd) of 35 ft, which yields a specific capacity of 18.6 gpm/ft dd. Well #5 has exhibited elevated levels of manganese, which occasionally exceed the secondary maximum contaminant level (MCL) established by the United States Environmental Protection Agency (USEPA) for drinking water (Water Replenishment District

Figure 1 Sativa Service Area and Project Site Location



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Additional data provided by California Natural Resources Agency, 2018.

Fig. 2 Project Site Vicinity

of Southern California [WRD] 2018). The proposed project would address these water quality considerations; see Chapter 2 of this Initial Study for a detailed description of the proposed project.

Sativa and WRD are working together under a Memorandum of Understanding established in March 2016 to apply for funding via WRD's Safe Drinking Water Program. WRD and Sativa are applying for funding through the Drinking Water State Revolving Fund administered by the State Water Resources Control Board (SWRCB). This funding will provide a wellhead treatment system and supporting facilities for Well #5. A detailed description of the proposed project is provided in Chapter 2.

Due to use of the Drinking Water State Revolving Fund for these improvements, the required level of environmental analysis under the California Environmental Quality Act (CEQA) is "CEQA-Plus", which includes federal cross-cutter requirements. This Initial Study addresses federal cross-cutter requirements in Chapter 4.

1.6 Project Location

The project site (Well #5) is a 0.08-acre site in a residential neighborhood at the street address of 2083 East Stockwell Street, at the intersection of East Stockwell Street and South Aranbe Avenue in the community of Willowbrook in unincorporated Los Angeles County. See Figure 1 for a map of the project site within the Sativa service area and Figure 2 for a map of the regional site location.

1.7 Existing Setting and Surrounding Land Uses

Land uses in and around the project area are predominantly urban and residential. The Well #5 site is entirely disturbed and paved and is secured on all sides by fencing and walls approximately eight feet in height. All project activities, including construction staging, and ground disturbance would occur within the existing Well #5 site. Existing public roads surrounding the project site would provide construction access to the site.

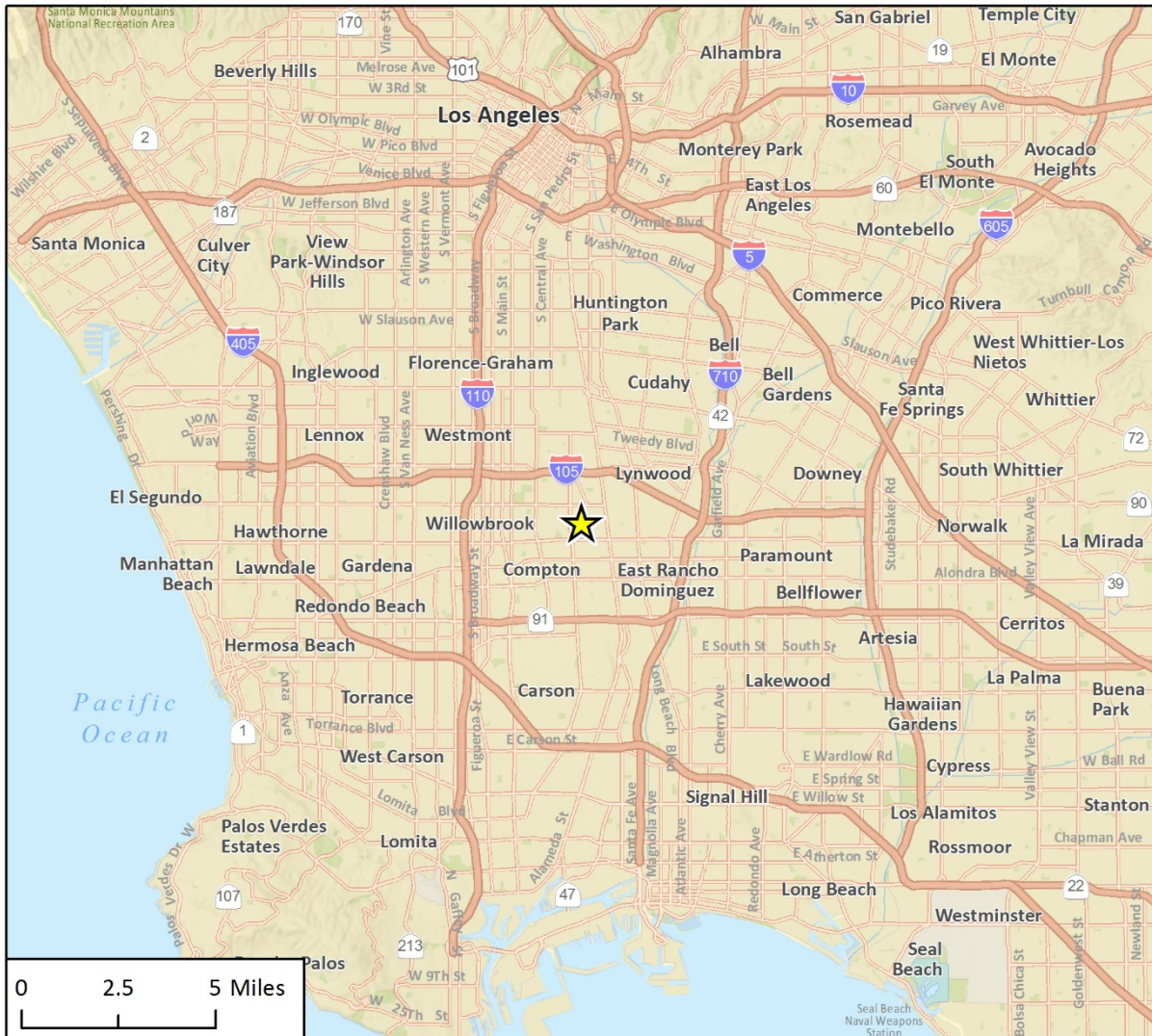
1.8 General Plan Designation and Zoning

The project site is located within the Willowbrook Transit Oriented District (TOD) Specific Plan area; the Los Angeles County General Plan identifies TODs as priority policy areas throughout the county (County of Los Angeles 2015). This site is zoned as R-1 for "single-family residence" as shown on Figure ZC.34: Willowbrook, of the County's Zoning Consistency Program, effective November 5, 2015 (County of Los Angeles 2015). As described in Chapter 2, Project Description, the proposed project would not change the existing land uses on the project site.

1.9 Required Approvals

WRD is the CEQA lead agency with responsibility for approving the project. Table 1 lists other approvals that would likely be required for the project.

Figure 2 Regional Project Location



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★ Project Location

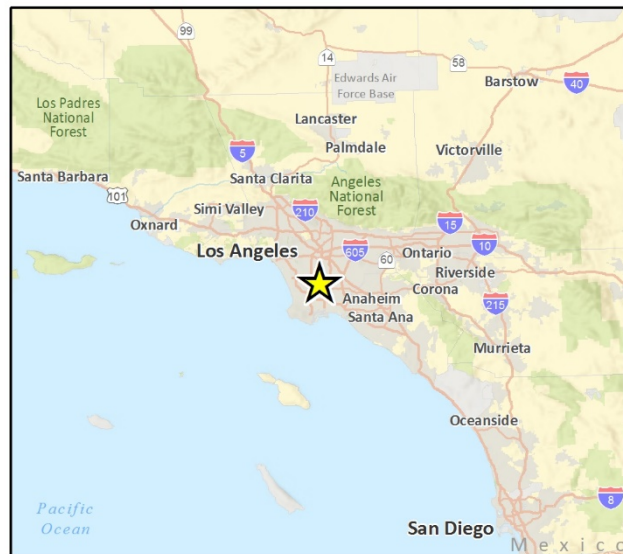


Fig 1 Regional Location

Table 1 Summary of Potentially Required Approvals

Responsible/Regulating Agency	Potential Permit/Approval
State Water Resources Control Board	Potential Funding Source – Drinking Water State Revolving Fund
South Coast Air Quality Management District (SCAQMD)	Permit to Construct and Permit to Operate ¹

¹ A Fugitive Dust Control Plan will be submitted to SCAQMD prior to grading/excavation.

1.10 Scope and Use of this Document

This Initial Study-Mitigated Negative Declaration (IS-MND) provides an assessment of the potential impacts to environmental resources that would result from implementing the proposed project. The discussion and level of analysis are commensurate with the expected magnitude and severity of each impact to environmental resources. The analyses in Chapter 3 are based on technical reports and studies prepared for the project, supplemented with other public information sources as provided in the list of references.

This document evaluates the potential for impacts to resources areas identified in Appendix G of the *State CEQA Guidelines*. These resources areas include:

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

1.10.1 Administration of the Drinking Water State Revolving Loan Fund Program in California

The Drinking Water State Revolving Loan Fund (DWSRF) was established by the 1996 amendments to the Safe Drinking Water Act (SDWA). The DWSRF is a financial assistance program to help water systems and states achieve the health protection objectives of the SDWA. The proposed project is planned to be funded with a grant and/or loan from the DWSRF Program. The program is administered, nationally, by the USEPA, and in certain instances the administration has been delegated to the states. In California, administration of the DWSRF program has been delegated to the SWRCB. In turn, the SWRCB requires that all projects being considered under the DWSRF program must comply with CEQA and certain federal environmental protection laws. SWRCB requires compliance with the Federal Endangered Species Act (FESA; Section 7), the National Historic Preservation Act (NHPA; Section 106), the General Conformity Rule for the Federal Clean Air Act (FCAA), and other executive orders and federal regulations. Collectively, the SWRCB refers to these requirements as “CEQA-Plus.” Therefore, this IS-MND has been prepared in accordance with

the State Environmental Review Process for the DWSRF and is expanded beyond the typical content requirements of an IS-MND to include additional CEQA-Plus information. The SWRCB, as a responsible agency for the project, will consider this CEQA document prior to any DWSRF funding authorization.

1.10.2 Impact Terminology

The anticipated environmental impacts are identified for each of the resource areas listed above. The level of significance for each resource area uses CEQA terminology as specified below:

- **Potentially Significant.** Adverse environmental consequences that have the potential to be significant according to the threshold criteria identified for the resource, even after mitigation strategies are applied and/or an adverse effect that could be significant and for which no mitigation has been identified. If any potentially significant impacts are identified, an Environmental Impact Report (EIR) must be prepared to meet the requirements of CEQA.
- **Potentially Significant Unless Mitigation is Incorporated.** Adverse environmental consequences that have the potential to be significant but can be reduced to less than significant levels through the application of identified mitigation strategies that have not already been incorporated into the proposed project.
- **Less than Significant.** Potential adverse environmental consequences have been identified. However, they are not so adverse as to meet the significance threshold criteria for that resource. Therefore, no mitigation measures are required.
- **No Impact.** No adverse environmental consequences have been identified for the resource or the consequences are negligible or undetectable. Therefore, no mitigation measures are required.

1.10.3 Recommended Level of Environmental Documentation

Based on the analysis presented herein, an IS-MND is the appropriate level of environmental documentation for the project.

Chapter 2: Project Description

The proposed project would implement an oxidation-filtration treatment method of iron manganese removal for groundwater produced from Well #5. The proposed treatment facilities, identified in Table 2, would be located exclusively at the Well #5 site alongside existing facilities. Existing facilities include Well #5, gas chlorinator facilities, an electrical room, a backup generator, and a hydropneumatics surge tank. Under the proposed project, all existing facilities would be left in place with the exception of the hydropneumatics surge tank, which would be removed.

Table 2 Proposed Treatment Facilities

Proposed Treatment Facilities	Dimensions
Iron manganese filtration system with an air compressor and two reaction vessels	7 ft. diameter x 9.3 ft. in height (filter vessel) 4 ft. diameter x 8 ft. in height (reaction vessels)
Sodium bisulfite chemical system (1/4 horsepower)	4 ft. diameter x 12.5 ft. in height
Additional gas cylinder for gas chlorinator facilities	n/a
20,000-gallon backwash settling tank	15 ft. diameter x 16 ft. height
48,000-gallon steel tank for on-site treated water storage	18 ft. diameter x 32 ft. height
Two 750 gallon-per-minute booster pumps	n/a
Yard piping	200 linear feet (LF)
Backwash pump	n/a
Decant return pump	n/a
n/a = not applicable	

Groundwater pumped from Well #5 would proceed through the gas chlorinator and sodium bisulfite chemical system before entering the iron manganese filtration system. The additional gas cylinder would provide an additional two milligrams per liter of chlorine for the iron manganese filtration system. The treated product water from the system would initially be stored on-site in the 48,000-gallon steel tank and would be pumped by the booster pump system (BPS) through the existing pipe connection to the existing distribution main on South Aranbe Street. The steel tank would also supply water via the backwash pump for the daily backwash cycle required for the iron manganese filtration system. Upon completion of the backwash cycle, wastewater would be stored in a backwash settling tank equipped with a dolphin strainer/skimmer, which would recycle the supernatant solution and pump the reclaimed water back into the iron manganese filtration system via the decant return pump (WRD 2018). The iron manganese filtration system, sodium bisulfite chemical system, backwash pump, booster pumps, and decant return pump would be equipped with electric motors. In conjunction with the construction of the proposed treatment facilities, the existing hydropneumatics surge tank located on the Well #5 site would be removed.

Figure 3 shows the site layout of the proposed project, and Figure 4 shows the process flow diagram for the treatment facilities. During normal operation, staff is anticipated to visit the site daily for visual inspection. If operated manually, the proposed project may require one additional trip per day.

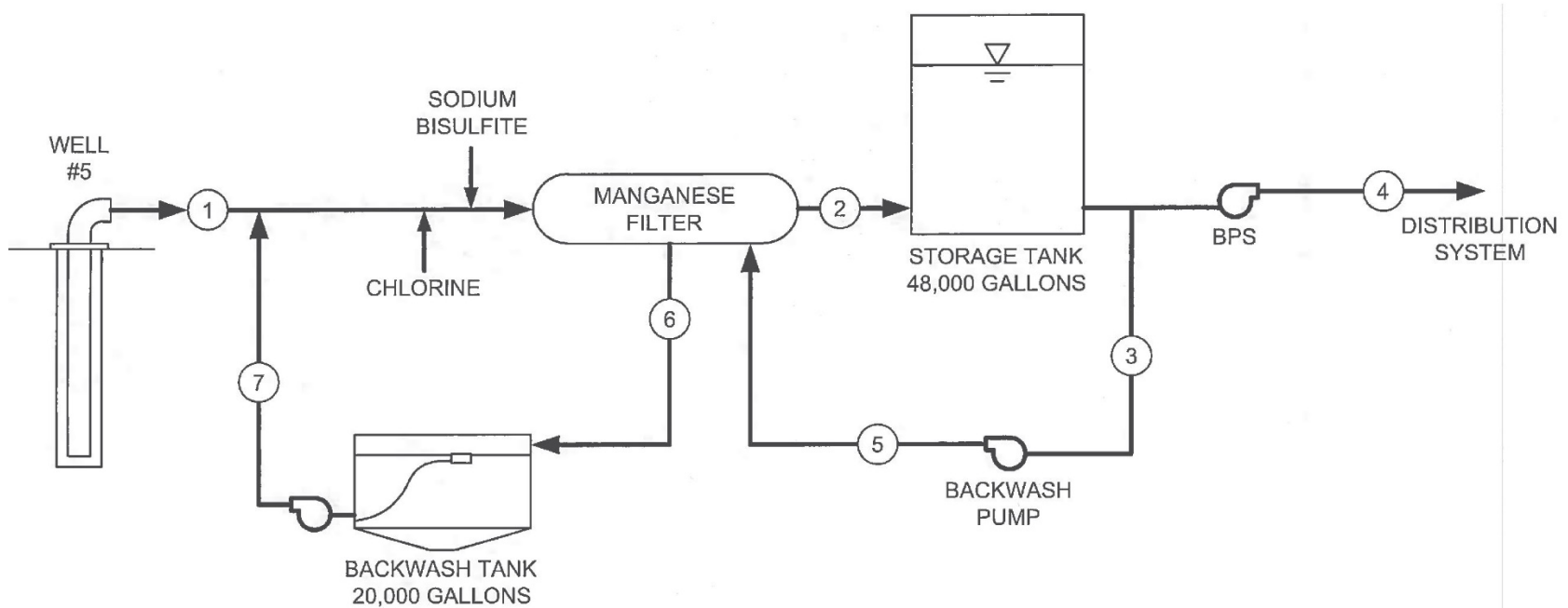
Figure 3 Project Facilities



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Additional data provided by Water Replenishment District of Southern California, 2018.

Fig. 3 Project Site Facilities Existing/Proposed

Figure 4 Process Flow Diagram



STREAM	DESCRIPTION	FLOW (gpm)
①	RAW WELL FEED	580 - 750
②	FILTERED PRODUCT WATER	640 - 750
③	PRODUCT WATER SUPPLY TO BACKWASH	1,500
④	PRODUCT WATER TO DISTRIBUTION	640 - 1,500
⑤	BACKWASH FEED	1,500
⑥	BACKWASH WASTE TO TANK	1,500
⑦	RECLAIM FLOW	60

Source: Tetra Tech 2018

2.1 Purpose of the Project

The purpose of the proposed project is to provide water quality treatment at Sativa's Well #5 to address manganese contamination which affects drinking water quality produced and delivered within Sativa's service area.

2.2 Project Construction

The proposed project would install facilities to provide water quality treatment for manganese contamination, as identified in Table 2. Construction would include removal of the existing hydropneumatics surge tank, site preparation, laying of foundations, installation of pipelines, tanks, pumps, and equipment, and paving of disturbed areas. These activities would occur over approximately seven months between April 2019 and December 2020 in the following phases:

- Demolition: two weeks
- Site Preparation, foundations, and piping: six weeks
- Installation of tanks, pumps, and equipment: one month
- Paving: five days

In addition, startup and testing activities would occur for one month following the completion of construction. Construction activities would typically occur between the hours of 7:00 a.m. and 5:00 p.m., such that nighttime lighting, noise, and traffic in the project area may be avoided. On occasion, late afternoon activities during the winter could require that some lighting be used, and, in some cases, nighttime construction may be required, as addressed in Section 3.1, Aesthetics.

Construction of the pads that would underlie the backwash tank, iron manganese filtration system, treated water storage tank, and booster pump system would require excavation to a depth of four to six feet. In addition, installation of yard piping would require construction via open trench measuring two feet in width and three feet in depth. Based upon the dimensions of the aforementioned project features, it is anticipated that approximately 110 cubic yards (CY) of soil would be excavated from the project site, 29 CY of the excavated soil would be reused on-site for fill material, 81 CY of the excavated soils would be exported, and approximately 15 CY of soil would be imported for use on-site. At the end of the construction period, the trenched area would be re-paved. Construction staging and materials storage would occur on-site.

Environmental Factors Potentially Affected

This project would potentially affect the environmental factors checked below, involving at least one impact that is “Potentially Significant” or “Less than Significant with Mitigation Incorporated” as indicated by the checklist on the following pages.

- | | | |
|--|---|--|
| <input type="checkbox"/> Aesthetics | <input type="checkbox"/> Agriculture and Forest Resources | <input type="checkbox"/> Air Quality |
| <input checked="" type="checkbox"/> Biological Resources | <input checked="" type="checkbox"/> Cultural Resources | <input type="checkbox"/> Geology and Soils |
| <input checked="" type="checkbox"/> Greenhouse Gas Emissions | <input checked="" type="checkbox"/> Hazards and Hazardous Materials | <input type="checkbox"/> Hydrology/Water Quality |
| <input type="checkbox"/> Land Use/Planning | <input type="checkbox"/> Mineral Resources | <input checked="" type="checkbox"/> Noise |
| <input type="checkbox"/> Population/Housing | <input type="checkbox"/> Public Services | <input type="checkbox"/> Recreation |
| <input type="checkbox"/> Transportation/Traffic | <input type="checkbox"/> Tribal Cultural Resources | <input type="checkbox"/> Utilities/Service Systems |
| <input type="checkbox"/> Mandatory Findings of Significance | | |

Determination

Based on this initial evaluation:

- I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
- 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 to the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
- I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
- I find that the proposed project MAY have a “potentially significant impact” or “potentially significant unless mitigated” impact on the environment, but at least one effect (1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and (2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

- I find that although the proposed project could have a significant effect on the environment, because all potential 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.

Charlene King
Signature

11/15/2018
Date

Charlene King
Printed Name

Associate Engineer
Title

Chapter 3: Environmental Checklist

3.1 Aesthetics

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project have any of the following impacts?				
a. Substantial adverse effect on a scenic vista	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Substantial damage to scenic resources, including but not limited to trees, rock outcroppings, and historic buildings along a state scenic highway	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. Substantially degrade the existing visual character or quality of the site and its surroundings	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Create a new source of substantial light or glare that would adversely affect daytime or nighttime views in the area	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

- a. *Would the project have a substantial adverse effect on a scenic vista?*
- b. *Would the project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings in a State scenic highway?*

There are no scenic vistas located in the project area. Land uses in and around the project area are predominantly residential and urban. The proposed project involves the construction of water quality treatment infrastructure on a previously disturbed site that is presently being used for water production and treatment. There would be no change in land use at the project site and the proposed project would not interrupt or impede an identified scenic vista. No impact would occur.

There are no proposed or designated State scenic highways in the project area. Therefore, the project would not result in a substantial adverse effect on a scenic resource visible from a State scenic highway. No impact would occur.

NO IMPACT

- c. *Would the project substantially degrade the existing visual character or quality of the site and its surroundings?*

Construction of the proposed project would be visible from surrounding land uses and would temporarily alter the existing visual character and quality of the project area and vicinity. A temporary change in visual character would result from the presence of construction equipment and material, stockpiles of soil, and construction vehicles during installation of the project. Construction activities may include grading, excavation, trenching, and erection of safety barriers and temporary exclusion fencing. These activities may temporarily obstruct or degrade the viewshed for residents and motorists in the immediate vicinity, but this change would end once project construction is complete and the project site is restored to pre-construction conditions.

In addition, high-quality visual resources are not present in the project area. As described above, there are no scenic vistas or State scenic highways visible from the proposed project site. Due to the temporary nature of construction activities at the project site, the lack of high-quality visual resources in the project area, and the consistency of visible project components with existing site conditions, construction and operation of the proposed project would not substantially degrade the existing visual character or quality of the site and its surroundings.

This impact would be less than significant.

LESS THAN SIGNIFICANT IMPACT

- d. *Would the project create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?*

Construction of the proposed project components may create light and glare during construction due to the presence of construction vehicles and equipment. Construction activities would typically occur between the hours of 7:00 a.m. and 5:00 p.m., such that nighttime lighting may be avoided. On occasion, late afternoon activities during the winter could require that some lighting be used, and, in some cases, nighttime construction may be required. This light may be visible from surrounding roadways and residential and other land uses, but the lighting would not face toward adjacent land uses and would be directed towards the project activities. Furthermore, construction activities would be temporary. The proposed project would not create a new source of light or glare once construction is complete, as the proposed facilities would be visually consistent with existing facilities on the project site.

Therefore, potential impacts associated with light or glare would be less than significant.

LESS THAN SIGNIFICANT IMPACT

3.2 Agriculture and Forest Resources

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
--	--------------------------------	--	------------------------------	-----------

Would the project have any of the following impacts?

a. Convert Prime Farmland, Unique Farmland, Farmland of Statewide Importance (Farmland), as shown on maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Conflict with existing zoning for agricultural use or a Williamson Act contract	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. Conflict with existing zoning for or cause rezoning of forest land (as defined in Public Resources Code Section 12220(g)); timberland (as defined by Public Resources Code Section 4526); or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. Result in the loss of forest land or conversion of forest land to non-forest use	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e. Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

- a. *Would the project convert Prime Farmland, Unique Farmland, Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?*
- b. *Would the project conflict with existing zoning for agricultural use, or a Williamson Act contract?*
- c. *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))?*
- d. *Would the project result in the loss of forest land or conversion of forest land to non-forest use?*
- e. *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?*

The project site is fully disturbed and not in agricultural production. The project site does not contain Prime Farmland, Unique Farmland, Farmland of Statewide Importance, or land with a Williamson Act contract. No part of the site is located on forest land or timber land. The project would also not cause the loss of forest land or conversion of forest land to non-forest use. Due to the absence of agricultural land at the project site or in the surrounding area, the project would not involve changes to the existing environment which could result in conversion of Farmland to a non-agricultural use. No impact to agricultural or forest resources would occur.

NO IMPACT

3.3 Air Quality

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project have any of the following impacts?				
a. Conflict with or obstruct implementation of the applicable air quality plan	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Violate any air quality standard or contribute substantially to an existing or projected air quality violation	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. 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 (including releasing emissions which exceed quantitative thresholds for ozone precursors)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Expose sensitive receptors to substantial pollutant concentrations	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e. Create objectionable odors affecting a substantial number of people	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

The project area is within the South Coast Air Basin (SCAB) which is bounded by the Pacific Ocean to the west and the San Gabriel, San Bernardino, and San Jacinto Mountains to the north and east, and includes all of Orange County and the non-desert portions of Los Angeles, Riverside, and San Bernardino Counties, in addition to the San Geronio Pass area in Riverside County. The SCAB is under the regulatory jurisdiction of the South Coast Air Quality Management District (SCAQMD). The local air quality management agency is required to monitor air pollutant levels to ensure that National Ambient Air Quality Standards (NAAQS) and California Ambient Air Quality Standards (CAAQS) are met and, if they are not met, to develop strategies to meet the standards.

Depending on whether the standards are met or exceeded, the SCAB is classified as being in “attainment” or “nonattainment” for air quality. The SCAQMD’s 2016 Air Quality Management Plan (AQMP) assesses the attainment status of the SCAB. The NAAQS and CAAQS attainment statuses for the SCAB are listed in Table 3. As shown therein, the SCAB is in nonattainment for the federal standards for ozone and particulate matter 2.5 microns or less in diameter (PM_{2.5}) and the state standards for ozone, particulate matter 10 microns or less in diameter (PM₁₀), and PM_{2.5}. Areas of the SCAB located in Los Angeles County are also in nonattainment for lead (SCAQMD 2017a). The SCAB is designated unclassifiable or in attainment for all other federal and state standards. Thus, the SCAB currently exceeds several state and federal ambient air quality standards and is required to implement strategies that would reduce pollutant levels to recognized acceptable standards. The

SCAQMD has adopted an AQMP that provides a strategy for the attainment of state and federal air quality standards.

Table 3 South Coast Air Basin Attainment Status

Pollutant	Standard	Designation
1-Hour Ozone	NAAQS	Nonattainment (Extreme)
	CAAQS	Nonattainment
8-Hour Ozone	NAAQS	Nonattainment (Extreme) ¹
	CAAQS	Nonattainment
CO	NAAQS	Attainment (Maintenance)
	CAAQS	Attainment
NO ₂	NAAQS	Unclassifiable/Attainment
	CAAQS	Attainment
SO ₂	NAAQS	Designations Pending/Unclassifiable/Attainment ²
	CAAQS	Attainment
PM ₁₀	NAAQS	Attainment (Maintenance)
	CAAQS	Nonattainment
PM _{2.5} (24-hour)	NAAQS	Nonattainment (Serious)
	CAAQS	Nonattainment
Lead	NAAQS	Nonattainment (Partial) ³
	CAAQS	Attainment
Hydrogen Sulfide	CAAQS	Unclassified ⁴
Sulfates	CAAQS	Attainment

NAAQS: National Ambient Air Quality Standards; CAAQS: California Ambient Air Quality Standards; CO: carbon monoxide; PM₁₀: particulate matter less than 10 microns in size; PM_{2.5}: particulate matter less than 2.5 microns in size; NO₂: nitrogen dioxide; SO₂: sulfur dioxide

¹ Designated Nonattainment (Extreme) for the 1997 and 2008 8-Hour Ozone NAAQS. Designation is pending for the 2015 8-Hour Ozone NAAQS, but Nonattainment (Extreme) is expected.

² Designated Unclassifiable/Attainment for the Annual SO₂ NAAQS. Designation is pending for the 1-Hour SO₂ NAAQS but the SCAB expected to be designated Unclassifiable/Attainment.

³ Designated Nonattainment (Partial) for the Los Angeles County portion of the SCAB only for near-source monitors. Los Angeles County is expected to remain in attainment based on current monitoring data, and the attainment re-designation request is pending.

⁴ SCAQMD began monitoring hydrogen sulfide in the southeastern Coachella Valley in November 2013 due to odor events related to the Salton Sea; three full years of data are not yet available for a state designation.

Source: SCAQMD 2017a

In an effort to monitor the various concentrations of air pollutants throughout the SCAB, the SCAQMD has divided the region into 38 source receptor areas (SRAs) in which over 30 monitoring stations operate. The project is located within SRA 12, which covers the Willowbrook area. Ambient air pollutant concentrations within SRA 12 are monitored in Compton.

The SCAQMD provides numerical thresholds to analyze the significance of a project’s construction and operational emissions to regional air quality. These thresholds, listed in Table 4, are designed

such that a project consistent with the thresholds would not have an individually or cumulatively significant impact to the SCAB’s air quality.

Table 4 SCAQMD Air Quality Significance Thresholds

Pollutant	Mass Daily Thresholds	
	Construction Thresholds (pounds/day)	Operational Thresholds (pounds/day)
NO _x	55	100
ROG ¹	55	75
PM ₁₀	150	150
PM _{2.5}	55	55
SO _x	150	150
CO	550	550
Lead	3	3

NO_x: nitrogen oxides; PM₁₀: particulate matter 10 microns or less in diameter; PM_{2.5}: particulate matter 2.5 microns or less in diameter; SO_x: sulfur oxides; CO: carbon monoxide; ROG: reactive organic gases

¹ Reactive Organic Gases are formed during combustion and evaporation of organic solvents. Reactive Organic Gases are also referred to as Volatile Organic Compounds.

Source: SCAQMD 2015

In addition to the above thresholds, the SCAQMD has developed Localized Significance Thresholds (LSTs) in response to the Governing Board’s Environmental Justice Enhancement Initiative (1-4), which was prepared to update the CEQA Air Quality Handbook. LSTs were devised in response to concern regarding exposure of individuals to criteria pollutants in local communities and have been developed for nitrogen oxides (NO_x), carbon monoxide (CO), PM₁₀, and PM_{2.5}. LSTs represent the maximum emissions from a project that will not cause or contribute to an air quality exceedance of the most stringent applicable federal or state ambient air quality standard at the nearest sensitive receptor, taking into consideration ambient concentrations in each SRA, distance to the sensitive receptor, and project size. LSTs only apply to emissions within a fixed stationary location and are not applicable to mobile sources, such as cars on a roadway (SCAQMD 2008). According to the SCAQMD (2008) *Final Localized Significant Thresholds Methodology*, the use of LSTs is voluntary, to be implemented at the discretion of local agencies.

The project site is located in SRA 12, South Central LA County and is approximately 0.08 acre in size (SCAQMD 2008). LSTs have been developed for emissions within construction areas up to five acres in size. The SCAQMD provides lookup tables for sites that measure up to one, two, or five acres. The project site is less than one acre. Pursuant to SCAQMD guidance, LSTs for a one-acre site should be used for sites that are less than one acre in size. LSTs are provided for receptors at a distance of 25 to 500 meters (82 to 1,640 feet) from the project site boundary. The closest sensitive receptors to the project site are residences located adjacent to the project site. According to the SCAQMD’s LST methodology, projects with boundaries closer than 25 meters (82 feet) to the nearest receptor should use the LSTs for receptors located at 25 meters (SCAQMD 2008). Accordingly, LSTs for construction on a one-acre site in SRA 12 for a receptor within 25 meters are shown in Table 5.

Table 5 SCAQMD LSTs for Construction

Pollutant	Allowable Emissions from a One-acre Site in SRA 12 for a Receptor Within 25 Meters, or 82 Feet (pounds/day)
Gradual conversion of NO _x to NO ₂	46
CO	231
PM ₁₀	4
PM _{2.5}	3

SRA: Source Receptor Area; NO_x: nitrogen oxides; NO₂: nitrogen dioxide; PM₁₀: particulate matter 10 microns or less in diameter; PM_{2.5}: particulate matter 2.5 microns or less in diameter; CO: carbon monoxide
 Source: SCAQMD 2009

General Conformity with the State Implementation Plan is a Federal Clean Air Act (FCAA) regulatory process that applies to most federal actions. For CWSRF-funded projects, a FCAA general conformity analysis applies only to projects in a nonattainment area or an attainment area subject to a maintenance plan and is required for each criteria pollutant for which an area has been designated nonattainment or maintenance. The General Conformity Rule ensures that actions taken by federal agencies in nonattainment and maintenance areas do not interfere with the state’s plans to meet NAAQS. 40 Code of Federal Regulations (CFR) Part 93.153 defines *de minimis* levels, which are the minimum threshold for which a conformity determination must be performed. If the proposed project’s annual emissions are below the applicable *de minimis* levels, the project is not subject to a general conformity determination.

Based on the federal attainment statuses for the SCAB, the *de minimis* levels that apply to the SCAB are listed in Table 6. These levels apply to all direct and indirect annual emissions generated during construction and operation of the project.

Table 6 General Conformity De Minimis Emission Rates for the South Coast Air Basin

Pollutant	Attainment Status Designation	De Minimis Emission Rate (tons/year)
Ozone (VOC or NO _x)	Extreme Nonattainment	10
CO	Maintenance	100
PM ₁₀	Maintenance	100
PM _{2.5}	Serious Nonattainment	70
SO ₂ or NO ₂	Maintenance	100
Lead	Partial Nonattainment	25

VOC: volatile organic compounds; NO_x: nitrogen oxides; CO: carbon monoxide; PM₁₀: particulate matter 10 microns or less in diameter; PM_{2.5}: particulate matter 2.5 microns or less in diameter; SO₂: sulfur dioxide; NO₂: nitrogen dioxide

Sources: USEPA 2017 and SCAQMD 2017a

a. Would the project conflict with or obstruct implementation of the applicable air quality plan?

A project may be inconsistent with the AQMP if it would generate population, housing, or employment growth exceeding the forecasts used in the development of the AQMP. The proposed project involves the construction of groundwater treatment facilities to ensure that groundwater

pumped from Well #5 is in compliance with USEPA MCLs for drinking water. Treatment of groundwater pumped from Well #5 would not directly induce population growth because it would not produce additional water supply; rather, it would treat groundwater that is already being pumped and utilized for drinking water. The project does not include new housing or businesses, nor would operation and maintenance of the proposed project require new employees; therefore, the project would not generate population, housing, or employment growth. As a result, the project would not exceed Southern California Association of Governments' projected growth forecasts, and thus, would not conflict with or obstruct implementation of the AQMP. No impact would occur.

NO IMPACT

- b. Would the project violate any air quality standard or contribute substantially to an existing or projected air quality violation?*
- c. 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 (including releasing emissions that exceed quantitative thresholds for ozone precursors)?*

The project would generate short-term emissions associated with project construction and long-term emissions associated with operation of the pump station. Construction and operational project emissions were estimated using the California Emissions Estimator Model (CalEEMod) version 2016.3.2. CalEEMod was developed by the SCAQMD and is used by jurisdictions throughout the state to quantify criteria pollutant emissions.

For the purposes of modeling, the analysis relied upon the following assumptions:

- 200 linear feet (LF) of yard piping would be installed via open trench measuring two feet in width and three feet in depth
- Construction of the proposed project would disturb approximately 0.08 acre in total, on a site that is previously disturbed and paved
- Approximately 81 CY of material would be exported and 15 CY of material would be imported to the project site
- Construction would occur over a period of approximately seven months between April 2019 and December 2020 in the following phases:
 - Demolition: two weeks
 - Site Preparation, foundations, and piping: six weeks
 - Installation of tanks, pumps, and equipment: one month
 - Paving: five days
- Construction activities would comply with SCAQMD Rule 403, an existing regulation that requires construction projects to suppress fugitive dust emissions
- Assumptions for construction equipment and hours of operation for each phase were based on the nature of the proposed project as follows:
 - Demolition: crane
 - Site Preparation, foundations, and piping: tractor/loader/backhoe
 - Installation of tanks, pumps, and equipment: crane and forklift
 - Paving: cement and mortar mixer

Construction Emissions

Project construction would generate temporary air pollutant emissions. These impacts are associated with fugitive dust and exhaust emissions from heavy construction vehicles. The excavation phase of the project would involve the largest use of heavy equipment and generation of fugitive dust. Table 7 summarizes maximum daily pollutant emissions during construction of the project.

Table 7 Construction Emissions Compared to SCAQMD Thresholds

	Estimated Maximum Daily Emissions (pounds/day)					
	ROG	NO _x	CO	SO _x	PM ₁₀	PM _{2.5}
Maximum	0.4	4.2	2.2	< 0.1	0.5	0.3
SCAQMD Regional Thresholds	55	55	550	150	150	55
Threshold Exceeded?	No	No	No	No	No	No
Maximum (on-site only)	0.4	4.1	2.0	< 0.1	0.5	0.3
Local Significance Thresholds (on-site only)	n/a	46	231	n/a	4	3
Threshold Exceeded?	n/a	No	No	n/a	No	No

SCAQMD: South Coast Air Quality Management District; ROG: reactive organic gases; NO_x: nitrogen oxides; CO: carbon monoxide; SO_x: sulfur oxides; PM₁₀: particulate matter 10 microns or less in diameter; PM_{2.5}: particulate matter 2.5 microns or less in diameter

See Appendix A for modeling details and CalEEMod results.

Notes: Emissions presented are the highest of the winter and summer modeled emissions. Numbers may not add up due to rounding. Emission data is sourced from “mitigated” results, which include measures that will be implemented during project construction, such as watering of soils during construction required under SCAQMD Rule 403.

As shown in Table 7, project construction emissions would not exceed the SCAQMD’s regional thresholds or LSTs. Therefore, impacts to regional air quality and local receptors due to construction emissions would be less than significant.

Operational Emissions

The treatment facilities would require up to one additional daily maintenance/monitoring trip beyond the trips that currently occur to the project site for maintenance and monitoring of Sativa Well #5. The groundwater treatment facilities would incrementally increase daily electricity use; however, CalEEMod only calculates direct emissions of criteria pollutants from energy sources that combust on-site, such as natural gas used in a building (SCAQMD 2017b). CalEEMod does not calculate or attribute emissions of criteria pollutants from electricity generation to individual projects because fossil fuel power plants are existing stationary sources permitted by air districts and/or the USEPA, and they are subject to local, state and federal control measures. Criteria pollutant emissions from power plants are associated with the power plants themselves, and not individual projects or electricity users. Table 8 summarizes maximum daily pollutant emissions during operation of the project.

Table 8 Operational Emissions Compared to SCAQMD Thresholds

	Estimated Maximum Daily Emissions (pounds/day)					
	ROG	NO _x	CO	SO _x	PM ₁₀	PM _{2.5}
Area	0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Mobile	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Total	0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
SCAQMD Thresholds	75	100	550	150	150	55
Threshold Exceeded?	n/a	No	No	n/a	No	No

SCAQMD: South Coast Air Quality Management District; ROG: reactive organic gases; NO_x: nitrogen oxides; CO: carbon monoxide; SO_x: sulfur oxides; PM₁₀: particulate matter less than 10 microns in size; PM_{2.5}: particulate matter less than 2.5 microns in size
See Appendix A for modeling details and CalEEMod results.

Notes: Emissions presented are the highest of the winter and summer modeled emissions. Numbers may not add up due to rounding.

As shown in Table 8, operational emissions from the proposed project would not exceed the SCAQMD thresholds for any criteria pollutant. Therefore, operational emissions would be negligible and would have a less than significant impact on regional air quality.

General Conformity Assessment

Table 9 summarizes the project’s total annual emissions for 2019, which includes construction and operational emissions, and for 2020 onwards, which includes operational emissions only, and compares those to the applicable *de minimis* threshold for the SCAB region. As shown in Table 9, the project’s criteria air pollutant emissions would not exceed the applicable *de minimis* thresholds. Therefore, the general conformity requirements do not apply to these pollutants, and the project is exempt from a conformity determination.

Table 9 Maximum Annual Project Emissions Compared to De Minimis Threshold

	Estimated Annual Emissions (tons/year)					
	VOC	NO _x	CO	PM ₁₀	PM _{2.5}	SO ₂
Maximum Construction Plus Operational Emissions	0.026	0.115	0.084	0.017	0.001	< 0.001
De Minimis Thresholds	10	100	100	100	70	100
Threshold Exceeded?	No	No	No	No	No	No

VOC: volatile organic compounds; NO_x: nitrogen oxides; PM₁₀: particulate matter 10 microns or less in diameter

See Appendix A for modeling details and CalEEMod results. Emission data is sourced from “mitigated” results, which include measures that will be implemented during project construction, such as watering of soils during construction required under SCAQMD Rule 403.

Source: USEPA 2017

Based on the impact analysis provided above, potential impacts of the proposed project related to the violation of an air quality standard or a cumulatively considerable net increase of criteria pollutants would be less than significant.

LESS THAN SIGNIFICANT IMPACT

d. Would the project expose sensitive receptors to substantial pollutant concentrations?

Certain population groups, such as children, the elderly, and people with health problems, are particularly sensitive to air pollution. Sensitive receptors are defined as land uses that are more likely to be used by these population groups and include health care facilities, retirement homes, school and playground facilities, and residential areas. As described above, the project site is located in a residential neighborhood. As discussed under significance criteria (b) and (c) above, the project's construction emissions would not exceed the SCAQMD regional thresholds or LSTs, which are designed to be protective of public health.

Traffic-congested roadways and intersections have the potential for the generation of localized CO levels (i.e., CO hotspots). In general, CO hotspots occur in areas with poor circulation or areas with heavy traffic. As discussed above, operation of the proposed project would require up to one daily maintenance/monitoring trip, which would not significantly impact traffic on local roadways as discussed in Section 3.16, *Transportation and Traffic*. Therefore, the project would not result in CO hotspots on adjacent roadways. The project would not expose sensitive receptors to substantial pollutant concentrations and impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

e. Would the project create objectionable odors affecting a substantial number of people?

The project would generate oil or diesel fuel odors during construction from equipment as well as odors related to asphalt paving. The odors would be limited to the construction period and would be temporary. The project would not generate objectionable odors because the proposed treatment facilities are comparable to the existing facilities with low potential to generate odors. As a result, impacts would therefore be less than significant.

LESS THAN SIGNIFICANT IMPACT

3.4 Biological Resources

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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Would the project have any of the following impacts?

a. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

In August of 2018, Rincon Consultants, Inc. conducted a Biological Resources Assessment (BRA), including a literature review and field reconnaissance survey to document existing site conditions and the potential presence of special-status biological resources, including plant and wildlife species, plant communities, jurisdictional waters and wetlands, and habitat for nesting birds. The following summarizes the findings of the assessment. The complete BRA is contained in Appendix C of this document.

The Area of Potential Effect (APE) and study area for the BRA is comprised of urban/developed land which is defined to be areas that have been constructed upon or otherwise physically altered to an extent that native vegetation is no longer supported. Urban/developed lands are characterized by permanent or semi-permanent structures, pavement or hardscape, and landscaped areas that often require irrigation. Areas that have been physically disturbed (by previous human activity) and are no longer recognizable as a native or naturalized vegetation association, but continue to retain a soil substrate, may also be considered urban/developed lands. Ornamental trees are present on properties neighboring the project site within the study area. Plant species observed within the APE during the field reconnaissance survey were ornamental and included low ground cover species and succulents.

- a. *Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as candidate, sensitive, or special status in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or the U.S. Fish and Wildlife Service?*

Local, state, and federal agencies regulate special-status species and may require an assessment of their presence or potential presence to be conducted on site prior to the approval of any proposed development on a property. Assessments for the potential occurrence of special-status species are based upon known ranges, habitat preferences for the species, species occurrence records from the CNDDDB species occurrence records from other sites in the vicinity of the study area, and previous reports for the project site. The potential for each special-status species to occur in the study area was evaluated according to the following criteria:

- **No Potential.** Habitat on and adjacent to the site is clearly unsuitable for the species requirements (foraging, breeding, cover, substrate, elevation, hydrology, plant community, site history, disturbance regime).
- **Low Potential.** Few of the habitat components meeting the species requirements are present, and/or the majority of habitat on and adjacent to the site is unsuitable or of very poor quality. The species is not likely to be found on the site.
- **Moderate Potential.** Some of the habitat components meeting the species requirements are present, and/or only some of the habitat on or adjacent to the site is unsuitable. The species has a moderate probability of being found on the site.
- **High Potential.** All of the habitat components meeting the species requirements are present and/or most of the habitat on or adjacent to the site is highly suitable. The species has a high probability of being found on the site.
- **Present.** Species is observed on the site or has been recorded (e.g., CNDDDB, other reports) on the site recently (within the last 5 years).

For the purpose of this report, special-status species are those plants and animals listed, proposed for listing, or candidates for listing as Threatened or Endangered by the United States Fish and Wildlife (USFWS) under the ESA; those listed or candidates for listing as Rare, Threatened,

Endangered under CESA or the Native Plant Protection Act; those identified as Fully Protected under Sections 3511, 4700, 5050, and 5515 of the California Fish and Game Code (CFGC); Species of Special Concern (SSC) identified by the CDFW; and plants occurring on Ranks 1 and 2 of the California Native Plant Society's California Rare Plant Rank system per the following definitions:

- **List 1A** = Plants presumed extinct in California.
- **List 1B.1** = Rare or endangered in California and elsewhere; seriously endangered in California (over 80% of occurrences threatened/high degree and immediacy of threat).
- **List 1B.2** = Rare or endangered in California and elsewhere; fairly endangered in California (20-80% occurrences threatened).
- **List 1B.3** = Rare or endangered in California and elsewhere, not very endangered in California (<20% of occurrences threatened or no current threats known).
- **List 2** = Rare, threatened or endangered in California, but more common elsewhere.

Based on a query of the CNDDDB there are seven special-status plant species and nine special-status animal species documented within a 5-mile radius of the project site. All 16 species were evaluated for potential to occur within the survey area and results of this evaluation can be found in Appendix C. No special-status plant species were detected during the field reconnaissance survey on August 15, 2018. Additionally, no special-status plant species are expected to occur given the high degree of urbanization within the study area and the specific biotypes or soil types each species requires.

Special-status wildlife species typically have very specific habitat requirements which may include, but are not limited to, vegetation communities, elevation levels and topography, and availability of primary constituent elements (i.e., space for individual and population growth, breeding, foraging, and shelter).

No special-status wildlife species were detected during the field reconnaissance survey on August 15, 2018. Additionally, no special-status wildlife species are expected to occur given the high degree of urbanization within the study area and the specific habitat types each species requires.

Given the high degree of urbanization within the project site and lack of suitable habitat for each species, no other special-status wildlife species are expected to occur. Additionally, there is no critical habitat designated by the USFWS within the study area.

Nesting Birds

Under the provisions of the Migratory Bird Treaty Act (MBTA), it is unlawful "by any means or manner to pursue, hunt, take, capture (or) kill" any migratory birds except as permitted by regulations issued by the USFWS. The term "take" is defined by the U.S. Fish and Wildlife Service (USFWS) regulation to mean to "pursue, hunt, shoot, wound, kill, trap, capture or collect" any migratory bird or any part, nest, or egg of any migratory bird covered by the conventions, or to attempt those activities. In addition, pursuant to Sections 3503, 3503.5, and 3511 of the CFGC, it is unlawful to take, possess, or destroy any birds, nests, or eggs. Fully protected birds (Section 3511) may not be taken or possessed except under specific permit. Section 3503.5 of the CFGC protects all birds-of-prey and their eggs and nests against take, possession, or destruction of nests or eggs.

The onsite structures and ornamental trees on adjacent properties could provide habitat that has the potential to support protected nesting birds. If construction is scheduled during the breeding season (February 1 through August 31) adverse effects to nesting birds could occur if nests are destroyed or if nests are abandoned as a result of construction activity or noise. These adverse

effects may be considered significant under CEQA. A mitigation measure which would reduce this potential impact to a less than significant level is provided below.

Mitigation Measures

The following mitigation measures would reduce the impact to a less than significant level.

BIO-1 Nesting Birds

Project-related activities should occur outside of the bird breeding season (typically February 1 to August 31) to the extent practicable. If construction must occur within the bird breeding season (February 1 through August 31), then no more than one week prior to initiation of ground disturbance and/or vegetation removal, a nesting bird and raptor pre-construction survey shall be conducted by a qualified biologist within the disturbance footprint plus a 100-foot buffer, where practicable.

Pre-construction nesting bird and raptor surveys shall be conducted during the time of day when birds are active and should be of sufficient duration to reliably conclude presence/absence of nesting birds and raptors onsite and within the designated vicinity. A report of the nesting bird and raptor survey results, if applicable, shall be submitted to the lead agency for review and approval prior to ground and/or vegetation disturbance activities.

If nests are found, their locations shall be flagged. An appropriate avoidance-buffer ranging in size from 25 to 50 feet for song birds, and up to 100 feet for raptors depending upon the species and the proposed work activity, shall be determined and demarcated by a qualified biologist with suitable flagging. Active nests shall be monitored at a minimum of once per week until it has been determined that the nest is no longer being used by either the young or adults. No ground disturbance shall occur within this buffer until the qualified biologist confirms that the breeding/nesting is completed, and all the young have fledged. If project activities must occur within the buffer, they shall be conducted at the discretion of the qualified biologist. If no nesting birds are observed during pre-construction surveys, no further actions would be necessary. If a bird initiates a nest while construction activities, such as ground disturbance, or demolition and construction, are ongoing it is unlikely to be significantly disturbed by those same activities.

Implementation of this measure would reduce the potential impact to nesting birds and raptors to a less than significant level.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

- b. Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?*

Plant communities are considered sensitive biological resources if they have limited distributions, have high wildlife value, include sensitive species, or are particularly susceptible to disturbance. The CDFW ranks sensitive communities as "threatened" or "very threatened" and keeps records of their occurrences in CNDDDB. Similar to special-status plant and wildlife species, vegetation alliances are ranked 1 through 5 based on NatureServe's (2012) methodology, with those alliances ranked globally (G) or statewide (S) as 1 through 3 considered sensitive.

The CNDDDB has no records of sensitive plant communities or habitat types that have been reported within a 5-mile radius. Additionally, no sensitive plant communities or habitat types were identified

at the site reconnaissance survey on August 15, 2018. Consequently, the proposed project does not have the potential to result in direct or indirect impacts to sensitive vegetation communities. No impact would occur.

NO IMPACT

- c. *Would the project have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?*

The APE (i.e. project site) does not contain any federally protected waters or wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.); riparian habitat or streambed as defined by Section 1600 et seq. of the CFGC; or “waters of the State,” as defined by the Porter-Cologne Water Quality Control Act. Compton Creek is the nearest mapped jurisdictional water and is located approximately 0.75 miles west of the study area. Therefore, no impact would occur.

NO IMPACT

- 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?*

Wildlife movement corridors, or habitat linkages, are generally defined as connections between habitat patches that allow for physical and genetic exchange between otherwise isolated animal populations. Such linkages may serve a local purpose, such as providing a linkage between foraging and denning areas, or they may be regional in nature. Some habitat linkages may serve as migration corridors, wherein animals periodically move away from an area and then subsequently return. Others may be important as dispersal corridors for young animals. A group of habitat linkages in an area can form a wildlife corridor network.

The APE (i.e. project site) is located within developed urban area and surrounded by urbanized uses in each direction including roads, commercial uses and residential uses. Additionally, the project site is fenced on all four sides providing barriers to wildlife movement. Given the urban nature of the regional vicinity, it is unlikely that wildlife utilizes the immediate area for regional movement. Furthermore, the CDFW does not include any mapped California Essential Habitat Connectivity areas within the study area. Therefore, no impact would occur.

NO IMPACT

- e. *Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?*

The Los Angeles County Municipal Code Chapter 16.76 limits trimming, removal, or injury to any trees within the public right of way. No trees are located on the project site or proposed for removal as part of the project. Therefore, no impact would occur.

NO IMPACT

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

The project site is not subject to any Habitat Conservation Plans, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan. Therefore, no impact would occur.

NO IMPACT

3.5 Cultural Resources

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project have any of the following impacts?				
a. Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Cause a substantial adverse change in the significance of an archaeological resource as defined in §15064.5	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Directly or indirectly destroy a unique paleontological resource or site or unique geological feature	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Disturb any human remains, including those interred outside of formal cemeteries	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Information in this section regarding cultural (i.e., archaeological and historical) and paleontological resources includes data from the Cultural Resources Assessment (Appendix C) prepared by Rincon Consultants, Inc. and the Paleontological Resources Assessment (Appendix D) conducted by Rincon Consultants, Inc. The significance of cultural and/or paleontological resources and impacts to those resources is determined by whether or not those resources can increase our collective knowledge of the past. The primary determining factors are site content and degree of preservation.

For the purpose of this analysis, a significant impact would occur if physical changes to these resources would result in the following conditions, listed in Appendix G of the *State CEQA Guidelines*:

- 1) Cause a substantial adverse change in the significance of a historical resource as defined in CEQA Guidelines §15064.5
- 2) Cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines §15064.5
- 3) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature
- 4) Disturb any human remains, including those interred outside of formal cemeteries

A “substantial adverse change” in the significance of a historical resource is defined as “physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of an historical resource would be materially impaired.” State CEQA Guidelines Section 15064.5(b) states that the significance of an historical resource is “materially impaired” when a project does any of the following:

- Demolishes or materially alters in an adverse manner those physical characteristics of an historical resource that convey its historical significance and that justify its inclusion in, or eligibility for inclusion in the California Register of Historical Resources
- Demolishes or materially alters in an adverse manner those physical characteristics that account for its inclusion in a local register of historical resources or its identification in an historical resources survey, unless the public agency reviewing the effects of the project establishes by a preponderance of evidence that the resource is not historically or culturally significant
- Demolishes or materially alters in an adverse manner those physical characteristics of a historical resource that convey its historical significance and that justify its eligibility for inclusion in the California Register of Historical Resources as determined by a lead agency for purposes of CEQA

State CEQA Guidelines Section 15064.5 also states that the term “historical resources” shall include the following:

- 1) A resource listed in, or determined to be eligible by the State Historical Resources Commission, for listing in, the California Register of Historical Resources (Public Resources Code [PRC] Section 5024.1, Title 14 California Code of Regulations [CCR], Section 4850 et. seq.).
- 2) A resource included in a local register of historical resources, as defined in Section 5020.1(k) of the PRC or identified as significant in an historical resource survey meeting the requirements of Section 5024.1(g) of the PRC, shall be presumed to be historically or culturally significant. Public agencies must treat any such resource as significant unless the preponderance of evidence demonstrates that it is not historically or culturally significant.
- 3) Any object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California, may be considered to be an historical resource, provided the lead agency’s determination is supported by substantial evidence in light of the whole record. Generally, a resource shall be considered by the lead agency to be “historically significant” if the resource meets the criteria for listing in the California Register of Historical Resources (PRC Section 5024.1, Title 14 CCR, Section 4852) as follows:
 - Is associated with events that have made a significant contribution to the broad patterns of California’s history and cultural heritage
 - Is associated with the lives of persons important in our past
 - 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
 - Has yielded, or may be likely to yield, information important in prehistory or history (State CEQA Guidelines Section 15064.5)

- a. *Would the project cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?*
- b. *Would the project cause a substantial adverse change in the significance of an archaeological resource as defined in §15064.5?*

The project is located within a highly urbanized residential neighborhood in unincorporated Los Angeles County, just outside of the Compton city limits. The project site is mostly developed with infrastructure, including water storage tanks and utility and office buildings; areas without standing buildings or structures appear to have been graded or paved. Construction for the project would be confined to the 0.08-acre project site and would involve ground disturbance to a maximum depth of six feet below ground surface. No project development would occur within previously undisturbed areas.

Rincon conducted a cultural resources records search of the California Historical Resources Information System at the South Central Coastal Information Center located at California State University, Fullerton. The search was performed to identify all previously recorded cultural resources and previously conducted cultural resources studies within the project site and a 0.5-mile radius around it. A review of historical aerial photographs was also made of the project site. The records search did not identify any historical or archaeological resources within the project site. One historic period building, the Second Benevolent Baptist Church (P-19-187545), is located approximately 0.4 mile from the project site; P-19-187545 has not been evaluated for the California Register of Historic Places. Historical aerial photographs determined that prior to at least 1980, the project site was completely undeveloped; thus, none of the buildings or structures within the project site require management consideration under CEQA.

Rincon contacted the Native American Heritage Commission (NAHC) to request a search of the Sacred Lands File (SLF) and to provide contact information for Native Americans groups or individuals who may have knowledge of cultural resources within the project site. The SLF search was returned with negative results. Rincon reached out to 16 Native American contacts provided by the NAHC to inquire about any potential cultural resources that may be impacted by the project. The Gabrielino/Tongva San Gabriel Band of Mission Indians responded by stating that the area may be considered generally sensitive for cultural resources given the proximity of the project site to nearby waterways that may have supported prehistoric populations. Additionally, the Gabrielino Tongva Indians of California Tribal Council responded requesting notification if cultural resources and/or human remains are discovered during the project. Multiple contacts responded stating that the project was outside of their tribe's territory and that they had no comments on the project. The full results of the Native American outreach effort can be found in the Cultural Resources Assessment prepared for the project (Appendix C).

Rincon also contacted the following local historic groups to request input on potential or known historic resources within the project site or vicinity: the Los Angeles County Department of Regional Planning, the Los Angeles Conservancy, and the Hawthorne Historical Society. The Los Angeles County Department of Regional Planning responded stating they had no concerns for the project. The full results of the local historic group consultation can be found in the Cultural Resources Assessment prepared for the project (Appendix C).

Rincon conducted a field survey on August 9, 2018 to identify historical or archaeological resources that may be present within the project site. Results of the survey indicate that the ground surface across the project site has been extensively disturbed by the infrastructural developments, paving, and grading. The field survey was negative for historical or archaeological resources.

Based on the results of the records search, SLF search, Native American outreach, local historical group consultation, and field survey, the project site contains no known historical or archaeological resources. Although the project will not result in impacts to known historical or archaeological resources, there remains a low potential for buried cultural resources to be discovered during ground-disturbing activities. Should cultural resources be discovered, compliance with the following mitigation measure would reduce impacts to a less than significant level.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

Mitigation Measures

With implementation of the following mitigation measure, the potential impacts related to cultural resources would be reduced to less than significant:

CR-1 Unanticipated Discovery of Cultural Resources

If cultural resources are encountered during ground-disturbing activities, work in the immediate area shall be halted and an archaeologist meeting the Secretary of the Interior's Professional Qualification Standards for archaeology (National Park Service 1983) shall be contacted immediately to evaluate the find. If necessary, the evaluation may require preparation of a treatment plan and archaeological testing for California Register of Historical Resources eligibility. If the discovery proves to be significant under CEQA and cannot be avoided by the project, additional work such as data recovery excavation and Native American consultation and archaeological monitoring may be warranted to mitigate any significant impacts to cultural resources.

- c. *Would the project directly or indirectly destroy a unique paleontological resource or site or unique geological feature?*

Rincon evaluated the paleontological sensitivity of the geologic units that underlie the project site using the results of the paleontological locality search and review of existing information in the scientific literature concerning known fossils within those geologic units. Rincon submitted a request to the Natural History Museum of Los Angeles County (LACM) for a list of known fossil localities from the project site and immediate vicinity (i.e., localities recorded on the United States Geological Survey South Gate, 7.5-minute topographic quadrangle).

Paleontological Sensitivity

Following the literature review and museum record search a paleontological sensitivity classification was assigned to the geologic units within the project site. The potential for impacts to significant paleontological resources is based on the potential for ground disturbance to directly impact paleontologically sensitive geologic units. The Society of Vertebrate Paleontology (SVP; 2010) has developed a system for assessing paleontological sensitivity and describes sedimentary rock units as having high, low, undetermined, or no potential for containing scientifically significant nonrenewable paleontological resources. This criterion is based on rock units within which vertebrate or significant invertebrate fossils have been determined by previous studies to be present or likely to be present.

Geology and Paleontology of the Project Area

The geology of the project site is mapped by Saucedo et al. (2016) and is entirely underlain by Quaternary young alluvium, unit 2 (Qya₂). The Quaternary young alluvium was deposited during the

Holocene to latest Pleistocene and is composed of moderately consolidated and poorly sorted floodplain deposits composed of clay, silt, and sand. A search of LACM paleontological locality records resulted in no previously recorded vertebrate fossil localities in the project site. The closest vertebrate localities were recorded approximately two miles from the project site within older Pleistocene alluvial deposits, at depths between 15 and 20 feet below the surface. Localities LACM 4685, 1344, 3266, 3365, 1295, and 4206 yielded vertebrate fossil specimens of elephant, mammoth, bison, deer, horse, antelope, ground sloth, dire wolf, rabbit, squirrel, deer mouse, pocket gopher, pond turtle, puffin, and turkey.

A review of recent aerial photographs indicates the project site has been developed and paved and the original surficial alluvial deposits have been completely disturbed or removed. Any intact Holocene alluvial deposits in the project site would be too young to preserve paleontological resources. However, at depth, the Holocene sediments grade into older late Pleistocene deposits that may preserve fossils. The depth at which the Pleistocene strata underlies the surficial Holocene alluvium in the project site is unknown but may as shallow as 15 feet below ground surface (bgs), based on depth of recovery for nearby Pleistocene fossils (McLeod 2018).

Holocene sedimentary deposits, particularly those younger than 5,000 years old, are generally too young to contain fossilized material. Therefore, the Holocene alluvial deposits mapped at the surface of the project site have been assigned a low paleontological sensitivity, in accordance with the SVP (2010) guidelines. Maximum depth for project excavation will be approximately 10 feet bgs; therefore, the sensitive Pleistocene alluvial deposits that may be present at moderate depth (approximately 15 feet bgs) below surficial Holocene deposits are unlikely to be impacted by project development. As a result, the potential for encountering fossil resources during project-related ground disturbance is low and impacts to paleontological resources would be less than significant.

LESS THAN SIGNIFICANT IMPACT

d. Would the project disturb any human remains, including those interred outside of formal cemeteries?

Based on the previously disturbed nature of the project site and the lack of any identified cultural resources within the study area, the potential to encounter human remains is low. While the project site is unlikely to contain human remains, the potential for the discovery of human remains is always a possibility during ground disturbing activities. If human remains are found, existing regulations outlined in the State of California Health and Safety Code Section 7050.5 state that no further disturbance shall occur until the County Coroner has made a determination of origin and disposition pursuant to PRC Section 5097.98. In the event of an unanticipated discovery of human remains, the County Coroner must be notified immediately. If the human remains are determined to be prehistoric, the Coroner will notify the NAHC, which will determine and notify a most likely descendant (MLD). The MLD shall complete the inspection of the site within 48 hours of being granted access and provide recommendations as to the treatment of the remains to the landowner. This impact would be less than significant with compliance with existing regulations.

LESS THAN SIGNIFICANT IMPACT

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3.6 Geology and Soils

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project have any of the following impacts?				
a. Expose people or structures to potentially substantial adverse effects, including the risk of loss, injury, or death involving:				
1. 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	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2. Strong seismic ground shaking	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3. Seismic-related ground failure, including liquefaction	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
4. Landslides	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Result in substantial soil erosion or the loss of topsoil	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Be located on a geologic unit or soil that is made unstable as a result of the project, and potentially result in on or offsite landslide, lateral spreading, subsidence, liquefaction, or collapse	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Be located on expansive soil, as defined in Table 1-B of the Uniform Building Code, creating substantial risks to life or property	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e. Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The proposed project site is located in Southern California, which is a seismically active region at the junction of the North American and Pacific tectonic plates. The California Department of Conservation (DOC) Geologic Map of California indicates that the geology of the project site is composed of Quaternary Deposits consisting of unconsolidated and semi-consolidated alluvium lake, playa, and terrace deposits.

The United States Department of Agriculture (USDA) Natural Resource Conservation Service Web Soil Survey indicates that the soil on the project site is classified as Urban land-Biscailuz-Hueneme, drained complex, with zero- to two-percent slopes. Urban land areas typically have very high runoff rates, flood rarely, and are zero inches above the manufactured layer. Biscailuz soil has 3 to 15 percent clay, is somewhat poorly drained, has low runoff, floods rarely, and does not pond. Depth to the water table is more than six feet and has a moderately high to high percolation rate of 0.57 to 1.98 inches per hour. Biscailuz soil is in Hydrologic Soil Group "B" and has a non-irrigated land capability classification of "3w." Hueneme, drained soil has less than 18 percent clay is somewhat poorly drained, has low runoff, floods rarely, and does not pond. Depth to the water table is more than 80 inches and has a moderately high to high percolation rate of 0.60 to 2 inches per hour. Hueneme, drained soil is in Hydrologic Soil Group "B" and has a non-irrigated land capability classification of "3w" (USDA 2017a, 2017b). This information is used to inform the impact analysis discussions and conclusions provided below.

- a1. *Expose people or structures to 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?*
- a2. *Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving strong seismic ground shaking?*

According to the California DOC California Earthquake Hazards Zone Application, the project site is not located in an Alquist-Priolo Fault Zone. There are no faults present on the project site. The closest fault to the project site is the Avalon-Compton Fault, located approximately two miles to the east (California Geological Survey [CGS] 2017).

Design and construction for the proposed project would conform to the current seismic design provisions of the International Building Code and the California Building Code (CBC). The 2013 CBC incorporates the latest seismic design standards for structural loads and materials, as well as provisions from the National Earthquake Hazards Reduction Program, to mitigate losses from an earthquake and provide for the latest in earthquake safety. While the project would be susceptible to seismic activity given its location within a seismically active area, the project would be required to minimize this risk, to the extent feasible, through the incorporation of applicable CBC standards. Further, the project would not introduce new habitable structures, and improvements associated with the project would be consistent with existing land uses on the project site.

Because the project site is not located on or adjacent to a known earthquake fault, and the project would not introduce new infrastructure to the site that would cause seismic hazards, the proposed project would not expose people or structures to substantial adverse effects associated with a known earthquake fault. Impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

- a3. *Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving seismic-related ground failure, including liquefaction?*

Liquefaction occurs when the strength and stiffness of a soil is reduced by intense ground shaking typically associated with an earthquake in areas with a high groundwater table. According to the California DOC California Earthquake Hazards Zone Application, the project site is located in a liquefaction zone. However, the project site has a level (flat) grade, is not located on or near steep

slopes subject to liquefaction hazards, and is completely developed; as such, the project site is not considered to be subject to liquefaction hazards. It is possible that the project area may be affected by other types of seismic-related ground failure due to its location within a seismically active region of Southern California, should a strong seismic event occur on a nearby fault (as discussed above, the nearest fault to the project site is located approximately two miles away). However, development associated with the proposed project would be consistent with existing development on the project site and would not introduce new infrastructure that would result in substantial adverse effects associated with seismic-related ground failure. Impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

a4. Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving landslides?

According to the California DOC California Earthquake Hazards Zone Application, the project site is not located in a landslide zone (CGS 2017). Additionally, the project would not introduce new habitable structures or otherwise alter areas subject to landslide hazards. Therefore, no impact associated with risks from landslides would occur.

NO IMPACT

b. Would the project result in substantial soil erosion or the loss of topsoil?

Soil erosion or the loss of topsoil may occur when soils are disturbed but not secured or restored, such that wind or rain events may mobilize disturbed soils, resulting in their transport off the project site. The project site has been previously disturbed and is completely paved. As such, there is no topsoil on the project site. Construction activities would include grading, excavation, and trenching activities, which could potentially result in erosion.

For sites with a disturbance area greater than one acre, a Stormwater Pollution Prevention Plan (SWPPP) must be developed in accordance with Section 402 of the federal Clean Water Act (NPDES Stormwater Permit Program). The project site is less than one acre, so a SWPPP is not required. However, the project would implement BMPs to control stormwater runoff, including but not limited to covering and stabilizing areas of disturbed soils during the construction period, consistent with standard construction BMPs.

With implementation of BMPs to control soil erosion, which are standard construction BMPs, and with consideration to the consistency of the site's current developed and paved condition to the proposed developed and paved condition, impacts associated with soil erosion or the loss of topsoil would be less than significant.

LESS THAN SIGNIFICANT IMPACT

c. Would the project be located on a geologic unit or soil that is unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?

As discussed above, the project site would not be subject to landslide or liquefaction hazards. Similarly, because the project site is fully developed and paved, it is also not subject to lateral spreading. Although unlikely due to the present developed and paved nature of the project site, it is possible that the site could be affected by subsidence, which is the sudden sinking or gradual downward settling of the earth's surface with little or no horizontal movement. Subsidence is

caused by a variety of activities, which include, but are not limited to, withdrawal of groundwater, pumping of oil and gas from underground, the collapse of underground mines, liquefaction, and hydro-compaction. Ground subsidence and associated fissuring have occurred in Los Angeles County, due to falling and rising groundwater tables. The project site is composed of unconsolidated and semi-consolidated alluvium deposits, which may be subject to seismically-induced settlements. Implementation of the proposed project would not alter the site's potential to be affected by seismically-induced settlements and would not introduce new land uses that would increase potential hazards associated with seismically-induced settlements, should they occur in the project area. Furthermore, the proposed project would not increase the amount of water pumped from the underlying groundwater basin. Therefore, potential impacts associated with seismically-induced settlements would be less than significant.

LESS THAN SIGNIFICANT IMPACT

- d. Would the project be located on expansive soil, as defined in Table 1-B of the Uniform Building Code, creating substantial risks to life or property?*

Soils with high concentrations of clay tend to be the most expansive. The soil on the project site is mostly composed of loam with maximum clay concentration of 18 percent. The expansion potential for these fine sandy and sandy soil types found on alluvial fans and floodplains is very low to low (USDA 2017). The project is not located on expansive soils and would not introduce risk to life or property as a result of expansive soils. No impact would occur.

NO IMPACT

- e. Would the project have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?*

The proposed project would not include septic tanks or alternative wastewater disposal systems. No impact would occur.

NO IMPACT

3.7 Greenhouse Gas Emissions

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project have any of the following impacts?				
a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Conflict with any applicable plan, policy, or regulation adopted to reduce the emissions of greenhouse gases	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Climate change is the observed increase in the average temperature of the earth’s atmosphere and oceans along with other substantial changes in climate (such as wind patterns, precipitation, and storms) over an extended period of time. The term “climate change” is often used interchangeably with the term “global warming,” but “climate change” is preferred to “global warming” because it helps convey that there are other changes in addition to rising temperatures. The baseline against which these changes are measured originates in historical records identifying temperature changes that have occurred in the past, such as during previous ice ages. The global climate is continuously changing, as evidenced by repeated episodes of substantial warming and cooling documented in the geologic record. The rate of change has typically been incremental, with warming or cooling trends occurring over the course of thousands of years. The past 10,000 years have been marked by a period of incremental warming, as glaciers have steadily retreated across the globe. However, scientists have observed acceleration in the rate of warming during the past 150 years. Per the United Nations Intergovernmental Panel on Climate Change (IPCC), the understanding of anthropogenic warming and cooling influences on climate has led to a high confidence (95 percent or greater chance) that the global average net effect of human activities has been the dominant cause of warming since the mid-twentieth century (IPCC 2007).

Gases that absorb and re-emit infrared radiation in the atmosphere are called greenhouse gases (GHGs). The gases that are widely seen as the principal contributors to human-induced climate change include carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), fluorinated gases such as hydrofluorocarbons (HFC) and perfluorocarbons (PFC), and sulfur hexafluoride (SF₆). Water vapor is excluded from the list of GHGs because it is short-lived in the atmosphere and its atmospheric concentrations are largely determined by natural processes, such as oceanic evaporation.

GHGs are emitted by both natural processes and human activities. Of these gases, CO₂ and CH₄ are emitted in the greatest quantities from human activities. Emissions of CO₂ are largely by-products of fossil fuel combustion, whereas CH₄ results from off-gassing associated with agricultural practices and landfills.

Man-made GHGs, many of which have greater heat-absorption potential than CO₂, include fluorinated gases and SF₆ (California Environmental Protection Agency [CalEPA] 2006). Different types of GHGs have varying global warming potentials (GWPs). The GWP of a GHG is the potential of a gas or aerosol to trap heat in the atmosphere over a specified timescale (generally, 100 years).

Because GHGs absorb different amounts of heat, a common reference gas (CO₂) is used to relate the amount of heat absorbed to the amount of the gas emissions, referred to as “carbon dioxide equivalent” (CO₂e), and is the amount of a GHG emitted multiplied by its GWP. CO₂ has a 100-year GWP of one. By contrast, CH₄ has a GWP of 25, meaning its global warming effect is 25 times greater than CO₂ on a molecule per molecule basis (IPCC 2007).

The accumulation of GHGs in the atmosphere regulates the earth’s temperature. Without the natural heat-trapping effect of GHGs, Earth’s surface would be about 34 degrees Celsius cooler (CalEPA 2006). However, it is believed that emissions from human activities, particularly the consumption of fossil fuels for electricity production and transportation, have elevated the concentration of these gases in the atmosphere beyond the level of naturally occurring concentrations. The primary GHGs of concern include CO₂, CH₄, N₂O, and fluorinated gases (HFCs, PFCs, and SF₆). These all contribute to climate change on a global scale and climate change affects numerous environmental resources through potential impacts related to future air temperatures and precipitation patterns.

Project implementation would generate GHG emissions through the burning of fossil fuels or other emission sources, thus potentially contributing to cumulative impacts related to climate change. In response to an increase in man-made GHG concentrations over the past 150 years, California has implemented Assembly Bill (AB) 32, the “California Global Warming Solutions Act of 2006.” AB 32 codifies the statewide goal of reducing emissions to 1990 levels by 2020 (essentially a 15 percent reduction below 2005 emission levels) and the adoption of regulations to require reporting and verification of statewide GHG emissions. Furthermore, on September 8, 2016, the governor signed Senate Bill (SB) 32 into law, which requires the state to further reduce GHGs to 40 percent below 1990 levels by 2030. SB 32 extends AB 32, directing the California Air Resources Board (CARB) to ensure that GHGs are reduced to 40 percent below the 1990 level by 2030.

On December 14, 2017, CARB adopted the 2017 Scoping Plan, which provides a framework for achieving the 2030 target. The 2017 Scoping Plan does not provide project-level thresholds for land use development. Instead, it recommends that local governments adopt policies and locally-appropriate quantitative thresholds consistent with a statewide per capita goal of six metric tons (MT) CO₂e by 2030 and two MT CO₂e by 2050 (CARB 2017). As stated in the 2017 Scoping Plan, these goals may be appropriate for plan-level analyses (city, county, subregional, or regional level), but not for specific individual projects because they include all emissions sectors in the state.

The vast majority of individual projects do not generate sufficient GHG emissions to directly influence climate change. However, physical changes caused by a project can contribute incrementally to cumulative effects that are significant, even if individual changes resulting from a project are limited. The issue of climate change typically involves an analysis of whether a project’s contribution towards an impact would be cumulatively considerable. “Cumulatively considerable” means that the incremental effects of an individual project are significant when viewed in connection with the effects of past projects, other current projects, and probable future projects (CEQA Guidelines, Section 15064[h][1]).

The County of Los Angeles completed its *Community Climate Action Plan* (CCAP) in 2015 and GHG inventory in 2010, which quantified electricity associated with water conveyance and wastewater generation in a “water conveyance and wastewater generation” sector not associated with buildings or agriculture. However, the County of Los Angeles’ CCAP did not include GHG emissions from water supply, treatment, and distribution systems. Therefore, the GHG analysis of the proposed project cannot be streamlined via CEQA Guidelines Section 15183.5 (County of Los Angeles 2015c).

In guidance provided by the SCAQMD's GHG CEQA Significance Threshold Working Group in September 2010, the SCAQMD considered a tiered approach to determine the significance of projects. The draft tiered approach is outlined in meeting minutes dated September 29, 2010.

- **Tier 1.** If the project is exempt from further environmental analysis under existing statutory or categorical exemptions, there is a presumption of less than significant impacts with respect to climate change. If not, then the Tier 2 threshold should be considered.
- **Tier 2.** Consists of determining whether or not the project is consistent with a GHG reduction plan that may be part of a local general plan, for example. The concept embodied in this tier is equivalent to the existing concept of consistency in CEQA Guidelines section 15064(h)(3), 15125(d) or 15152(a). Under this Tier, if the proposed project is consistent with the qualifying local GHG reduction plan, it is not significant for GHG emissions. If there is not an adopted plan, then a Tier 3 approach would be appropriate.
- **Tier 3.** Establishes a screening significance threshold level to determine significance. The Working Group has provided a recommendation of 3,000 MT of CO₂e per year for land use projects.
- **Tier 4.** Establishes a service population threshold to determine significance. The Working Group has provided a recommendation of 4.8 MT of CO₂e per year for land use projects.

Since the proposed project cannot tier off the County of Los Angeles' CCAP, Tier 3 is the most appropriate approach for determining significance. Therefore, the proposed project would have a significant impact if GHG emissions exceed 3,000 MT of CO₂e per year.

a. *Would the project generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment?*

Construction activities, energy use, and daily operational activities due to the proposed project would generate GHG emissions. As discussed in Section 3.0, *Air Quality*, CalEEMod version 2016.3.2 was used to calculate emissions resulting from project construction.

Construction GHG Emissions

Project construction would generate GHG emissions from the operation of heavy machinery, motor vehicles, and worker trips to and from the site. Construction GHG emissions would be temporary, however, and would cease upon completion of construction. Although construction activity is addressed in this analysis, the California Air Pollution Control Officers Association (CAPCOA) does not discuss whether any of the suggested threshold approaches adequately address impacts from temporary construction activity. The *CEQA and Climate Change* white paper states that additional study is needed to make such an assessment or to develop separate thresholds for construction activity (CAPCOA 2008). Nevertheless, the SCAQMD has recommended amortizing construction-related emissions over a 30-year period in conjunction with the proposed project's operational emissions.

Construction activity would occur over a period of approximately seven months between January 2019 and December 2020, with completion and startup of the project expected by December 2020. Based on CalEEMod results, construction of the project would generate an estimated 13 MT of CO₂e, as shown in Table 10. Amortized over a 30-year period (the assumed life of the project), construction of the proposed project would generate approximately 0.4 MT of CO₂e per year.

Table 10 Estimated Construction GHG Emissions

Year	Project Emissions (MT of CO ₂ e)
Total	13.0
Total Amortized over 30 Years	0.4

See Appendix A for CalEEMod model output.

Operational GHG Emissions

Operational emissions include electricity use and mobile source (vehicle trips) emissions. The treatment facilities would require up to one daily vehicle trip for regular maintenance/monitoring. During project operation, electricity used to operate the treatment facilities would result in indirect GHG emissions from the generation of electricity by the electric service provider. Because CalEEMod does not provide an appropriate proxy for groundwater treatment facilities, these energy emissions were calculated separately using CalEEMod energy emissions factors for Southern California Edison. According to the Well #5 Technical Evaluation Study, the electricity required to operate the proposed treatment facilities would cost approximately \$2,300 annually with an anticipated rate of \$0.129 per kilowatt-hour (kWh). Therefore, the proposed project would require approximately 17,829.5 kWh of electricity (\$2,300 divided by \$0.129). Conversions of CH₄ and NO₂ to CO₂e were made using USEPA’s Greenhouse Gas Equivalencies Calculator (2018c). As shown in Table 11, the proposed project would result in combined annual GHG emissions of approximately 8 MT of CO₂e per year.

Table 11 Combined Annual Emissions of Greenhouse Gases

Emission Source	Annual Emissions (MT of CO ₂ e)
Construction	0.4
Operational	
Energy	5.7
Mobile	
CO ₂ and CH ₄	1.9
NO ₂	0.1
Total for Proposed Project	8.1

See Appendix A for CalEEMod model output.

¹ Because CalEEMod does not provide an appropriate proxy for the proposed groundwater treatment facilities, these energy emissions were calculated separately using CalEEMod energy emissions factors for Southern California Edison. Conversions of CH₄ and NO₂ to CO₂e were made using USEPA’s Greenhouse Gas Equivalencies Calculator (2018). See Appendix A for calculations.

b. Would the project conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

The County of Los Angeles’ CCAP (2015c) identifies the following county-wide water conservation and wastewater actions for improving regional sustainability and efficiency:

- **WAW-1 Per Capita Water Use Reduction Goal.** Meet the State-established per capita water use reduction goal,¹ as identified by SB X7-7 for 2020.
- **WAW-2 Recycled Water Use, Water Supply Improvement Programs, and Storm Water Runoff.** Promote the use of wastewater and gray water to be used for agricultural, industrial, and irrigation purposes consistent with the appropriate provisions of Title 22 and approval of the California Department of Health Services. Manage stormwater, reduce potential treatment, and protect local groundwater supplies.

The proposed project would construct groundwater treatment facilities and would not increase the quantity of groundwater pumped from Sativa Well #5; therefore, the proposed project would not conflict with Action WAW-1. The proposed project is intended to remediate an existing drinking water quality issue and would not result in the need for additional treatment of drinking water; therefore, the proposed project would not conflict with Action WAW-2.

The County of Los Angeles' CCAP (2015c) also identifies the following county-wide GHG reduction actions that would apply to the proposed project:

- **LUT-9 Idling Reduction Goal.** Encourage idling limits of three minutes for heavy-duty construction equipment, as feasible within manufacturer's specifications.
- **LUT-12 Electrify Construction and Landscaping Equipment.** Utilize electric equipment wherever feasible for construction projects. Reduce the use of gas-powered landscaping equipment.

In order to be consistent with the County of Los Angeles' CCAP, the proposed project would be required to incorporate these GHG reduction actions, which are included as Mitigation Measure GHG-1. Implementation of Mitigation Measure GHG-1 would ensure that the proposed project is consistent with the County of Los Angeles' CCAP, and impacts would therefore be less than significant with mitigation incorporated.

Mitigation Measure

With implementation of the following mitigation measure, the potential impacts related to GHG emissions would be reduced to less than significant:

GHG-1 Construction Equipment

Heavy-duty construction equipment shall not idle for more than three minutes, as feasible within manufacturer's specifications. Electric construction equipment shall be utilized wherever feasible.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

¹ SB X7-7 set a target of a statewide 20 percent reduction in urban daily per capita water use compared to baseline water levels by 2020 (California Water Code Section 10608.20(b)(4)).

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3.8 Hazards and Hazardous Materials

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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Would the project have any of the following impacts?

a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Be located on a site that is included on a list of hazardous material 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e. For a project located in an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f. For a project near a private airstrip, would it result in a safety hazard for people residing or working in the project area	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
h. Expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

- a. *Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?*
- 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?*

Construction of the proposed project would temporarily increase the transport and use of hazardous materials in the project area through the operation of vehicles and equipment needed to implement the proposed project. Such substances include diesel fuel, oil, solvents, and other similar materials that would be brought onto the construction site for use and storage during the construction period. Ground-disturbing activities associated with project construction could cause an accidental upset or release of hazardous materials if they are not properly stored and secured. If such conditions cause a release of hazardous materials into the environment, potential impacts could occur. Hazardous materials used during project construction would be disposed of off-site in accordance with all applicable laws and regulations.

Operation and maintenance of the project would result in the precipitation and removal of iron and manganese from groundwater; however, iron and manganese are not considered hazardous materials. The iron and manganese produced during operation of the project would be held in the backwash tank and then trucked to an approved disposal facility approximately every six months, or as needed. The USEPA has identified secondary drinking water standards for iron and manganese, which indicates that although there are secondary water quality standards that apply to iron and manganese, meaning that they may produce affects related to odor, taste, and/or color, but present no health risk in drinking water. Thus, as stated, iron and manganese are not considered hazardous materials for this project.

Due to the potential for an unanticipated spill or release of hazardous materials to occur during project construction, Mitigation Measure HAZ-1 would be implemented to reduce or avoid potential impacts. This mitigation measure would implement a Hazardous Materials Management and Spill Control Plan to ensure that hazardous materials are appropriately used, handled, and stored during project construction and operation. Therefore, potential impacts would be less than significant with mitigation incorporated.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

Mitigation Measures

With implementation of the following mitigation measure, the potential impacts related to hazardous materials would be reduced to less than significant:

HAZ-1 Hazardous Materials Management and Spill Control Plan

Before construction begins, the construction contractor shall develop and implement a Hazardous Materials Management and Spill Control Plan (HMMSCP) that includes a project-specific contingency plan for hazardous materials and waste operations. The HMMSCP shall establish policies and procedures consistent with applicable codes and regulations, including but not limited to the California Building and Fire Codes, as well United States Department of Labor OSHA and California OSHA regulations. The HMMSCP shall articulate hazardous materials handling practices to prevent the accidental spill or release of hazardous materials.

- c. Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school?*

The nearest school to the project site is Anderson Elementary School, located at 2210 East 130th Street in the community of Willowbrook. The shortest distance between the Sativa Well #5 site and the Anderson Elementary School site is approximately 0.22 mile; this distance is to the outer edge of the school's athletic field. It is approximately 0.3 mile from the Sativa Well #5 site to the school's classroom buildings. There are no other schools located within 0.25 mile of the project site. As described above, there is potential that an accidental spill or release of hazardous or potentially hazardous materials such as vehicle and equipment fuels could occur during project construction; however, implementation of Mitigation Measure MM HAZ-1 would ensure that these already less than significant impacts would be further reduced. As such, although there is one school located within 0.25 mile of the project site, the project would not result in significant impacts related to the handling or release of hazardous materials. Impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

- d. Would the project be located on a site included on a list of hazardous material 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?*

Government Code Section 65962.5 requires CalEPA develop an updated Cortese List. The California Department of Toxic Substance Control (DTSC) is responsible for a portion of the information contained in the Cortese List. Other state and local government agencies are required to provide additional hazardous material release information for the Cortese List (DTSC 2018). The analysis for this section included a review of the following resources on August 24, 2018 to provide hazardous material release information:

- SWRCB GeoTracker database
- DTSC EnviroStor database

Based on review of these databases, it was determined that the project site is not included on existing lists of hazardous materials sites compiled pursuant to Government Code Section 65962.5.

The SWRCB's GeoTracker database lists one open leaking underground storage tank (LUST) site 80 feet southeast of the site at 2100 East Stockwell Street; the Estate of Theorice Harry Pleasant site (SWRCB 2018). Semi-annual groundwater monitoring at this site has determined that groundwater contamination consists of total petroleum hydrocarbons (gasoline), benzene, ethylbenzene, and xylenes. Monitoring also determined that groundwater flow direction is to the southeast and that depth to groundwater is between approximately 40 and 41 feet (Los Angeles Regional Water Quality

Control Board [LARWQCB] 2018). Given that groundwater flow is in a southeasterly direction from the LUST site (away from the project site), and that the proposed project involves excavation to a maximum depth of six feet, the proposed project would not result in the release of hazardous materials into the environment from a hazardous material site. Therefore, no impact would occur.

NO IMPACT

- e. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?*

The closest public airports to the project site are the Compton/Woodley Airport located approximately 1.3 miles northeast of the project site, and the Long Beach Airport, located approximately seven miles northwest of the project site. The proposed project would not be located in the airport influence area for either airport (County of Los Angeles 2015). The proposed treatment facilities would be similar in height to the existing structures and residences in and around the site; therefore, construction and operation of the project's treatment facilities would be compatible with the nearby airports. Further, the project site does not extend onto airport property or into an airport safety zone, so construction workers would not be exposed to safety hazards associated with airport operations. Therefore, the project would have no impact related to safety hazards for people residing or working in the project area due to proximity to an airport.

NO IMPACT

- f. For a project near a private airstrip, would it result in a safety hazard for people residing or working in the project area?*

The project is not located near a private airstrip. As noted above, the nearest airport to the project site is a public airport 1.3 mile to the northeast. Therefore, the project would have no impact related to safety hazards for people residing or working in the project area due to proximity to a private airport.

NO IMPACT

- g. Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?*

The County of Los Angeles has adopted an Operational Area Emergency Response Plan (County of Los Angeles 2012). Construction of the proposed treatment facilities would not require temporary lane or road closures that would impede emergency response. All construction activity and equipment staging would occur on the project site. Operation of the proposed project would occur solely on the project site, which is presently developed with a groundwater well and associated infrastructure and would not interfere with emergency response. Therefore, no impact would occur.

NO IMPACT

- h. Would the project expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?*

The California Department of Forestry and Fire Protection (2011) has identified the project area as located within the “Non-Very High Fire Hazard Severity Zone” in the Local Responsibility Area for incorporated cities which indicates the site is not subject to wildfire hazards. The area does not contain wildlands and is not adjacent to wildlands. Construction and operation of the project would not introduce potentially flammable activities in fire-prone areas. Therefore, no impact would occur.

NO IMPACT

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3.9 Hydrology and Water Quality

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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Would the project have any of the following impacts?

a. Violate any water quality standards or waste discharge requirements	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering or the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level that would not support existing land uses or planned uses for which permits have been granted)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner that would result in substantial erosion or siltation on- or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. Substantially alter the existing drainage pattern of the site or area, including the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner that would result in flooding on or offsite	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e. Create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f. Otherwise substantially degrade water quality	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g. Place housing in a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary, Flood Insurance Rate Map, or other flood hazard delineation map	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
h. Place structures in a 100-year flood hazard area that would impede or redirect flood flows	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
i. Expose people or structures to a significant risk of loss, injury, or death involving flooding, including that occurring as a result of the failure of a levee or dam	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
j. Result in inundation by seiche, tsunami, or mudflow	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The federal Clean Water Act (CWA) establishes the framework for regulating discharges to Waters of the U.S. in order to protect their beneficial uses. The Porter-Cologne Water Quality Act regulates water quality within California and establishes the authority of the SWRCB and the nine RWQCBs. The SWRCB requires construction projects to provide careful management and close monitoring of runoff during construction, including onsite erosion protection, sediment management, and prevention of non-storm discharges. The SWRCB and RWQCBs issue National Pollutant Discharge Elimination System (NPDES) permits to regulate specific discharges. The project site is located within the jurisdiction of the LARWQCB. However, the proposed project site is less than one acre in size and therefore does not require an NPDES permit per Section 402 of the federal CWA.

The project site overlies the Coastal Plain of Los Angeles Central Groundwater Basin: 4-011.04. This subbasin is commonly referred to as the “Central Basin” and is bounded by a surface divide called the La Brea high to the north, and Tertiary rocks of the Elysian, Repetto, Merced, and Puente Hills to the east and northeast. The southeast boundary between the Central Basin and Orange County Groundwater Basin roughly follows Coyote Creek, which is a regional drainage province boundary. The southwest boundary is formed by the Newport Inglewood fault system and associated folded rocks of the Newport Inglewood uplift. The strongest effect on groundwater basin recharge occurs along the southwest boundary to the Central Subbasin. The faults and folds of the Newport-Inglewood uplift are partial barriers to movement of groundwater from the Central Basin to the West Coast Basin. Water levels in the basin varied about 25 feet between 1961 and 1977, and five to 10 feet between 1996 and 2004. In total, the groundwater basin has a storage capacity of 13,800,000 gallons (Department of Water Resources [DWR] 2004).

a. Would the project violate any water quality standards or waste discharge requirements?

f. Would the project otherwise substantially degrade water quality?

Excavation, grading, and other activities associated with construction of the proposed project would result in soil disturbance that could cause water quality violations through potential erosion and subsequent sedimentation of receiving water bodies. Construction activities could also cause water quality violations in the event of an accidental fuel or hazardous materials leak or spill. If precautions are not taken to contain contaminants, construction activities could result in contaminated stormwater runoff that could enter nearby waterbodies.

The project site is located in the region covered by the Los Angeles County Municipal Stormwater NPDES Permit No. CAS004001 (Municipal Separate Storm Sewer System [MS4] Permit), issued by the LARWQCB (LARWQCB 2012). The permit governs non-point source discharges associated with stormwater runoff. Construction activities would comply with the standards established in the MS4 Permit, which requires that the amount of runoff from the site must be the same before and after construction of a project. Since the project site is less than one acre in size, it would not be subject to the Construction General Permit.

Due to the relatively short construction period for the proposed project, the generally flat topography of the project site, and the lack of any streams, wetlands, or other water bodies at or adjacent to the project site, the likelihood that spilled or leaked hazardous material would contaminate a water body is low. Leaks or accidental spills of hazardous materials would be quickly cleaned up and disposed of in accordance with applicable regulations and Mitigation Measure HAZ-1, identified above in Section 3.8, criterion (b). In addition, drainage patterns on the project site would not be substantially revised as a result of the project and proposed uses on the project site would be consistent with existing uses on the project site, including with respect to the types of materials used and present, and the potential effects to water quality. Therefore, potential impacts related to water quality would be less than significant.

LESS THAN SIGNIFICANT IMPACT

- b. Would the project substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering or the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level that would not support existing land uses or planned uses for which permits have been granted)?*

The purpose of the proposed project is to provide water quality treatment at Sativa's Well #5 to address iron and manganese contamination which affects drinking water quality produced and delivered within Sativa's jurisdiction. Extraction rates of water from the Central Basin would not increase as a result of the proposed project.

In addition, the project site is previously developed and paved. The proposed project would not increase impervious surface area at the project site and would therefore not introduce additional obstacles to groundwater recharge. Therefore, there would be no impacts to groundwater supplies.

NO IMPACT

- c. Would the project substantially alter the existing drainage pattern of the site or area, including by altering the course of a stream or river, in a manner that would result in substantial erosion or siltation on or offsite?*
- d. Would the project substantially alter the existing drainage pattern of the site or area, including the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner that would result in flooding on or offsite?*
- e. Would the project create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?*

The project site is completely paved and impermeable. Permeability and on-site drainage patterns would not change as a result of the proposed project. Construction activities would comply with the

standards established in the MS4 Permit, which requires that the amount of runoff from the site must be the same before and after construction of a project. Therefore, potential impacts associated with changes to drainage patterns and the potential to increase stormwater runoff would not occur.

NO IMPACT

- g. Would the project place housing in a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary, Flood Insurance Rate Map, or other flood hazard delineation map?*
- h. Would the project place in a 100-year flood hazard area structures that would impede or redirect flood flows?*

According to the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps, the project site is located in an area of minimal flood hazard (FEMA 2018). In addition, the proposed project would not introduce new housing or otherwise cause housing to become located in a Flood Hazard Area. Therefore, no impact would occur.

NO IMPACT

- i. Would the project expose people or structures to a significant risk of loss, injury, or death involving flooding including that occurs as a result of the failure of a levee or dam?*

Flood control levees are located throughout the Los Angeles basin. Castaic Dam, Pyramid Dam, and Palos Verdes Reservoir all have inundation areas in the county. The nearest dam to the project site is the Palos Verdes Reservoir, located approximately 11 miles to the southwest (Metropolitan Water District of Southern California 2017). The project site is not located within a defined dam inundation area. Implementation of the proposed project would not cause the failure of a levee or dam. Activities associated with the proposed project would be comparable to existing activities on the project site. As such, the proposed project would not result in risks associated with the failure of a levee or dam. No impact would occur.

NO IMPACT

- j. Would the project result in inundation by seiche, tsunami, or mudflow?*

The proposed project site is not located near the ocean or a large water body, and therefore is not subject to tsunamis or seiche. Further, the California DOC identifies the project site as being located outside of a tsunami inundation zone (California DOC 2017). Further, the area is generally flat and would not be subject to inundation by mudflow. No impact would occur.

NO IMPACT

3.10 Land Use and Planning

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project have any of the following impacts?				
a. Physically divide an established community	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. Conflict with an applicable habitat conservation plan or natural community conservation plan	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The proposed project would occur at the Sativa Well #5 site located at 2083 Stockwell Street in the community of Willowbrook in south-central unincorporated Los Angeles County. Existing public roads surrounding the project site would be utilized to provide construction access to the site.

a. Would the project physically divide an established community?

The proposed project includes the installation of groundwater treatment facilities in a developed, primarily residential urban area. All project activities and ground disturbance would occur within the existing Well #5 site. Construction staging would maintain local access for businesses and residences in the vicinity of the project site. Therefore, project facilities do not have the potential to physically divide an established community. No impact would occur.

NO IMPACT

b. Would the project conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?

The project site is located within the Willowbrook Transit Oriented District (TOD) Specific Plan area. The Los Angeles County General Plan identifies TODs as priority policy areas throughout the County. This site is zoned as R-1 for “single-family residence” as shown on Figure ZC.34: Willowbrook, of the County’s Zoning Consistency Program, effective November 5, 2015 (County of Los Angeles 2015b). As described in Chapter 2, Project Description, the proposed project would not change the existing land uses on the project site.

The proposed project would install treatment facilities to remediate elevated levels of manganese in groundwater pumped from Well #5. The Los Angeles County General Plan 2035 identifies the following goals and policies related to drinking water infrastructure (County of Los Angeles 2015a). While not subject to these policies, the following consistency analysis has been provided for informational purposes:

Goal Public Services and Facilities (PS/F) 1: A coordinated, reliable, and equitable network of public facilities that preserves resources, ensures public health and safety, and keeps pace with planned development.

Policy PS/F 1.4: Ensure the adequate maintenance of infrastructure.

Goal PS/F 2: Increased water conservation efforts.

Goal PS/F 3: Increased local water supplies through the use of new technologies.

The project would improve drinking water quality at Well #5, which would be consistent with Goal PS/F 1 and Policy PS/F 1.4. In addition, no increase in groundwater pumping would occur as a result of the project; therefore, the project would not interfere with implementation of Goals PS/F 2 and 3. There would be no conflicts with land use plans, policies, or regulations.

NO IMPACT

- c. *Would the project conflict with an applicable habitat conservation plan or natural community conservation plan?*

The project site is not within the plan area for any habitat conservation plan or natural community conservation plan (CDFW 2017). Therefore, no impact would occur.

NO IMPACT

3.11 Mineral Resources

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project have any of the following impacts:				
a. Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

- 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?*
- 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?*

Mineral resources in the region include sand, gravel, Portland cement concrete aggregate. CGS maps indicate that the project site is located in Mineral Resource Zone 1 (MRZ-1; CGS 1982 and 2010). The Los Angeles County General Plan Conservation and Natural Resources Element also designates the area as MRZ-1 (County of Los Angeles 2015a). In MRZ-1 areas, the available geologic information indicates no significant mineral deposits are present or that there is little likelihood for their presence (CGS 1982). No mines or quarries exist near the project site. Since there are no known mineral resources or mineral resource recovery sites in the vicinity of the project and the project would not alter the existing land uses at the site, no impact would occur.

NO IMPACT

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3.12 Noise

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project result in any of the following impacts?				
a. Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. A substantial permanent increase in ambient noise levels above those existing prior to implementation of the project	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. A substantial temporary or periodic increase in ambient noise levels in the project vicinity above those existing prior to implementation of the project	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. For a project located in an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f. For a project near a private airstrip, would it expose people residing or working in the project area to excessive noise	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Noise Background

Noise is defined as unwanted sound that disturbs human activity. Environmental noise levels typically fluctuate over time, and different types of noise descriptors are used to account for this variability. Noise level measurements include intensity, frequency, and duration, as well as time of occurrence. Noise level (or volume) is generally measured in decibels (dB) using the A-weighted sound pressure level (dBA). Because of the way the human ear interprets sound level, a sound must be about 10 dBA greater than the reference sound to be judged as twice as loud. In general, a 3-dBA change in community noise levels is noticeable, while 1 to 2 dBA changes are typically not perceived. Quiet suburban areas generally have noise levels in the range of 40 to 50 dBA, while

arterial streets are in the 50 to 60+ dBA range. Normal conversational levels are in the 60 to 65 dBA range, and ambient noise levels greater than 65 dBA can interrupt conversations.

In addition to the instantaneous measurement of sound levels, the duration of sound is important since sounds that occur over a long period of time are more likely to be an annoyance or cause direct physical damage or environmental stress. One of the most frequently used noise metrics that considers both duration and sound power level is the equivalent noise level (Leq). The Leq is defined as the single steady A-weighted level that is equivalent to the same amount of energy as that contained in the actual fluctuating levels over a period of time (essentially, the average noise level). Typically, Leq is summed over a one-hour period. The highest root mean squared (RMS) sound pressure level within the measuring period is the Lmax (the maximum sound level experienced within the recorded measurement with A-weighted frequency response). The lowest RMS sound pressure level within the measuring period is the Lmin (the minimum sound level experienced within the recorded measurement with A-weighted frequency response).

The time period in which noise occurs is also important since noise that occurs at night tends to be more disturbing than noise that occurs during the day. Two commonly used noise metrics – the Day-Night average level (Ldn) and the Community Noise Equivalent Level (CNEL) – recognize this fact by weighting hourly Leqs over a 24-hour period. The Ldn is a 24-hour average noise level that adds 10 dBA to actual nighttime (10:00 p.m. to 7:00 a.m.) noise levels to account for the greater sensitivity to noise during that time period. The CNEL is identical to the Ldn, except it also adds a 5-dBA penalty for noise occurring during the evening (7:00 p.m. to 10:00 p.m.).

In practice, CNEL and Ldn are often used interchangeably. The relationship between peak hourly Leq values and associated Ldn values depends on the distribution of traffic over the entire day. There is no precise way to convert a peak hourly Leq value to an Ldn value. However, in urban areas near heavy traffic, the peak hourly Leq value is typically 2 to 4 dBA lower than the daily Ldn value. In less heavily developed areas, such as suburban areas, the peak hourly Leq is often equal to the daily Ldn value. For rural areas with little nighttime traffic, the peak hourly Leq value will often be 3 to 4 dBA greater than the daily Ldn value.

Vibration Background

Vibration is a unique form of noise because its energy is carried through buildings, structures, and the ground, whereas noise is simply carried through the air. Thus, vibration is generally felt rather than heard. Some vibration effects can be caused by noise (e.g., the rattling of windows from passing trucks). This phenomenon is caused by the coupling of the acoustic energy at frequencies that are close to the resonant frequency of the material being vibrated. Typically, groundborne vibration generated by manmade activities attenuates rapidly as distance from the source of the vibration increases. The ground motion caused by vibration is measured as particle velocity in inches per second and is referenced as vibration decibels (VdB) in the United States.

The vibration velocity level threshold of perception for humans is approximately 65 VdB. A vibration velocity of 75 VdB is the approximate dividing line between barely perceptible and distinctly perceptible levels for many people. Most perceptible indoor vibration is caused by sources inside buildings such as the operation of mechanical equipment, movement of people, or the slamming of doors. Typical outdoor sources of perceptible groundborne vibration are construction equipment, steel-wheeled trains, and traffic on rough roads.

Existing Noise Setting

The project site is located in a developed, predominantly residential urban area. The nearest highway is California State Route (SR) 105, located approximately 1.2 miles north of the project site. Noise levels at the project site are typical of residential areas. Transportation-related sources of noise, such as automobiles, trucks, buses, and motorcycles on South Aranbe Avenue and Stockwell Street, are the primary noise sources in the project vicinity. Speed limits on the residential roadways surrounding the project site are 25 miles per hour.

The project site is located approximately 1.3 miles northeast of the Compton/Woodley Airport, a public airport owned by the County of Los Angeles. The project site is not within the airport noise contour (County of Los Angeles 2015).

On August 15, 2018, Rincon Consultants, Inc. collected two noise measurements in the vicinity of the project site using an ANSI Type II integrating sound level meter. Two fifteen-minute noise measurements were taken during the morning traffic hours between 8:30 a.m. and 9:05 a.m. Figure 5 shows the noise measurement locations.

Noise Measurement Number 1 (NM1) was taken on South Aranbe Avenue, and Noise Measurement Number 2 (NM2) was taken on Stockwell Street. Both measurement locations were selected to avoid walls or structures that could interfere with collection of noise measurements. Table 12 summarizes the recorded noise measurements.

Table 12 Noise Measurements

Measurement Number	Measurement Location	Sample Times (a.m.)	15-minute Leq ¹ (dBA) ²	Lmin (dBA) ³	Lmax (dBA) ⁴
1	South Aranbe Avenue	8:32 – 8:47	61.2	38.0	82.9
2	Stockwell Street	8:50 – 9:05	60.6	41.5	80.8

¹ The equivalent noise level (Leq) is defined as the single steady A-weighted level that is equivalent to the same amount of energy as that contained in the actual fluctuating levels over a period of time (essentially, the average noise level). A-weighted decibel (dBA) is defined as a decibel (dB) adjusted to be consistent with human response. For this measurement, the Leq was over a 15-minute period (Leq[15]).

³ Lmin is the minimum sound level experienced within the recorded measurement with A-weighted frequency response

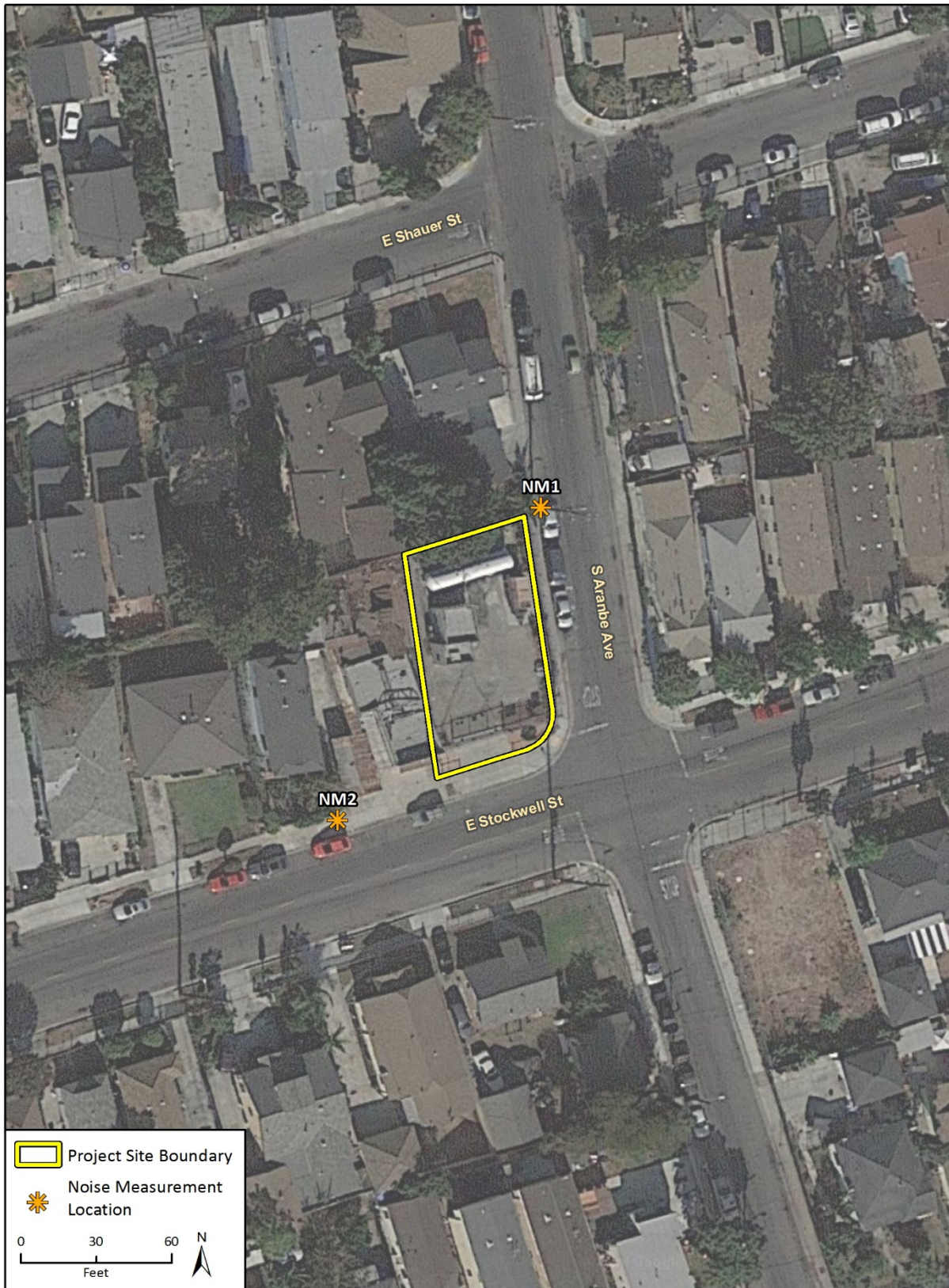
⁴ Lmax is the maximum sound level experienced within the recorded measurement with A-weighted frequency response

Source: Rincon Consultants, field visit on August 15, 2018 using ANSI Type II Integrating sound level meter. See Appendix E for noise monitoring data

Sensitive Receptors

Noise exposure goals for various types of land uses reflect the varying noise sensitivities associated with those uses. The County of Los Angeles General Plan Noise Element identifies particular land uses as sensitive to noise, including residences, schools, hospitals, childcare facilities, and other land uses that house those at high risk of being affected by high noise levels (County of Los Angeles 2015). The project site is located in a residential area and is immediately adjacent to several residences.

Figure 5 Noise Measurement Locations



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Fig 5 Noise Measurement Locations

Regulatory Setting

County of Los Angeles

Consistent with state law, the County of Los Angeles has adopted noise policies in its General Plan Noise Chapter, as well as the noise ordinance, codified under Chapter 12.08, Noise Control.

Title 12, Chapter 12.08 of the Noise Ordinance sets exterior noise standards, interior noise standards, and restrictions on mobile and stationary construction equipment. Table 13 summarizes the applicable exterior noise standards for the proposed project.

Table 13 County of Los Angeles Exterior Noise Standards for Residential Properties

Time Interval	Exterior Noise Level (dBA)					
	Standard No. 1 ¹	Standard No. 2 ²	Standard No. 3 ³	Standard No. 4 ⁴	Standard No. 5 ⁵	
10 p.m. to 7 a.m.	45	50	55	60	65	
7 a.m. to 10 p.m.	50	55	60	65	70	

¹ Standard No. 1 shall be the exterior noise level which may not be exceeded for a cumulative period of more than 30 minutes in any hour. Standard No. 1 shall be the applicable noise level; or, if the ambient L₅₀ exceeds the forgoing level, then the ambient L₅₀ becomes the exterior noise level for Standard No. 1.

² Standard No. 2 shall be the exterior noise level which may not be exceeded for a cumulative period of more than 15 minutes in any hour. Standard No. 2 shall be the applicable noise level from Standard 1 plus 5 dBA; or, if the ambient L₂₅ exceeds the forgoing level, then the ambient L₂₅ becomes the exterior noise level for Standard No. 2.

³ Standard No. 3 shall be the exterior noise level which may not be exceeded for a cumulative period of more than five minutes in any hour. Standard No. 3 shall be the applicable noise level from Standard 1 plus 10 dBA; or, if the ambient L_{8.3} exceeds the forgoing level, then the ambient L_{8.3} becomes the exterior noise level for Standard No. 3.

⁴ Standard No. 4 shall be the exterior noise level which may not be exceeded for a cumulative period of more than one minute in any hour. Standard No. 4 shall be the applicable noise level from Standard 1 plus 15 dBA, or, if the ambient L_{1.7} exceeds the forgoing level, then the ambient L_{1.7} becomes the exterior noise level for Standard No. 4.

⁵ Standard No. 5 shall be the exterior noise level which may not be exceeded for any period of time. Standard No. 5 shall be the applicable noise level from Standard 1 plus 20 dBA; or, if the ambient L₀ exceeds the forgoing level, then the ambient L₀ becomes the exterior noise level for Standard No. 5.

Section 12.07.11.2 of the Los Angeles County Code states that interior noise levels attributable to exterior sources shall not exceed 45 dBA Ldn/CNEL in any habitable rooms. Los Angeles County Code Section 12.08.440 prohibits construction between the hours of 7:00 p.m. and 7:00 a.m. of any day, and any time on Sundays or holidays, if it will create a noise disturbance across a residential or commercial property line. Maximum daytime noise levels for mobile construction equipment is restricted to 75 dBA at single-family residential receptors, while maximum daytime noise levels for stationary construction equipment is restricted to 60 dBA at single-family residential receptors. Los Angeles County Code Section 12.08.440 also requires that all mobile or stationary internal-combustion-engine powered equipment or machinery be equipped with suitable exhaust and air-intake silencers.

The County of Los Angeles County Code’s thresholds for stationary equipment are specifically intended for “repetitively scheduled and relatively long-term operation (periods of 10 days or more) of stationary equipment.” Project construction involves two pieces of stationary equipment: cranes and cement mixers. These pieces of equipment would only be used on a short-term basis (e.g., a crane would be used to remove the hydropneumatic surge tank). It is assumed that no heavy-duty equipment would be used for more than 10 days. Therefore, the stationary equipment threshold of 60 dBA Lmax is not applicable to the project’s construction equipment. This analysis uses the mobile

equipment threshold of 75 dBA Lmax as a conservative method for analyzing noise impacts of heavy duty construction equipment. Therefore, the proposed project would result in a significant impact related to construction noise if it would cause construction noise levels to exceed 75 dBA at adjacent single-family residences.

- a. *Would the project result in exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?*
- c. *Would the project result in a substantial permanent increase in ambient noise levels above levels existing without the project?*

During operations, water treatment equipment would not generate substantial noise. The iron manganese filtration system, sodium bisulfite chemical system, backwash pump, booster pumps, and decant return pump would be equipped with electric motors, which generate minimal noise in comparison to pumps powered by internal combustion engines.

Operation of the proposed project would also involve an air compressor, which could generate substantial operational noise. Operational noise for the nearest sensitive receptors was estimated using the Federal Highway Administration’s (FHWA) Roadway Construction Noise Model (RCNM) (FHWA 2006). Since air compressor specifications are unknown at this time, default assumptions were used. For the purposes of this analysis, it was assumed that the air compressor would run day and night. There is not presently an air compressor used on the project site; therefore, this would be a new use implemented with the proposed project.

Table 14 provides the estimated noise levels generated by the air compressor.

Table 14 Estimated Noise Levels Generated during Operation

Stationary Equipment	Distance to Sensitive Receptor	Hourly dBA Lmax ¹	Hourly dBA Leq ²
Air Compressor	60 feet	76.1	72.1

¹ Lmax is the maximum sound level experienced with A-weighted frequency response. A-weighted decibel (dBA) is defined as a decibel (dB) adjusted to be consistent with human response.

² The equivalent noise level (Leq) is defined as the single steady A-weighted level that is equivalent to the same amount of energy as that contained in the actual fluctuating levels over a period of time (essentially, the average noise level). See Appendix E for RCNM outputs

According to the noise model, the air compressor would generate noise levels of 76.1 dBA Lmax and 72.1 dBA Leq at the nearest sensitive receptor. Exterior noise standards for non-transportation sources of noise range from 45 dBA Leq[30] to 65 dBA Lmax at nighttime and 50 dBA Leq[30] to 70 dBA Lmax during the day for residential receptors. Therefore, noise impacts associated with operation of the air compressor would exceed both daytime and nighttime County thresholds.

Mitigation Measure N-1 would reduce noise impacts to adjacent residential receptors by reducing the noise levels generated by project equipment. With mitigation, impacts related to operational noise levels would be less than significant.

Mitigation Measures

The following mitigation measures would reduce operational noise impacts to a less than significant level.

N-1 Operational Equipment Noise Reduction Measures

Air compressor shall be powered by electricity. Noise impacts associated with operational air compressor usage shall be mitigated using one of the following measures:

- Project proponent shall install an operational air compressor with a decibel rating below 65 dBA Lmax and 45 dBA Leq[30] at a distance of 60 feet.
- Air compressor shall be placed in a noise barrier enclosure to reduce noise generated by compressor at adjacent residential receptors to levels below 65 dBA Lmax and 45 dBA Leq[30].

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

d. Would the project result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?

Project construction would result in temporary and intermittent noise increases at adjacent sensitive receptors. Construction noise primarily arises from the use of vehicles and equipment on the project site. Noise would also be introduced by trucks transporting excavated material from the construction site to disposal site(s) and new soil to the project site (as previously described, it is anticipated that approximately 110 CY of soil would be excavated from the project site, 29 CY of the excavated soil would be reused on-site for fill material, 81 CY of the excavated soils would be exported, and approximately 15 CY of soil would be imported for use on-site). Construction noise for the nearest sensitive receptors was estimated using the FHWA RCNM (FHWA 2006).

The potential for temporary construction noise impacts are determined by the proximity of sensitive receptors to construction activities, estimated noise levels associated with construction activities, the potential for construction noise to interfere with daytime and nighttime activities, and whether construction noise at nearby receptors would exceed local noise ordinance standards. Equipment lists were based on construction activities described in project description and CalEEMod default assumptions for each phase of construction. It was assumed that the equipment would operate at a distance of 25 feet from the adjacent residential receptors during the demolition and construction phases, and 60 feet during the grading and paving phases. These distances were estimated using aerial imagery.

Table 15 provides the estimated noise levels for each phase of construction.

Table 15 Estimated Noise Levels Generated during Construction Phases

Construction Phase	Equipment	Hourly dBA Lmax ¹	Hourly dBA Leq ²
Demolition	Crane	86.6	78.6
Grading	Tractor/Loader/Backhoe	82.4	78.4
Construction	Crane	86.6	79.8
	Forklift		
Paving	Cement and Mortar Mixer	78.4	75.4

¹ Lmax is the maximum sound level experienced with A-weighted frequency response. A-weighted decibel (dBA) is defined as a decibel (dB) adjusted to be consistent with human response.

² The equivalent noise level (Leq) is defined as the single steady A-weighted level that is equivalent to the same amount of energy as that contained in the actual fluctuating levels over a period of time (essentially, the average noise level).

See Appendix D for RCNM outputs

As discussed above, the Los Angeles County Code (Section 12.08.440) prohibits construction between the hours of 7:00 p.m. and 7:00 a.m. of any day, any time on Sundays, and legal holidays, if it will create a noise disturbance across a residential or commercial property line. It also requires equipment to be equipped with suitable exhaust and air-intake silencers. Compliance with these time and equipment restrictions would limit construction noise to times when people are generally less sensitive to noise and reduce construction equipment noise. Nevertheless, peak noise levels associated with construction (up to 86.6 dBA Lmax) would potentially expose the nearby residences to noise levels that exceed the County’s single-family residential standard for construction equipment (75 dBA Lmax).

Noise associated with short-term construction activities is potentially significant and mitigation is required. Mitigation Measures N-2 and N-3 would reduce construction noise impacts to adjacent residential receptors. Table 16 summarizes the unmitigated and mitigated noise levels.

Table 16 Maximum Noise Levels Generated by Equipment - Mitigated

Equipment	Unmitigated Maximum Noise Level at Nearest Receptor (dBA Lmax)	County Threshold (dBA Lmax)	Mitigation Type	Mitigated Maximum Noise Level at Nearest Receptor (dBA Lmax)
Crane	86.6	75	Muffler	71.6
Tractor/Loader/Backhoe	82.4	75	Barrier	62.4
Forklift	80.7	75	Barrier	60.7
Cement and Mortar Mixer	78.4	75	Barrier	58.4

Source: FHWA 2006

Mitigation Measures N-2 and N-3 would reduce noise impacts to adjacent residential receptors by reducing the noise levels generated by project activities. With implementation of these mitigation measures, impacts related to construction-generated noise levels would be less than significant.

Mitigation Measures

The following mitigation measures would reduce construction-related noise impacts to a less than significant level.

N-2 Construction Noise Reduction

- Construction activities shall be scheduled so as to avoid operating several pieces of equipment simultaneously, which causes high noise levels
- Cranes shall be retrofitted with an industrial grade muffler or muffler of similar capacity, capable of reducing engine noise by at least 15 dBA (see Appendix E)
- Adjacent land uses within 500 feet of the construction activity shall be notified about the estimated duration and hours of construction activity at least 30 days before the start of construction

N-3 Temporary Solid Noise Attenuation Barrier

Temporary sound attenuation barriers (e.g., sound curtains) with a Sound Transmission Class (STC) of at least 20 or greater, based on sound transmission loss data taken according to ASTM Test Method E90, shall be used along the construction boundaries during project construction. If an STC-rated product is not available or not feasible for use, a product with a similar industry-standard

specification, or a product that would achieve a similar insertion loss based on a manufacturer or supplier recommendation would be an acceptable substitute. A 20 dBA reduction barrier is practicable barrier attenuation (see Appendix E).

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

b. Would the project result in exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?

The Federal Transit Administration (FTA) provides guidance for determining if vibration impacts would be significant, depending on the frequency and sensitive receptor type (FTA 2006). In most cases, the primary concern regarding groundborne vibration is the potential for damage to buildings and structures (FTA 2006). Vibration impacts would be significant if they exceed the following Federal Railroad Administration (FRA) thresholds:

- 65 VdB where low ambient vibration is essential for interior operations, such as hospitals and recording studios
- 72 VdB for residences and buildings where people normally sleep, including hotels
- 75 VdB for institutional land uses with primary daytime use, such as churches and schools
- 95 VdB for physical damage to extremely fragile historic buildings
- 100 VdB for physical damage to buildings

In addition to the groundborne vibration thresholds outlined above, the FTA outlined human response to different levels of groundborne vibration and determined that vibration that is 85 VdB is acceptable only if there are an infrequent number of events per day.

Operation of the proposed project would not perceptibly increase groundborne vibration on the project site above existing conditions. Construction of the project could potentially increase groundborne vibration near the project site, but any effects would be temporary. The project site is almost entirely surrounded by sensitive receptors. The nearest sensitive receptors are located approximately 25 feet away from where construction would occur.

The anticipated construction equipment list for the proposed project does not include equipment with high vibration levels, such as vibratory rollers and large dozers. Table 17 shows typical vibration levels associated with loaded trucks, which may be used to transport construction materials to and from the project site.

Table 17 Typical Vibration Levels Generated by Construction Equipment

Equipment ¹	Approximate VdB 25 Feet from the Source	Approximate VdB 60 Feet from the Source
Loaded Trucks	86	74

VdB: vibration decibels

¹List not comprehensive of all equipment that would be used for the proposed project

Source: FTA 2006

Based on the information presented in Table 17, residences at 25 feet from construction activities could be exposed to maximum vibration levels of up to 86 VdB during construction without mitigation. As discussed above, 100 VdB is the general threshold where minor damage can occur in buildings. Because vibration levels would not reach 100 VdB, structural damage would not be

expected to occur because of construction activities. The vibration levels at the residence nearest to the project site could exceed the groundborne velocity threshold level of 72 VdB recommended by the FHWA for residences and buildings where people normally sleep; however, Los Angeles County Code Section 12.08.440 restricts construction activities to daytime hours, which would minimize sleep disruption and other disruptive effects at nearby sensitive uses. Therefore, construction would not occur during recognized sleep hours for residences, and vibration impacts from project construction would be less than significant and no mitigation would be required.

LESS THAN SIGNIFICANT

- e. For a project located in an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?*
- f. For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise?*

The project site is located approximately 1.3 miles northeast of the Compton/Woodley Airport, a public airport owned by the County of Los Angeles. The next closest airport (public or private) is the Long Beach Airport, located approximately seven miles southeast of the project site. The project site is not within the airport noise contour (County of Los Angeles 2015). Therefore, construction of the proposed project would not expose residents or workers to excessive noise levels associated with airports. No impact would occur.

NO IMPACT

3.13 Population and Housing

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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Would the project result in any of the following impacts?

a. Induce substantial population growth in an area, either directly (e.g., by proposing new homes and businesses) or indirectly (e.g., through extension of roads or other infrastructure)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Displace substantial amounts of existing housing, necessitating the construction of replacement housing elsewhere	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

a. *Would the project induce substantial 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)?*

The proposed project would provide treatment facilities to bring groundwater into compliance with USEPA’s secondary MCL for manganese in drinking water. Construction workers would be local to Los Angeles County and therefore, construction would not generate new population growth. During operation of the project, groundwater treatment facilitated by the proposed project would not directly induce population growth because it would not produce additional water supply for residential or commercial use. The proposed project would not result in the construction of new homes or new commercial or industrial uses. Therefore, no impact associated with direct or indirect population growth would occur.

NO IMPACT

- b. *Would the project displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?*
- c. *Would the project displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?*

The proposed project would be constructed on the existing Sativa Well #5 site and would not include any features that would displace any existing housing or people. No impact would occur.

NO IMPACT

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3.14 Public Services

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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Would the project result in any of the following impacts?

a. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:

1 Fire protection	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
2 Police protection	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
3 Schools	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
4 Parks	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
5 Other public facilities	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

a.1-5 Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the 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, police protection, schools, parks, and/or other public facilities?

The proposed project would construct groundwater treatment facilities that would be similar to existing facilities on-site. These new facilities would not require additional or unusual fire or police protection resources. It is expected that construction workers would be local to Los Angeles County; therefore, construction would not generate new population growth. The existing Sativa and WRD workforce would operate the proposed project. In addition, the proposed project would not change existing demand for public services (e.g., schools, parks, or libraries) because population growth would not result from construction of the proposed project (see Section 3.13, *Population and Housing*). No impact would occur.

NO IMPACT

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3.15 Recreation

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project result in any of the following impacts?				
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	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

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?*

As discussed in Section 3.13, *Population and Housing*, the proposed project would not directly or indirectly support population growth, and therefore, it would not 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. No impact would occur.

NO IMPACT

b. *Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?*

The proposed project would not implement new recreational facilities and would not require the construction or expansion of any recreational facilities. As such, no impact would occur.

NO IMPACT

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3.16 Transportation

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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Would the project result in any of the following impacts?

a. Conflict with an applicable plan, ordinance or policy establishing a measure of effectiveness for the performance of the circulation system, taking into account all modes of transportation, including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways, and freeways, pedestrian and bicycle paths, and mass transit?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible use (e.g., farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e. Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f. Conflict with adopted policies, plans, or programs regarding public transit, bikeways, or pedestrian facilities, or otherwise substantially decrease the performance or safety of such facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

- a. *Would the project conflict with an applicable plan, ordinance or policy establishing a measure of effectiveness for the performance of the circulation system, taking into account all modes of transportation, including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways, and freeways, pedestrian and bicycle paths, and mass transit?*
- b. *Would the project conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?*

As an accepted industry standard method, the 15-minute traffic counts for South Aranbe Avenue and East Stockwell Street were multiplied by four and then again by 10 to estimate an average daily traffic (ADT) count along South Aranbe Avenue and East Stockwell Street. For South Aranbe Avenue, a total of 14 vehicles were observed; therefore, ADT for South Aranbe Avenue is approximately 560 ADT. For East Stockwell Street, a total of 32 vehicles were observed; therefore, ADT for East Stockwell Street is approximately 1,280 ADT. The Los Angeles County Metropolitan Transportation Authority (LA Metro) is the designated Congestion Management Agency responsible for the development and implementation of the Congestion Management Program (CMP) in the project area. According to the current (year 2010) CMP, approximately half of the freeway system operates at LOS E and F, the most congested levels, in the morning and afternoon rush hours (LA Metro 2010). No CMP intersections exist in the project area; therefore, the proposed project would not interfere with the CMP.

Anticipated construction-related vehicle trips include construction workers traveling to and from the project site, haul trucks (including for import and export of excavated materials, as needed), and other trucks associated with equipment and material deliveries. These trips would primarily use East Stockwell Street to access the project site. Construction would occur over approximately seven months, and construction staging would occur on the project site. During peak construction, construction-related vehicle trips would number approximately six one-way trips for construction workers and approximately four one-way haul truck trips per day. These additional trips would temporarily result in an approximately one percent increase over existing traffic on East Stockwell Street and would only occur over the seven-month construction period. Because construction is short-term, the number of construction-related vehicle trips is low, and no road or lane closures would occur, construction-related traffic would not substantially impact the existing circulation system. Accordingly, construction-related traffic impacts would be less than significant.

During regular operation of the proposed project, Sativa staff is anticipated to visit the site daily for visual inspection in conjunction with the existing daily maintenance trip for Well #5. Therefore, during normal operation, the proposed project would not result in any new traffic on area roadways. If operated manually, the proposed project would require up to one additional trip per day. These additional trips would primarily use East Stockwell Street to access the project site and would result in an approximately 0.1 percent long-term increase over existing traffic. Therefore, operational traffic would not substantially impact the existing circulation system. As such, operational traffic impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

- c. *Would the project result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?*

The project site is located approximately 1.3 miles northeast of the Compton/Woodley Airport, and seven miles northwest of the Long Beach Airport. The project site is not located in the airport influence area for either airport (County of Los Angeles 2015). The proposed treatment facilities would be similar in height to the existing structures and residences; therefore, construction and operation of the treatment facilities would not necessitate a change in air traffic patterns. The proposed project would not involve any direct or indirect changes to air traffic patterns or frequency, runway alignments, or flight approach zones. No impact would occur.

NO IMPACT

- d. *Would the project substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible use (e.g., farm equipment)?*

Project facilities consist of groundwater treatment facilities that would be located on the existing Well #5 site. Several project components, including the iron manganese filtration system and the sodium bisulfite chemical system, would be located on the southeastern corner of the project site near the intersection of South Aranbe Avenue and East Stockwell Street, which is a four-way stop-sign-controlled intersection. Although these project components would be up to 12.5 feet in height, the proposed project would be set back approximately 20 feet from East Stockwell Street. Therefore, the proposed project would not have the potential to obstruct the line of sight of motorists travelling southbound on South Aranbe Avenue because project components would be sufficiently setback to allow a clear field of view. The proposed project would therefore not create or substantially increase a traffic hazard due to a design feature or incompatible use, and no impact would occur.

NO IMPACT

- e. *Would the project result in inadequate emergency access?*

Construction activities associated with the proposed project would not result in road lane closures or associated traffic impacts. Although construction of the project would temporarily increase vehicle transit to and from the project site, such effects would be localized and temporary, and would not have potential to impede emergency access in the project area. Similarly, operation of the project may increase vehicular traffic to and from the project site, but such increase would be a maximum of one additional vehicle per day, which would not substantially affect emergency access in the project area. Therefore, potential impacts associated with impeding emergency access in the project area would be less than significant.

LESS THAN SIGNIFICANT IMPACT

- f. *Conflict with adopted policies, plans, or programs regarding public transit, bikeways, or pedestrian facilities, or otherwise substantially decrease the performance or safety of such facilities?*

The proposed project involves construction and operation of groundwater treatment facilities that would be consistent with existing uses on the project site, and therefore would not conflict with adopted policies, plans, or programs regarding public transit, bicycle or pedestrian facilities. No public transit or bicycle facilities exist in the immediate project vicinity. The proposed project would be located on the existing Well #5 site, which is bound on the eastern and southern edges by

sidewalks along South Aranbe Avenue and East Stockwell Street. During construction, these sidewalks may need to be temporarily restricted to pedestrian traffic; however, pedestrians would be able to use sidewalks on the opposite sides of South Aranbe Avenue and East Stockwell Street to navigate the immediate vicinity. Furthermore, construction-related impacts due to construction vehicle traffic on area roadways and potential sidewalk closures would be temporary. Operation of the proposed project would require one to two additional daily vehicle trips to the project site, which would not interfere with pedestrian use of the sidewalks. Impacts to public transit, bikeways, and pedestrian facilities would be less than significant.

LESS THAN SIGNIFICANT IMPACT

3.17 Tribal Cultural Resources

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in a 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:

- | | | | | |
|---|--------------------------|--------------------------|--------------------------|--------------------------|
| <p>a. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or</p> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| <p>b. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 2024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.</p> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

a., b. Would the project cause a substantial adverse change in the significance of a tribal cultural resource as defined in Public Resources Code 21074 that is (a) listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or (b) a resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 2024.1?

Tribal cultural resources are defined in PRC 21074 as sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are either:

- Included or determined to be eligible for inclusion in the California Register of Historical Resources
- Included in a local register of historical resources as defined in subdivision (k) of Section 5020.1

WRD initiated AB 52 consultation on September 8, 2018 (letters were mailed on September 7, 2018; Appendix F). Under AB 52, Native American contacts have 30 days to respond and request further consultation and thus, have until October 8 to respond to WRD’s consultation request.

Water Replenishment District of Southern California
Sativa Well #5

As of October 5th, 2018, one tribe has responded to request formal consultation under AB 52. Consultation is ongoing and potential impacts are anticipated to be less than significant.

LESS THAN SIGNIFICANT IMPACT

3.18 Utilities and Service Systems

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project result in any of the following impacts?				
a. Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e. 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	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f. Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g. Comply with federal, state, and local statutes and regulations related to solid waste	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

- a. *Would the project exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?*
- b. *Would the project require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?*

The proposed project would not generate sanitary wastewater or otherwise contribute to an increase in wastewater treatment. The purpose of the proposed project is to provide water quality treatment at Sativa Well #5 to address manganese contamination which affects drinking water quality produced and delivered within Sativa's service area. The proposed project would itself be a water treatment facility, in that it would implement an oxidation-filtration treatment method of iron manganese removal for groundwater produced from Sativa Well #5. All project activities would occur in compliance with LARWQCB permits and regulations. Therefore, potential impacts would be less than significant with no mitigation required.

LESS THAN SIGNIFICANT IMPACT

- c. *Would the project require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?*

The project site is paved and impermeable. The proposed project would not result in new impervious surfaces. Site drainage systems would be designed, installed, and maintained for consistency with existing conditions on the project site. The project would not require or result in the construction of new stormwater drainage facilities or the expansion of existing facilities. Impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

- d. *Would the project have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed*
- e. *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?*

The proposed project consists of the construction and operation of an oxidation-filtration treatment of iron manganese removal for groundwater produced from Sativa Well #5. Extraction rates of water from the Central Basin would not increase as a result of the proposed project. The proposed project would not introduce a need for potable water or wastewater treatment, nor would it require new or expanded water supply entitlements. No impact would occur.

NO IMPACT

- f. *Would the project be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?*
- g. *Would the project comply with federal, state, and local statutes and regulations related to solid waste?*

The proposed project would result in minimal, short-term generation of solid waste associated with construction materials. Due to the minimal and short-term nature of the construction activities, the

disposal of materials associated with construction activities would not result in a long-term increase in the amount of waste generated. In addition, the proposed project would be required to recycle and reuse the majority of its construction-generated solid waste.

Assembly Bill 939 requires that state and local governments share the responsibility for managing solid waste. The State of California has directed Los Angeles County to prepare and implement a local integrated waste management plan in accordance with Assembly Bill 939. The Los Angeles County Countywide Integrated Waste Management Summary Plan Executive Summary presents the goals, policies, and objectives for integrating strategies aimed toward reducing, reusing, recycling, diverting, and marketing solid waste generated within the County.

Construction of the proposed project would incorporate source reduction techniques and recycling measures and maintain a recycling program to divert waste in accordance with the County's Integrated Waste Management Plan. These measures would minimize the amount of construction debris generated by the proposed project that would need to be disposed of in an area landfill.

Based on a phone call with Waste Management on September 26, 2018, Rincon Consultants identified the El Sobrante Landfill in Riverside County as a potential recipient of the proposed project's construction-generated solid waste (Waste Management 2018). The El Sobrante Landfill is a Class 3 regional disposal facility permitted to accept up to 16,054 tons of solid waste per day. As of April 2009, the remaining capacity at the landfill was approximately 145.5 million tons (CalRecycle 2018a).

The Sanitation Districts of Los Angeles County (LACSD) operate a comprehensive solid waste system that includes sanitary landfills, recycle centers, materials recovery/transfer facilities, and energy recovery facilities. The two operational landfill sites are the Calabasas Landfill and the Scholl Canyon Landfill. The Puente Hills, Spadra, Palos Verdes, and Mission Canyon Landfills have all been closed. The Calabasas Landfill is a permitted Class 3 facility with a remaining capacity of approximately 14.5 million cubic yards (CalRecycle 2018b). The Scholl Canyon Landfill is a permitted Class 3 facility with a remaining capacity of approximately 58.9 million cubic yards (CalRecycle 2018c).

Construction activities would temporarily generate solid waste, which would be disposed of in accordance with all applicable federal, state, and local statutes and regulations. As described above, nearby landfills have the capacity to accept solid waste generated by project construction activities. Once constructed, project operation would not generate solid waste. Potential impacts would therefore be less than significant.

LESS THAN SIGNIFICANT IMPACT

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3.19 Mandatory Findings of Significance

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a. Does the project have the potential to substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, eliminate a plant or animal community, 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

a. *Does the project have the potential to substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, eliminate a plant or animal community, 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?*

The project site is located on a developed parcel in an urban area. As such it does not have the potential to substantially reduce the habitat of fish and wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, eliminate a plant or animal community, or reduce the number or restrict the range of a rare or endangered plant or animal. In addition, the project would not eliminate important examples of the major periods of California history or prehistory as none are present in the project area.

NO IMPACT

- 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)?*

As described in the discussion of environmental checklist Sections 3.1 through 3.19, with respect to all environmental issues, the proposed project would have no impact, a less than significant impact, or a less than significant impact with mitigation incorporated. Construction activities would occur for nine months and then be complete. Operational activities would be similar to those occurring at the site at present. If construction of other projects occurs at the same time as the proposed project in the same vicinity, adjacent sensitive receptors may be exposed to greater levels of impact from construction activities (e.g., noise). However, even if other projects are occurring at the same time in the area, any cumulative effects would also be short-term and temporary. Therefore, the proposed project would not result in a considerable contribution to any cumulative impact significant or otherwise.

LESS THAN SIGNIFICANT IMPACT

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

In general, impacts to human beings are associated with air quality, hazards and hazardous materials, and noise impacts. As detailed in the preceding sections, the project would not result, either directly or indirectly, in substantial adverse effects related to air quality or noise following the implementation of required mitigation measures (N-1, N-2 and N-3). Compliance with applicable rules and regulations and implementation of Mitigation Measure HAZ-1 and HAZ-2 would reduce potential impacts on human beings related to hazards and hazardous materials to a less than significant level.

LESS THAN SIGNIFICANT IMPACT

Chapter 4: Federal Cross-Cutting Environmental Regulations Evaluation

The proposed project would receive funding under a state program that also has a federal funding component. Therefore, to assist in compliance with the federal environmental requirements for the funding program, this document includes analysis pertinent to several federal cross-cutting regulations (also referred to as federal cross-cutters or CEQA-Plus).

This section describes the status of compliance with relevant federal laws, executive orders, and policies, and the consultation that has occurred to date or will occur in the near future. The topics are based in part on the SWRCB's DWSRF Program Federal Cross-cutting Environmental Regulations Evaluation Form for Environmental Review and Federal Coordination.

4.1 Federal Endangered Species Act

Section 7 of the federal Endangered Species Act (FESA) requires federal agencies, in consultation with the Secretary of the Interior, to ensure that their actions do not jeopardize the continued existence of endangered or threatened species or result in the destruction or adverse modification of the critical habitat of these species. Under Section 7, a project that could result in incidental take of a listed threatened or endangered species must consult with the USFWS to obtain a Biological Opinion (BO). If the BO finds that the project could jeopardize the existence of a listed species ("jeopardy opinion"), the agency cannot authorize the project until it is modified to obtain a "non-jeopardy" opinion.

Section 3.4, *Biological Resources*, describes that no endangered or threatened plant or wildlife species were observed within the study area and no endangered or threatened plant or wildlife species are expected to occur in the study area based on habitat requirements. Therefore, the project is not expected to affect endangered or threatened plant or wildlife species. All ground-disturbing activities associated with project construction would occur within previously disturbed areas. The lead agency would be in compliance with the FESA.

4.2 National Historic Preservation Act, Section 106

The purpose of the National Historic Presentation Act (NHPA) is to protect, preserve, rehabilitate, or restore significant historical, archaeological, and cultural resources. Section 106 requires federal agencies to take into account effects on historic properties. Section 106 review involves a step-by-step procedure described in detail in the implementing regulations (36 CFR Part 800).

As described in Section 3.5, *Cultural Resources*, a cultural resource assessment for the proposed project was conducted. The analysis includes a Section 106 evaluation for the proposed project and can be submitted as part of the consultation process with the SHPO. Concurrence by SHPO would ensure compliance with the NHPA. No cultural resources were identified within the project site during this study. Therefore, less than significant impacts to historical resources under CEQA and no effects to historic properties under the NHPA for the proposed project are expected. Along with adherence to existing regulations concerning the unanticipated discovery of human remains, CR-1 is

recommended in the event of an unanticipated discovery of cultural resources to further reduce the already less than significant impact to cultural resources.

4.3 Clean Air Act

U.S. Congress adopted general conformity requirements as part of the FCAA Amendments in 1990 and the USEPA implemented those requirements in 1993 (Sec. 176 of the FCAA (42 United States Code [U.S.C.] § 7506) and 40 CFR Part 93, Subpart B). General conformity requires that all federal actions “conform” with the State Implementation Plan as approved or promulgated by USEPA. The purpose of the general conformity program is to ensure that actions taken by the federal government do not undermine state or local efforts to achieve and maintain the NAAQS. Before a federal action is taken, it must be evaluated for conformity with the State Implementation Plan. All “reasonably foreseeable” emissions predicted to result from the action are taken into consideration. These include direct and indirect emissions and must be identified as to location and quantity. If it is found that the action would create emissions above *de minimis* threshold levels specified in USEPA regulations (40 CFR § 93.153(b)), or if the activity is considered “regionally significant” because its emissions exceed 10 percent of an area’s total emissions, the action cannot proceed unless mitigation measures are specified that would bring the proposed project into conformance.

As described in Section 3.3, *Air Quality*, the project area lies within the SCAB. The results of the air quality modeling showed that pollutant emissions would not exceed federal General Conformity *de minimis* thresholds (Appendices A and B). Accordingly, the lead agency would be in compliance with the FCAA.

4.4 Coastal Zone Management Act

The Coastal Zone Management Act (CZMA), passed by Congress in 1972 and managed by the National Oceanic and Atmospheric Administration’s Office of Ocean and Coastal Resource Management, is designed to balance completing land and water issues in coastal zones. It also aims to “preserve, protect, develop, and where possible, to restore or enhance the resources of the nation’s coastal zone.” Within California, the CZMA is administered by the Bay Conservation and Development Commission, the California Coastal Conservancy, and the California Coastal Commission.

No portion of the proposed project is within the coastal zone. Therefore, the CMZA does not apply to the proposed project.

4.5 Farmland Protection Policy Act

The Farmland Protection Policy Act (FPPA) requires a federal agency consider the effects of its actions and programs on the nation’s farmlands. The FPPA is intended to minimize the impact of federal programs with respect to the conversion of farmland to nonagricultural uses. It assures that, to the extent possible, federal programs are administered to be compatible with state, local, and private programs and policies to protect farmland.

As described in Section 3.2, *Agriculture and Forestry Resources*, the project site is not in agricultural production and does not contain Prime Farmland, Unique Farmland, Farmland of Statewide Importance, or land with a Williamson Act contract. No part of the site is located on forest land or

timber land. Therefore, the proposed project would not adversely affect any farmland areas and the lead agency would be in compliance with the FPPA.

4.6 Executive Order 11988 – Floodplain Management

Executive Order (EO) 11988 requires federal agencies to recognize the values of floodplains and to consider the public benefits from restoring and preserving floodplains.

As described in Section 3.9, *Hydrology and Water Quality*, the project site is located in an area of minimal flood hazard (FEMA 2018). The proposed project would not introduce new housing or otherwise cause housing to become located in a Flood Hazard Area and proposed uses on the project site would be consistent with existing uses on the project site. Project features would not interfere with floodplain management or expose people or structures to a significant risk of loss, injury or death involving flooding. As such, the lead agency would be in compliance with this EO.

4.7 Federal Migratory Bird Treaty Act, Bald and Golden Eagle Protection Act, and Executive Order 13168

The Migratory Bird Treaty Act (MBTA) and the Bald and Golden Eagle Protection Act prohibit the take of migratory birds (or any part, nest, or eggs of any such bird) and the take and commerce of eagles. EO 13168 requires that any project with federal involvement address impacts of federal actions on migratory birds.

As described in Section 3.4, *Biological Resources*, the onsite structures and ornamental trees on adjacent properties could provide habitat that has the potential to support protected nesting birds; therefore, Mitigation Measure BIO-1 would be implemented to ensure that potential impacts on nesting birds would be less than significant. Therefore, the lead agency would be in compliance with this EO.

4.8 Executive Order 11990 – Protection of Wetlands

Under EO 11990, federal agencies must avoid affecting wetlands unless it is determined that no practicable alternative is available.

As described in Section 3.4, *Biological Resources*, the project site does not support federally protected wetlands as defined by CWA Section 404 and therefore no impacts would occur. Thus, the lead agency would be in compliance with EO 11990.

4.9 Wild and Scenic Rivers Act

The Wild and Scenic Rivers Act was passed in 1968 to preserve and protect designated rivers for their natural, cultural, and recreational value.

There are no designated Wild and Scenic Rivers within the project area, nor will any designated rivers be adversely affected by the proposed project. As a result, the Wild and Scenic Rivers Act does not apply to the proposed project.

4.10 Safe Drinking Water Act – Source Water Protection

Section 1424(e) of the Safe Drinking Water Act established the USEPA's Sole Source Aquifer Program. This program protects communities from groundwater contamination from federally-funded projects.

Within USEPA's Region 9, which includes California, there are nine sole source aquifers. None of these sole source aquifers are located within the project area. Therefore, the Sole Source Aquifer Program does not apply to the proposed project, and the lead agency would be in compliance with Section 1424(e) of the Safe Drinking Water Act.

4.11 Executive Order on Trails for America in the 21st Century

The EO on Trails for America requires federal agencies to protect, connect, promote, and assist trails of all types throughout the United States.

The project site is entirely developed, and no trails exist near the project site. Therefore, no adverse effects on trails would occur and the lead agency is in compliance with this EO.

4.12 Executive Order 13007 – Indian Sacred Sites

Sacred sites are defined in Executive Order 13007 (May 24, 1996) as "any specific, discrete, narrowly delineated location on federal land that is identified by an Indian tribe, or Indian individual determined to be an appropriately authoritative representative of an Indian religion, as sacred by virtue of its established religious significance to, or ceremonial use by, an Indian religion; provided that the tribe or appropriately authoritative representative of an Indian religion has informed the agency of the existence of such a site."

The proposed project would not be located on or impact any federal lands and therefore would not affect any Indian sacred sites under this EO.

4.13 Magnuson-Stevens Fishery Conservation and Management Act

The Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act) of 1976 as amended (16 U.S.C. § 1801 et seq.), is the primary act governing federal management of fisheries in federal waters, from the 3-nautical-mile state territorial sea limit to the outer limit of the U.S. Exclusive Economic Zone. It establishes exclusive U.S. management authority over all fishing within the Exclusive Economic Zone, all anadromous fish throughout their migratory range except when in a foreign nation's waters, and all fish on the continental shelf. The Act also requires federal agencies to consult with NMFS on actions that could damage Essential Fish Habitat (EFH), as defined in the 1996 Sustainable Fisheries Act (Public Law 104-297).

The proposed project would not be located in or impact any U.S. federal waters regulated under the Magnuson-Stevens Act. Essential Fish Habitat includes those habitats that support the different life stages of each managed species. A single species may use many different habitats throughout its life to support breeding, spawning, nursery, feeding, and protection functions. EFH can consist of both

the water column and the underlying surface (e.g., streambed) of a particular area. The project site is located in an entirely developed area. As described in Section 3.4, *Biological Resources*, the project would not have adverse effects on resident or migratory fish, wildlife species, or fish habitat in the project area.

4.14 Environmental Justice

Consistent with CEQA-Plus requirements, this section describes the existing socioeconomic resources in the proposed project area and the regulatory setting pertaining to environmental justice-related issues. This section also evaluates the potential for the proposed project to disproportionately affect minority or low-income groups. The USEPA defines environmental justice as follows:

The fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies. Fair treatment means no group of people, including racial, ethnic, or economic groups should bear a disproportionate share of the negative environmental consequences resulting from industrial, municipal, and commercial operations or the execution of federal, state, local, and tribal programs and policies. (USEPA 2016)

Minority and Low Income Communities

Environmental justice considerations bring attention to the racial and economic demographics of a community with the aim of avoiding impacts that would disproportionately affect minority and low-income groups. According to USEPA guidelines, a population is identified as minority in an area affected by a policy action if the minority population of the affected area exceeds 50 percent or if the minority population percentage of the affected area is meaningfully greater than the general population or other appropriate unit of geographic analysis (USEPA 1998).

The proposed project involves the construction of groundwater treatment facilities in Willowbrook, a census-designated place (CDP) in Los Angeles County. According to the United States Census Bureau (U.S. Census) American FactFinder, 22.9 percent of the total population in Willowbrook identified as Caucasian as of the 2010 census. Therefore, the area surrounding the proposed project site has a minority population exceeding 50 percent and is identified as a minority population for the purposes of environmental justice analysis (U.S. Census 2017a).

USEPA guidelines recommend that analyses of low income communities consider the U.S. Census poverty level definitions, as well as applicable state and regional definitions of low income and poverty communities. The U.S. Census Bureau uses a set of financial income thresholds that vary by family size and composition to determine who is in poverty (U.S. Census Bureau 2017b). According to American Community Survey (ACS) estimates, 28 percent of people in Willowbrook were considered to be in poverty between 2012 and 2016. In comparison, the percentage of persons in poverty in Los Angeles County was 16.3 percent (U.S. Census 2017c). Therefore, the area surrounding the proposed project site is classified as a low-income community.

DWR defines a Disadvantaged Community (DAC) as a community with a median household income (MHI) less than 80 percent of the California MHI (DWR 2014). According to 2012 to 2016 ACS data, the statewide MHI was \$63,783. A DAC would therefore be a community with a MHI of \$51,026 or less. For this time period, the MHI of Willowbrook was \$38,070. Therefore, according to DWR's

definition of low income/disadvantaged communities, the census-designated place in which the proposed project would take place is a DAC (U.S. Census 2017c).

Conclusion

For the purposes of this analysis, an impact related to environmental justice would be significant if the proposed project would cause impacts to minority or low-income populations that are disproportionately high and adverse, either directly, indirectly, or cumulatively. The proposed project is located in a minority, low-income, and disadvantaged community.

The proposed project would construct groundwater treatment facilities to address elevated levels of manganese that affect drinking water quality in the Sativa service area, which includes the Willowbrook CDP and a portion of Compton. Although construction would generate impacts (e.g., dust, traffic, and noise), such activities would be intermittent and temporary, and would cease upon completion of work activities. Where potential construction-related impacts could occur, mitigation measures have been identified to reduce such effects to less-than-significant levels. No significant, long-term operational impacts would occur as a result of the proposed project. Although construction of the proposed project has the potential for short-term effects, the proposed treatment facilities would have the long-term benefit of providing adequately-treated drinking water to all Sativa customers regardless of race, ethnicity, or income level. Therefore, the proposed project would not result in any disproportionately high impacts on minority, low income, or disadvantaged communities. Thus, no adverse environmental justice impacts would occur.

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List of Preparers

Rincon Consultants, Inc. prepared this IS/MND on behalf of the Water Replenishment District of Southern California. Persons involved in data gathering analysis, project management, and quality control include the following.

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Appendix A

CalEEMod

Sativa Well #5 - Los Angeles-South Coast County, Annual

Sativa Well #5
Los Angeles-South Coast County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Light Industry	3.63	1000sqft	0.08	3,633.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	33
Climate Zone	11			Operational Year	2021
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	702.44	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Sativa Well #5 - Los Angeles-South Coast County, Annual

Project Characteristics -

Land Use - Based on GE approximation of site.

Construction Phase - Based on applicant construction schedule

Off-road Equipment - Based on PD.

Off-road Equipment - Based on PD.

Off-road Equipment - Based on PD

Off-road Equipment - Based on PD.

Off-road Equipment - Based on PD.

Trips and VMT - Based on 16 CY trucks.

Demolition -

Grading -

Architectural Coating -

Vehicle Trips - Based on applicant info.

Energy Use - Energy GHG emissions calculated separately.

Water And Wastewater - Project will not increase amount of GW pumped

Solid Waste - No waste generated by project.

Construction Off-road Equipment Mitigation -

Mobile Land Use Mitigation -

Sativa Well #5 - Los Angeles-South Coast County, Annual

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	100.00	30.00
tblConstructionPhase	NumDays	10.00	14.00
tblConstructionPhase	NumDays	2.00	42.00
tblEnergyUse	LightingElect	3.10	0.00
tblEnergyUse	NT24E	5.75	0.00
tblEnergyUse	NT24NG	4.45	0.00
tblEnergyUse	T24E	2.25	0.00
tblEnergyUse	T24NG	13.65	0.00
tblGrading	MaterialExported	0.00	81.00
tblGrading	MaterialImported	0.00	15.00
tblLandUse	LandUseSquareFeet	3,630.00	3,633.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	PhaseName		Demolition
tblSolidWaste	SolidWasteGenerationRate	4.50	0.00
tblTripsAndVMT	HaulingTripNumber	0.00	12.00
tblTripsAndVMT	WorkerTripNumber	13.00	3.00
tblTripsAndVMT	WorkerTripNumber	8.00	3.00
tblTripsAndVMT	WorkerTripNumber	10.00	3.00
tblVehicleTrips	ST_TR	1.32	0.27
tblVehicleTrips	SU_TR	0.68	0.27
tblVehicleTrips	WD_TR	6.97	0.27
tblWater	IndoorWaterUseRate	839,437.50	0.00

Sativa Well #5 - Los Angeles-South Coast County, Annual

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2019	0.0110	0.1133	0.0779	1.4000e-004	0.0173	6.1100e-003	0.0235	9.1000e-003	5.6300e-003	0.0147	0.0000	12.9399	12.9399	3.5100e-003	0.0000	13.0276
Maximum	0.0110	0.1133	0.0779	1.4000e-004	0.0173	6.1100e-003	0.0235	9.1000e-003	5.6300e-003	0.0147	0.0000	12.9399	12.9399	3.5100e-003	0.0000	13.0276

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2019	0.0110	0.1133	0.0779	1.4000e-004	8.6500e-003	6.1100e-003	0.0148	4.3200e-003	5.6300e-003	9.9500e-003	0.0000	12.9399	12.9399	3.5100e-003	0.0000	13.0276
Maximum	0.0110	0.1133	0.0779	1.4000e-004	8.6500e-003	6.1100e-003	0.0148	4.3200e-003	5.6300e-003	9.9500e-003	0.0000	12.9399	12.9399	3.5100e-003	0.0000	13.0276

Sativa Well #5 - Los Angeles-South Coast County, Annual

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	50.12	0.00	37.08	52.53	0.00	32.45	0.00	0.00	0.00	0.00	0.00	0.00

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	4-1-2019	6-30-2019	0.0757	0.0757
2	7-1-2019	9-30-2019	0.0483	0.0483
		Highest	0.0757	0.0757

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0148	0.0000	5.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	9.0000e-005	9.0000e-005	0.0000	0.0000	1.0000e-004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	3.7000e-004	2.0200e-003	5.7000e-003	2.0000e-005	1.6500e-003	2.0000e-005	1.6600e-003	4.4000e-004	2.0000e-005	4.6000e-004	0.0000	1.8674	1.8674	1.0000e-004	0.0000	1.8698
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0152	2.0200e-003	5.7500e-003	2.0000e-005	1.6500e-003	2.0000e-005	1.6600e-003	4.4000e-004	2.0000e-005	4.6000e-004	0.0000	1.8674	1.8674	1.0000e-004	0.0000	1.8699

Sativa Well #5 - Los Angeles-South Coast County, Annual

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0148	0.0000	5.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	9.0000e-005	9.0000e-005	0.0000	0.0000	1.0000e-004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	3.7000e-004	2.0200e-003	5.7000e-003	2.0000e-005	1.6500e-003	2.0000e-005	1.6600e-003	4.4000e-004	2.0000e-005	4.6000e-004	0.0000	1.8674	1.8674	1.0000e-004	0.0000	1.8698
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0152	2.0200e-003	5.7500e-003	2.0000e-005	1.6500e-003	2.0000e-005	1.6600e-003	4.4000e-004	2.0000e-005	4.6000e-004	0.0000	1.8674	1.8674	1.0000e-004	0.0000	1.8699

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Sativa Well #5 - Los Angeles-South Coast County, Annual

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	4/1/2019	4/18/2019	5	14	
2	Site Prep, Foundations, Piping	Grading	4/19/2019	6/17/2019	5	42	
3	Installation of Tanks, Pumps, and Equipment	Building Construction	6/18/2019	7/29/2019	5	30	
4	Paving	Paving	7/30/2019	8/5/2019	5	5	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Cranes	1	2.00	231	0.29
Site Prep, Foundations, Piping	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Installation of Tanks, Pumps, and Equipment	Cranes	1	4.00	231	0.29
Installation of Tanks, Pumps, and Equipment	Forklifts	1	6.00	89	0.20
Paving	Cement and Mortar Mixers	1	6.00	9	0.56

Trips and VMT

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Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	5	3.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Prep, Foundations, Piping	3	3.00	0.00	12.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Installation of Tanks, Pumps, and Equipment	4	2.00	1.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	4	3.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Demolition - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	8.8000e-004	0.0105	4.0100e-003	1.0000e-005		4.5000e-004	4.5000e-004		4.1000e-004	4.1000e-004	0.0000	0.9068	0.9068	2.9000e-004	0.0000	0.9140
Total	8.8000e-004	0.0105	4.0100e-003	1.0000e-005		4.5000e-004	4.5000e-004		4.1000e-004	4.1000e-004	0.0000	0.9068	0.9068	2.9000e-004	0.0000	0.9140

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3.2 Demolition - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.1000e-004	9.0000e-005	9.5000e-004	0.0000	2.3000e-004	0.0000	2.3000e-004	6.0000e-005	0.0000	6.0000e-005	0.0000	0.2212	0.2212	1.0000e-005	0.0000	0.2214
Total	1.1000e-004	9.0000e-005	9.5000e-004	0.0000	2.3000e-004	0.0000	2.3000e-004	6.0000e-005	0.0000	6.0000e-005	0.0000	0.2212	0.2212	1.0000e-005	0.0000	0.2214

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	8.8000e-004	0.0105	4.0100e-003	1.0000e-005		4.5000e-004	4.5000e-004		4.1000e-004	4.1000e-004	0.0000	0.9068	0.9068	2.9000e-004	0.0000	0.9140
Total	8.8000e-004	0.0105	4.0100e-003	1.0000e-005		4.5000e-004	4.5000e-004		4.1000e-004	4.1000e-004	0.0000	0.9068	0.9068	2.9000e-004	0.0000	0.9140

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3.2 Demolition - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.1000e-004	9.0000e-005	9.5000e-004	0.0000	2.3000e-004	0.0000	2.3000e-004	6.0000e-005	0.0000	6.0000e-005	0.0000	0.2212	0.2212	1.0000e-005	0.0000	0.2214
Total	1.1000e-004	9.0000e-005	9.5000e-004	0.0000	2.3000e-004	0.0000	2.3000e-004	6.0000e-005	0.0000	6.0000e-005	0.0000	0.2212	0.2212	1.0000e-005	0.0000	0.2214

3.3 Site Prep, Foundations, Piping - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0158	0.0000	0.0158	8.6900e-003	0.0000	8.6900e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.6700e-003	0.0368	0.0363	5.0000e-005		2.4600e-003	2.4600e-003		2.2600e-003	2.2600e-003	0.0000	4.3942	4.3942	1.3900e-003	0.0000	4.4290
Total	3.6700e-003	0.0368	0.0363	5.0000e-005	0.0158	2.4600e-003	0.0183	8.6900e-003	2.2600e-003	0.0110	0.0000	4.3942	4.3942	1.3900e-003	0.0000	4.4290

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3.3 Site Prep, Foundations, Piping - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	6.0000e-005	1.9000e-003	4.0000e-004	0.0000	1.0000e-004	1.0000e-005	1.1000e-004	3.0000e-005	1.0000e-005	3.0000e-005	0.0000	0.4672	0.4672	3.0000e-005	0.0000	0.4680
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.2000e-004	2.6000e-004	2.8600e-003	1.0000e-005	6.9000e-004	1.0000e-005	7.0000e-004	1.8000e-004	1.0000e-005	1.9000e-004	0.0000	0.6636	0.6636	2.0000e-005	0.0000	0.6642
Total	3.8000e-004	2.1600e-003	3.2600e-003	1.0000e-005	7.9000e-004	2.0000e-005	8.1000e-004	2.1000e-004	2.0000e-005	2.2000e-004	0.0000	1.1308	1.1308	5.0000e-005	0.0000	1.1322

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					7.1200e-003	0.0000	7.1200e-003	3.9100e-003	0.0000	3.9100e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.6700e-003	0.0368	0.0363	5.0000e-005		2.4600e-003	2.4600e-003		2.2600e-003	2.2600e-003	0.0000	4.3942	4.3942	1.3900e-003	0.0000	4.4290
Total	3.6700e-003	0.0368	0.0363	5.0000e-005	7.1200e-003	2.4600e-003	9.5800e-003	3.9100e-003	2.2600e-003	6.1700e-003	0.0000	4.3942	4.3942	1.3900e-003	0.0000	4.4290

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3.3 Site Prep, Foundations, Piping - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	6.0000e-005	1.9000e-003	4.0000e-004	0.0000	1.0000e-004	1.0000e-005	1.1000e-004	3.0000e-005	1.0000e-005	3.0000e-005	0.0000	0.4672	0.4672	3.0000e-005	0.0000	0.4680
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.2000e-004	2.6000e-004	2.8600e-003	1.0000e-005	6.9000e-004	1.0000e-005	7.0000e-004	1.8000e-004	1.0000e-005	1.9000e-004	0.0000	0.6636	0.6636	2.0000e-005	0.0000	0.6642
Total	3.8000e-004	2.1600e-003	3.2600e-003	1.0000e-005	7.9000e-004	2.0000e-005	8.1000e-004	2.1000e-004	2.0000e-005	2.2000e-004	0.0000	1.1308	1.1308	5.0000e-005	0.0000	1.1322

3.4 Installation of Tanks, Pumps, and Equipment - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	5.5800e-003	0.0611	0.0306	6.0000e-005		3.1500e-003	3.1500e-003		2.9000e-003	2.9000e-003	0.0000	5.4308	5.4308	1.7200e-003	0.0000	5.4738
Total	5.5800e-003	0.0611	0.0306	6.0000e-005		3.1500e-003	3.1500e-003		2.9000e-003	2.9000e-003	0.0000	5.4308	5.4308	1.7200e-003	0.0000	5.4738

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3.4 Installation of Tanks, Pumps, and Equipment - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	6.0000e-005	1.7700e-003	4.8000e-004	0.0000	9.0000e-005	1.0000e-005	1.1000e-004	3.0000e-005	1.0000e-005	4.0000e-005	0.0000	0.3751	0.3751	3.0000e-005	0.0000	0.3757
Worker	1.5000e-004	1.3000e-004	1.3600e-003	0.0000	3.3000e-004	0.0000	3.3000e-004	9.0000e-005	0.0000	9.0000e-005	0.0000	0.3160	0.3160	1.0000e-005	0.0000	0.3163
Total	2.1000e-004	1.9000e-003	1.8400e-003	0.0000	4.2000e-004	1.0000e-005	4.4000e-004	1.2000e-004	1.0000e-005	1.3000e-004	0.0000	0.6911	0.6911	4.0000e-005	0.0000	0.6920

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	5.5800e-003	0.0611	0.0306	6.0000e-005		3.1500e-003	3.1500e-003		2.9000e-003	2.9000e-003	0.0000	5.4308	5.4308	1.7200e-003	0.0000	5.4738
Total	5.5800e-003	0.0611	0.0306	6.0000e-005		3.1500e-003	3.1500e-003		2.9000e-003	2.9000e-003	0.0000	5.4308	5.4308	1.7200e-003	0.0000	5.4738

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3.4 Installation of Tanks, Pumps, and Equipment - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	6.0000e-005	1.7700e-003	4.8000e-004	0.0000	9.0000e-005	1.0000e-005	1.1000e-004	3.0000e-005	1.0000e-005	4.0000e-005	0.0000	0.3751	0.3751	3.0000e-005	0.0000	0.3757
Worker	1.5000e-004	1.3000e-004	1.3600e-003	0.0000	3.3000e-004	0.0000	3.3000e-004	9.0000e-005	0.0000	9.0000e-005	0.0000	0.3160	0.3160	1.0000e-005	0.0000	0.3163
Total	2.1000e-004	1.9000e-003	1.8400e-003	0.0000	4.2000e-004	1.0000e-005	4.4000e-004	1.2000e-004	1.0000e-005	1.3000e-004	0.0000	0.6911	0.6911	4.0000e-005	0.0000	0.6920

3.5 Paving - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	1.1000e-004	6.9000e-004	5.8000e-004	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.0859	0.0859	1.0000e-005	0.0000	0.0862
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	1.1000e-004	6.9000e-004	5.8000e-004	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.0859	0.0859	1.0000e-005	0.0000	0.0862

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3.5 Paving - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.0000e-005	3.0000e-005	3.4000e-004	0.0000	8.0000e-005	0.0000	8.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0790	0.0790	0.0000	0.0000	0.0791
Total	4.0000e-005	3.0000e-005	3.4000e-004	0.0000	8.0000e-005	0.0000	8.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0790	0.0790	0.0000	0.0000	0.0791

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	1.1000e-004	6.9000e-004	5.8000e-004	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.0859	0.0859	1.0000e-005	0.0000	0.0862
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	1.1000e-004	6.9000e-004	5.8000e-004	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.0859	0.0859	1.0000e-005	0.0000	0.0862

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3.5 Paving - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.0000e-005	3.0000e-005	3.4000e-004	0.0000	8.0000e-005	0.0000	8.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0790	0.0790	0.0000	0.0000	0.0791
Total	4.0000e-005	3.0000e-005	3.4000e-004	0.0000	8.0000e-005	0.0000	8.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0790	0.0790	0.0000	0.0000	0.0791

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	3.7000e-004	2.0200e-003	5.7000e-003	2.0000e-005	1.6500e-003	2.0000e-005	1.6600e-003	4.4000e-004	2.0000e-005	4.6000e-004	0.0000	1.8674	1.8674	1.0000e-004	0.0000	1.8698
Unmitigated	3.7000e-004	2.0200e-003	5.7000e-003	2.0000e-005	1.6500e-003	2.0000e-005	1.6600e-003	4.4000e-004	2.0000e-005	4.6000e-004	0.0000	1.8674	1.8674	1.0000e-004	0.0000	1.8698

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Light Industry	0.98	0.98	0.98	4,340	4,340
Total	0.98	0.98	0.98	4,340	4,340

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Light Industry	16.60	8.40	6.90	59.00	28.00	13.00	92	5	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Light Industry	0.547192	0.045177	0.202743	0.121510	0.016147	0.006143	0.019743	0.029945	0.002479	0.002270	0.005078	0.000682	0.000891

5.0 Energy Detail

Historical Energy Use: N

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5.2 Energy by Land Use - Natural Gas

Mitigated

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Land Use	kBTU/yr	tons/yr										MT/yr						
General Light Industry	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Light Industry	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

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5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Light Industry	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0148	0.0000	5.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	9.0000e-005	9.0000e-005	0.0000	0.0000	1.0000e-004
Unmitigated	0.0148	0.0000	5.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	9.0000e-005	9.0000e-005	0.0000	0.0000	1.0000e-004

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6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	1.6800e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0131					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0000	0.0000	5.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	9.0000e-005	9.0000e-005	0.0000	0.0000	1.0000e-004
Total	0.0148	0.0000	5.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	9.0000e-005	9.0000e-005	0.0000	0.0000	1.0000e-004

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	1.6800e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0131					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0000	0.0000	5.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	9.0000e-005	9.0000e-005	0.0000	0.0000	1.0000e-004
Total	0.0148	0.0000	5.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	9.0000e-005	9.0000e-005	0.0000	0.0000	1.0000e-004

7.0 Water Detail

Sativa Well #5 - Los Angeles-South Coast County, Annual

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Light Industry	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

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7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Light Industry	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

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8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Light Industry	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Light Industry	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

9.0 Operational Offroad

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

Fire Pumps and Emergency Generators

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

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

User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

Sativa Well #5 - Los Angeles-South Coast County, Summer

Sativa Well #5
Los Angeles-South Coast County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Light Industry	3.63	1000sqft	0.08	3,633.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	33
Climate Zone	11			Operational Year	2021
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	702.44	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Sativa Well #5 - Los Angeles-South Coast County, Summer

Project Characteristics -

Land Use - Based on GE approximation of site.

Construction Phase - Based on applicant construction schedule

Off-road Equipment - Based on PD.

Off-road Equipment - Based on PD.

Off-road Equipment - Based on PD

Off-road Equipment - Based on PD.

Off-road Equipment - Based on PD.

Trips and VMT - Based on 16 CY trucks.

Demolition -

Grading -

Architectural Coating -

Vehicle Trips - Based on applicant info.

Energy Use - Energy GHG emissions calculated separately.

Water And Wastewater - Project will not increase amount of GW pumped

Solid Waste - No waste generated by project.

Construction Off-road Equipment Mitigation -

Mobile Land Use Mitigation -

Sativa Well #5 - Los Angeles-South Coast County, Summer

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	100.00	30.00
tblConstructionPhase	NumDays	10.00	14.00
tblConstructionPhase	NumDays	2.00	42.00
tblEnergyUse	LightingElect	3.10	0.00
tblEnergyUse	NT24E	5.75	0.00
tblEnergyUse	NT24NG	4.45	0.00
tblEnergyUse	T24E	2.25	0.00
tblEnergyUse	T24NG	13.65	0.00
tblGrading	MaterialExported	0.00	81.00
tblGrading	MaterialImported	0.00	15.00
tblLandUse	LandUseSquareFeet	3,630.00	3,633.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	PhaseName		Demolition
tblSolidWaste	SolidWasteGenerationRate	4.50	0.00
tblTripsAndVMT	HaulingTripNumber	0.00	12.00
tblTripsAndVMT	WorkerTripNumber	13.00	3.00
tblTripsAndVMT	WorkerTripNumber	8.00	3.00
tblTripsAndVMT	WorkerTripNumber	10.00	3.00
tblVehicleTrips	ST_TR	1.32	0.27
tblVehicleTrips	SU_TR	0.68	0.27
tblVehicleTrips	WD_TR	6.97	0.27
tblWater	IndoorWaterUseRate	839,437.50	0.00

Sativa Well #5 - Los Angeles-South Coast County, Summer

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2019	0.3861	4.1978	2.1693	4.5300e-003	0.7916	0.2112	0.9092	0.4241	0.1944	0.5323	0.0000	451.2361	451.2361	0.1289	0.0000	454.4584
Maximum	0.3861	4.1978	2.1693	4.5300e-003	0.7916	0.2112	0.9092	0.4241	0.1944	0.5323	0.0000	451.2361	451.2361	0.1289	0.0000	454.4584

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2019	0.3861	4.1978	2.1693	4.5300e-003	0.3774	0.2112	0.4950	0.1965	0.1944	0.3047	0.0000	451.2361	451.2361	0.1289	0.0000	454.4584
Maximum	0.3861	4.1978	2.1693	4.5300e-003	0.3774	0.2112	0.4950	0.1965	0.1944	0.3047	0.0000	451.2361	451.2361	0.1289	0.0000	454.4584

Sativa Well #5 - Los Angeles-South Coast County, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	52.32	0.00	45.55	53.67	0.00	42.76	0.00	0.00	0.00	0.00	0.00	0.00

Sativa Well #5 - Los Angeles-South Coast County, Summer

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.0812	0.0000	3.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		7.9000e-004	7.9000e-004	0.0000		8.5000e-004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	2.1600e-003	0.0106	0.0327	1.2000e-004	9.2300e-003	9.0000e-005	9.3200e-003	2.4700e-003	9.0000e-005	2.5600e-003		11.7202	11.7202	6.0000e-004		11.7351
Total	0.0834	0.0106	0.0331	1.2000e-004	9.2300e-003	9.0000e-005	9.3200e-003	2.4700e-003	9.0000e-005	2.5600e-003		11.7210	11.7210	6.0000e-004	0.0000	11.7359

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.0812	0.0000	3.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		7.9000e-004	7.9000e-004	0.0000		8.5000e-004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	2.1600e-003	0.0106	0.0327	1.2000e-004	9.2300e-003	9.0000e-005	9.3200e-003	2.4700e-003	9.0000e-005	2.5600e-003		11.7202	11.7202	6.0000e-004		11.7351
Total	0.0834	0.0106	0.0331	1.2000e-004	9.2300e-003	9.0000e-005	9.3200e-003	2.4700e-003	9.0000e-005	2.5600e-003		11.7210	11.7210	6.0000e-004	0.0000	11.7359

Sativa Well #5 - Los Angeles-South Coast County, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	4/1/2019	4/18/2019	5	14	
2	Site Prep, Foundations, Piping	Grading	4/19/2019	6/17/2019	5	42	
3	Installation of Tanks, Pumps, and Equipment	Building Construction	6/18/2019	7/29/2019	5	30	
4	Paving	Paving	7/30/2019	8/5/2019	5	5	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Cranes	1	2.00	231	0.29
Site Prep, Foundations, Piping	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Installation of Tanks, Pumps, and Equipment	Cranes	1	4.00	231	0.29
Installation of Tanks, Pumps, and Equipment	Forklifts	1	6.00	89	0.20
Paving	Cement and Mortar Mixers	1	6.00	9	0.56

Sativa Well #5 - Los Angeles-South Coast County, Summer

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	5	3.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Prep, Foundations, Piping	3	3.00	0.00	12.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Installation of Tanks, Pumps, and Equipment	4	2.00	1.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	4	3.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Demolition - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.1260	1.5018	0.5733	1.4400e-003		0.0637	0.0637		0.0586	0.0586		142.8027	142.8027	0.0452		143.9322
Total	0.1260	1.5018	0.5733	1.4400e-003		0.0637	0.0637		0.0586	0.0586		142.8027	142.8027	0.0452		143.9322

Sativa Well #5 - Los Angeles-South Coast County, Summer

3.2 Demolition - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0150	0.0110	0.1447	3.7000e-004	0.0335	2.9000e-004	0.0338	8.8900e-003	2.7000e-004	9.1600e-003		36.3886	36.3886	1.2500e-003		36.4198
Total	0.0150	0.0110	0.1447	3.7000e-004	0.0335	2.9000e-004	0.0338	8.8900e-003	2.7000e-004	9.1600e-003		36.3886	36.3886	1.2500e-003		36.4198

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.1260	1.5018	0.5733	1.4400e-003		0.0637	0.0637		0.0586	0.0586	0.0000	142.8027	142.8027	0.0452		143.9322
Total	0.1260	1.5018	0.5733	1.4400e-003		0.0637	0.0637		0.0586	0.0586	0.0000	142.8027	142.8027	0.0452		143.9322

Sativa Well #5 - Los Angeles-South Coast County, Summer

3.2 Demolition - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0150	0.0110	0.1447	3.7000e-004	0.0335	2.9000e-004	0.0338	8.8900e-003	2.7000e-004	9.1600e-003		36.3886	36.3886	1.2500e-003		36.4198
Total	0.0150	0.0110	0.1447	3.7000e-004	0.0335	2.9000e-004	0.0338	8.8900e-003	2.7000e-004	9.1600e-003		36.3886	36.3886	1.2500e-003		36.4198

3.3 Site Prep, Foundations, Piping - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.7530	0.0000	0.7530	0.4138	0.0000	0.4138			0.0000			0.0000
Off-Road	0.1746	1.7530	1.7270	2.3300e-003		0.1170	0.1170		0.1077	0.1077		230.6564	230.6564	0.0730		232.4808
Total	0.1746	1.7530	1.7270	2.3300e-003	0.7530	0.1170	0.8701	0.4138	0.1077	0.5215		230.6564	230.6564	0.0730		232.4808

Sativa Well #5 - Los Angeles-South Coast County, Summer

3.3 Site Prep, Foundations, Piping - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	2.6800e-003	0.0875	0.0187	2.3000e-004	5.0000e-003	3.2000e-004	5.3200e-003	1.3700e-003	3.1000e-004	1.6800e-003		24.7003	24.7003	1.7000e-003		24.7429
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0150	0.0110	0.1447	3.7000e-004	0.0335	2.9000e-004	0.0338	8.8900e-003	2.7000e-004	9.1600e-003		36.3886	36.3886	1.2500e-003		36.4198
Total	0.0177	0.0985	0.1633	6.0000e-004	0.0385	6.1000e-004	0.0391	0.0103	5.8000e-004	0.0108		61.0889	61.0889	2.9500e-003		61.1627

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.3389	0.0000	0.3389	0.1862	0.0000	0.1862			0.0000			0.0000
Off-Road	0.1746	1.7530	1.7270	2.3300e-003		0.1170	0.1170		0.1077	0.1077	0.0000	230.6564	230.6564	0.0730		232.4808
Total	0.1746	1.7530	1.7270	2.3300e-003	0.3389	0.1170	0.4559	0.1862	0.1077	0.2939	0.0000	230.6564	230.6564	0.0730		232.4808

Sativa Well #5 - Los Angeles-South Coast County, Summer

3.3 Site Prep, Foundations, Piping - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	2.6800e-003	0.0875	0.0187	2.3000e-004	5.0000e-003	3.2000e-004	5.3200e-003	1.3700e-003	3.1000e-004	1.6800e-003		24.7003	24.7003	1.7000e-003		24.7429
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0150	0.0110	0.1447	3.7000e-004	0.0335	2.9000e-004	0.0338	8.8900e-003	2.7000e-004	9.1600e-003		36.3886	36.3886	1.2500e-003		36.4198
Total	0.0177	0.0985	0.1633	6.0000e-004	0.0385	6.1000e-004	0.0391	0.0103	5.8000e-004	0.0108		61.0889	61.0889	2.9500e-003		61.1627

3.4 Installation of Tanks, Pumps, and Equipment - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.3720	4.0747	2.0422	4.0300e-003		0.2103	0.2103		0.1935	0.1935		399.0956	399.0956	0.1263		402.2523
Total	0.3720	4.0747	2.0422	4.0300e-003		0.2103	0.2103		0.1935	0.1935		399.0956	399.0956	0.1263		402.2523

Sativa Well #5 - Los Angeles-South Coast County, Summer

3.4 Installation of Tanks, Pumps, and Equipment - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	4.1600e-003	0.1157	0.0307	2.6000e-004	6.4000e-003	7.4000e-004	7.1400e-003	1.8400e-003	7.1000e-004	2.5500e-003		27.8815	27.8815	1.7900e-003		27.9261
Worker	9.9900e-003	7.3400e-003	0.0964	2.4000e-004	0.0224	1.9000e-004	0.0226	5.9300e-003	1.8000e-004	6.1100e-003		24.2591	24.2591	8.3000e-004		24.2799
Total	0.0142	0.1231	0.1271	5.0000e-004	0.0288	9.3000e-004	0.0297	7.7700e-003	8.9000e-004	8.6600e-003		52.1405	52.1405	2.6200e-003		52.2060

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.3720	4.0747	2.0422	4.0300e-003		0.2103	0.2103		0.1935	0.1935	0.0000	399.0956	399.0956	0.1263		402.2523
Total	0.3720	4.0747	2.0422	4.0300e-003		0.2103	0.2103		0.1935	0.1935	0.0000	399.0956	399.0956	0.1263		402.2523

Sativa Well #5 - Los Angeles-South Coast County, Summer

3.4 Installation of Tanks, Pumps, and Equipment - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	4.1600e-003	0.1157	0.0307	2.6000e-004	6.4000e-003	7.4000e-004	7.1400e-003	1.8400e-003	7.1000e-004	2.5500e-003		27.8815	27.8815	1.7900e-003		27.9261
Worker	9.9900e-003	7.3400e-003	0.0964	2.4000e-004	0.0224	1.9000e-004	0.0226	5.9300e-003	1.8000e-004	6.1100e-003		24.2591	24.2591	8.3000e-004		24.2799
Total	0.0142	0.1231	0.1271	5.0000e-004	0.0288	9.3000e-004	0.0297	7.7700e-003	8.9000e-004	8.6600e-003		52.1405	52.1405	2.6200e-003		52.2060

3.5 Paving - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.0441	0.2761	0.2313	5.3000e-004		0.0108	0.0108		0.0108	0.0108		37.8872	37.8872	3.9300e-003		37.9856
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.0441	0.2761	0.2313	5.3000e-004		0.0108	0.0108		0.0108	0.0108		37.8872	37.8872	3.9300e-003		37.9856

Sativa Well #5 - Los Angeles-South Coast County, Summer

3.5 Paving - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0150	0.0110	0.1447	3.7000e-004	0.0335	2.9000e-004	0.0338	8.8900e-003	2.7000e-004	9.1600e-003		36.3886	36.3886	1.2500e-003		36.4198
Total	0.0150	0.0110	0.1447	3.7000e-004	0.0335	2.9000e-004	0.0338	8.8900e-003	2.7000e-004	9.1600e-003		36.3886	36.3886	1.2500e-003		36.4198

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.0441	0.2761	0.2313	5.3000e-004		0.0108	0.0108		0.0108	0.0108	0.0000	37.8872	37.8872	3.9300e-003		37.9856
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.0441	0.2761	0.2313	5.3000e-004		0.0108	0.0108		0.0108	0.0108	0.0000	37.8872	37.8872	3.9300e-003		37.9856

Sativa Well #5 - Los Angeles-South Coast County, Summer

3.5 Paving - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0150	0.0110	0.1447	3.7000e-004	0.0335	2.9000e-004	0.0338	8.8900e-003	2.7000e-004	9.1600e-003		36.3886	36.3886	1.2500e-003		36.4198
Total	0.0150	0.0110	0.1447	3.7000e-004	0.0335	2.9000e-004	0.0338	8.8900e-003	2.7000e-004	9.1600e-003		36.3886	36.3886	1.2500e-003		36.4198

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Sativa Well #5 - Los Angeles-South Coast County, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	2.1600e-003	0.0106	0.0327	1.2000e-004	9.2300e-003	9.0000e-005	9.3200e-003	2.4700e-003	9.0000e-005	2.5600e-003		11.7202	11.7202	6.0000e-004		11.7351
Unmitigated	2.1600e-003	0.0106	0.0327	1.2000e-004	9.2300e-003	9.0000e-005	9.3200e-003	2.4700e-003	9.0000e-005	2.5600e-003		11.7202	11.7202	6.0000e-004		11.7351

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Light Industry	0.98	0.98	0.98	4,340	4,340
Total	0.98	0.98	0.98	4,340	4,340

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Light Industry	16.60	8.40	6.90	59.00	28.00	13.00	92	5	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Light Industry	0.547192	0.045177	0.202743	0.121510	0.016147	0.006143	0.019743	0.029945	0.002479	0.002270	0.005078	0.000682	0.000891

5.0 Energy Detail

Historical Energy Use: N

Sativa Well #5 - Los Angeles-South Coast County, Summer

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Light Industry	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

Sativa Well #5 - Los Angeles-South Coast County, Summer

5.2 Energy by Land Use - Natural Gas

Mitigated

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Light Industry	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0812	0.0000	3.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		7.9000e-004	7.9000e-004	0.0000		8.5000e-004
Unmitigated	0.0812	0.0000	3.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		7.9000e-004	7.9000e-004	0.0000		8.5000e-004

Sativa Well #5 - Los Angeles-South Coast County, Summer

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	9.2300e-003					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0719					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	3.0000e-005	0.0000	3.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		7.9000e-004	7.9000e-004	0.0000		8.5000e-004
Total	0.0812	0.0000	3.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		7.9000e-004	7.9000e-004	0.0000		8.5000e-004

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	9.2300e-003					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0719					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	3.0000e-005	0.0000	3.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		7.9000e-004	7.9000e-004	0.0000		8.5000e-004
Total	0.0812	0.0000	3.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		7.9000e-004	7.9000e-004	0.0000		8.5000e-004

7.0 Water Detail

Sativa Well #5 - Los Angeles-South Coast County, Summer

7.1 Mitigation Measures Water**8.0 Waste Detail****8.1 Mitigation Measures Waste****9.0 Operational Offroad**

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Stationary Equipment**Fire Pumps and Emergency Generators**

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

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

Equipment Type	Number
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11.0 Vegetation

Sativa Well #5 - Los Angeles-South Coast County, Winter

Sativa Well #5
Los Angeles-South Coast County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Light Industry	3.63	1000sqft	0.08	3,633.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	33
Climate Zone	11			Operational Year	2021
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	702.44	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

Sativa Well #5 - Los Angeles-South Coast County, Winter

Project Characteristics -

Land Use - Based on GE approximation of site.

Construction Phase - Based on applicant construction schedule

Off-road Equipment - Based on PD.

Off-road Equipment - Based on PD.

Off-road Equipment - Based on PD

Off-road Equipment - Based on PD.

Off-road Equipment - Based on PD.

Trips and VMT - Based on 16 CY trucks.

Demolition -

Grading -

Architectural Coating -

Vehicle Trips - Based on applicant info.

Energy Use - Energy GHG emissions calculated separately.

Water And Wastewater - Project will not increase amount of GW pumped

Solid Waste - No waste generated by project.

Construction Off-road Equipment Mitigation -

Mobile Land Use Mitigation -

Sativa Well #5 - Los Angeles-South Coast County, Winter

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	100.00	30.00
tblConstructionPhase	NumDays	10.00	14.00
tblConstructionPhase	NumDays	2.00	42.00
tblEnergyUse	LightingElect	3.10	0.00
tblEnergyUse	NT24E	5.75	0.00
tblEnergyUse	NT24NG	4.45	0.00
tblEnergyUse	T24E	2.25	0.00
tblEnergyUse	T24NG	13.65	0.00
tblGrading	MaterialExported	0.00	81.00
tblGrading	MaterialImported	0.00	15.00
tblLandUse	LandUseSquareFeet	3,630.00	3,633.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	PhaseName		Demolition
tblSolidWaste	SolidWasteGenerationRate	4.50	0.00
tblTripsAndVMT	HaulingTripNumber	0.00	12.00
tblTripsAndVMT	WorkerTripNumber	13.00	3.00
tblTripsAndVMT	WorkerTripNumber	8.00	3.00
tblTripsAndVMT	WorkerTripNumber	10.00	3.00
tblVehicleTrips	ST_TR	1.32	0.27
tblVehicleTrips	SU_TR	0.68	0.27
tblVehicleTrips	WD_TR	6.97	0.27
tblWater	IndoorWaterUseRate	839,437.50	0.00

Sativa Well #5 - Los Angeles-South Coast County, Winter

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2019	0.3874	4.1987	2.1645	4.5100e-003	0.7916	0.2113	0.9092	0.4241	0.1944	0.5323	0.0000	449.0659	449.0659	0.1290	0.0000	452.2900
Maximum	0.3874	4.1987	2.1645	4.5100e-003	0.7916	0.2113	0.9092	0.4241	0.1944	0.5323	0.0000	449.0659	449.0659	0.1290	0.0000	452.2900

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2019	0.3874	4.1987	2.1645	4.5100e-003	0.3774	0.2113	0.4950	0.1965	0.1944	0.3047	0.0000	449.0659	449.0659	0.1290	0.0000	452.2899
Maximum	0.3874	4.1987	2.1645	4.5100e-003	0.3774	0.2113	0.4950	0.1965	0.1944	0.3047	0.0000	449.0659	449.0659	0.1290	0.0000	452.2899

Sativa Well #5 - Los Angeles-South Coast County, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	52.32	0.00	45.55	53.67	0.00	42.76	0.00	0.00	0.00	0.00	0.00	0.00

Sativa Well #5 - Los Angeles-South Coast County, Winter

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.0812	0.0000	3.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		7.9000e-004	7.9000e-004	0.0000		8.5000e-004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	2.1000e-003	0.0109	0.0308	1.1000e-004	9.2300e-003	9.0000e-005	9.3200e-003	2.4700e-003	9.0000e-005	2.5600e-003		11.1592	11.1592	5.9000e-004		11.1740
Total	0.0833	0.0109	0.0312	1.1000e-004	9.2300e-003	9.0000e-005	9.3200e-003	2.4700e-003	9.0000e-005	2.5600e-003		11.1600	11.1600	5.9000e-004	0.0000	11.1748

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.0812	0.0000	3.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		7.9000e-004	7.9000e-004	0.0000		8.5000e-004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	2.1000e-003	0.0109	0.0308	1.1000e-004	9.2300e-003	9.0000e-005	9.3200e-003	2.4700e-003	9.0000e-005	2.5600e-003		11.1592	11.1592	5.9000e-004		11.1740
Total	0.0833	0.0109	0.0312	1.1000e-004	9.2300e-003	9.0000e-005	9.3200e-003	2.4700e-003	9.0000e-005	2.5600e-003		11.1600	11.1600	5.9000e-004	0.0000	11.1748

Sativa Well #5 - Los Angeles-South Coast County, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	4/1/2019	4/18/2019	5	14	
2	Site Prep, Foundations, Piping	Grading	4/19/2019	6/17/2019	5	42	
3	Installation of Tanks, Pumps, and Equipment	Building Construction	6/18/2019	7/29/2019	5	30	
4	Paving	Paving	7/30/2019	8/5/2019	5	5	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Cranes	1	2.00	231	0.29
Site Prep, Foundations, Piping	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Installation of Tanks, Pumps, and Equipment	Cranes	1	4.00	231	0.29
Installation of Tanks, Pumps, and Equipment	Forklifts	1	6.00	89	0.20
Paving	Cement and Mortar Mixers	1	6.00	9	0.56

Sativa Well #5 - Los Angeles-South Coast County, Winter

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	5	3.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Prep, Foundations, Piping	3	3.00	0.00	12.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Installation of Tanks, Pumps, and Equipment	4	2.00	1.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	4	3.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Demolition - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.1260	1.5018	0.5733	1.4400e-003		0.0637	0.0637		0.0586	0.0586		142.8027	142.8027	0.0452		143.9322
Total	0.1260	1.5018	0.5733	1.4400e-003		0.0637	0.0637		0.0586	0.0586		142.8027	142.8027	0.0452		143.9322

Sativa Well #5 - Los Angeles-South Coast County, Winter

3.2 Demolition - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0166	0.0122	0.1327	3.4000e-004	0.0335	2.9000e-004	0.0338	8.8900e-003	2.7000e-004	9.1600e-003		34.2639	34.2639	1.1800e-003		34.2934
Total	0.0166	0.0122	0.1327	3.4000e-004	0.0335	2.9000e-004	0.0338	8.8900e-003	2.7000e-004	9.1600e-003		34.2639	34.2639	1.1800e-003		34.2934

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.1260	1.5018	0.5733	1.4400e-003		0.0637	0.0637		0.0586	0.0586	0.0000	142.8027	142.8027	0.0452		143.9322
Total	0.1260	1.5018	0.5733	1.4400e-003		0.0637	0.0637		0.0586	0.0586	0.0000	142.8027	142.8027	0.0452		143.9322

Sativa Well #5 - Los Angeles-South Coast County, Winter

3.2 Demolition - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0166	0.0122	0.1327	3.4000e-004	0.0335	2.9000e-004	0.0338	8.8900e-003	2.7000e-004	9.1600e-003		34.2639	34.2639	1.1800e-003		34.2934
Total	0.0166	0.0122	0.1327	3.4000e-004	0.0335	2.9000e-004	0.0338	8.8900e-003	2.7000e-004	9.1600e-003		34.2639	34.2639	1.1800e-003		34.2934

3.3 Site Prep, Foundations, Piping - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.7530	0.0000	0.7530	0.4138	0.0000	0.4138			0.0000			0.0000
Off-Road	0.1746	1.7530	1.7270	2.3300e-003		0.1170	0.1170		0.1077	0.1077		230.6564	230.6564	0.0730		232.4808
Total	0.1746	1.7530	1.7270	2.3300e-003	0.7530	0.1170	0.8701	0.4138	0.1077	0.5215		230.6564	230.6564	0.0730		232.4808

Sativa Well #5 - Los Angeles-South Coast County, Winter

3.3 Site Prep, Foundations, Piping - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	2.7500e-003	0.0887	0.0199	2.2000e-004	5.0000e-003	3.3000e-004	5.3200e-003	1.3700e-003	3.1000e-004	1.6800e-003		24.2814	24.2814	1.7700e-003		24.3256
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0166	0.0122	0.1327	3.4000e-004	0.0335	2.9000e-004	0.0338	8.8900e-003	2.7000e-004	9.1600e-003		34.2639	34.2639	1.1800e-003		34.2934
Total	0.0194	0.1009	0.1527	5.6000e-004	0.0385	6.2000e-004	0.0391	0.0103	5.8000e-004	0.0108		58.5453	58.5453	2.9500e-003		58.6190

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.3389	0.0000	0.3389	0.1862	0.0000	0.1862			0.0000			0.0000
Off-Road	0.1746	1.7530	1.7270	2.3300e-003		0.1170	0.1170		0.1077	0.1077	0.0000	230.6564	230.6564	0.0730		232.4808
Total	0.1746	1.7530	1.7270	2.3300e-003	0.3389	0.1170	0.4559	0.1862	0.1077	0.2939	0.0000	230.6564	230.6564	0.0730		232.4808

Sativa Well #5 - Los Angeles-South Coast County, Winter

3.3 Site Prep, Foundations, Piping - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	2.7500e-003	0.0887	0.0199	2.2000e-004	5.0000e-003	3.3000e-004	5.3200e-003	1.3700e-003	3.1000e-004	1.6800e-003		24.2814	24.2814	1.7700e-003		24.3256
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0166	0.0122	0.1327	3.4000e-004	0.0335	2.9000e-004	0.0338	8.8900e-003	2.7000e-004	9.1600e-003		34.2639	34.2639	1.1800e-003		34.2934
Total	0.0194	0.1009	0.1527	5.6000e-004	0.0385	6.2000e-004	0.0391	0.0103	5.8000e-004	0.0108		58.5453	58.5453	2.9500e-003		58.6190

3.4 Installation of Tanks, Pumps, and Equipment - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.3720	4.0747	2.0422	4.0300e-003		0.2103	0.2103		0.1935	0.1935		399.0956	399.0956	0.1263		402.2523
Total	0.3720	4.0747	2.0422	4.0300e-003		0.2103	0.2103		0.1935	0.1935		399.0956	399.0956	0.1263		402.2523

Sativa Well #5 - Los Angeles-South Coast County, Winter

3.4 Installation of Tanks, Pumps, and Equipment - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	4.3300e-003	0.1159	0.0339	2.5000e-004	6.4000e-003	7.5000e-004	7.1500e-003	1.8400e-003	7.2000e-004	2.5600e-003		27.1277	27.1277	1.9100e-003		27.1754
Worker	0.0111	8.1300e-003	0.0885	2.3000e-004	0.0224	1.9000e-004	0.0226	5.9300e-003	1.8000e-004	6.1100e-003		22.8426	22.8426	7.9000e-004		22.8623
Total	0.0154	0.1240	0.1224	4.8000e-004	0.0288	9.4000e-004	0.0297	7.7700e-003	9.0000e-004	8.6700e-003		49.9703	49.9703	2.7000e-003		50.0376

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.3720	4.0747	2.0422	4.0300e-003		0.2103	0.2103		0.1935	0.1935	0.0000	399.0956	399.0956	0.1263		402.2523
Total	0.3720	4.0747	2.0422	4.0300e-003		0.2103	0.2103		0.1935	0.1935	0.0000	399.0956	399.0956	0.1263		402.2523

Sativa Well #5 - Los Angeles-South Coast County, Winter

3.4 Installation of Tanks, Pumps, and Equipment - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	4.3300e-003	0.1159	0.0339	2.5000e-004	6.4000e-003	7.5000e-004	7.1500e-003	1.8400e-003	7.2000e-004	2.5600e-003		27.1277	27.1277	1.9100e-003		27.1754
Worker	0.0111	8.1300e-003	0.0885	2.3000e-004	0.0224	1.9000e-004	0.0226	5.9300e-003	1.8000e-004	6.1100e-003		22.8426	22.8426	7.9000e-004		22.8623
Total	0.0154	0.1240	0.1224	4.8000e-004	0.0288	9.4000e-004	0.0297	7.7700e-003	9.0000e-004	8.6700e-003		49.9703	49.9703	2.7000e-003		50.0376

3.5 Paving - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.0441	0.2761	0.2313	5.3000e-004		0.0108	0.0108		0.0108	0.0108		37.8872	37.8872	3.9300e-003		37.9856
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.0441	0.2761	0.2313	5.3000e-004		0.0108	0.0108		0.0108	0.0108		37.8872	37.8872	3.9300e-003		37.9856

Sativa Well #5 - Los Angeles-South Coast County, Winter

3.5 Paving - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0166	0.0122	0.1327	3.4000e-004	0.0335	2.9000e-004	0.0338	8.8900e-003	2.7000e-004	9.1600e-003		34.2639	34.2639	1.1800e-003		34.2934
Total	0.0166	0.0122	0.1327	3.4000e-004	0.0335	2.9000e-004	0.0338	8.8900e-003	2.7000e-004	9.1600e-003		34.2639	34.2639	1.1800e-003		34.2934

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.0441	0.2761	0.2313	5.3000e-004		0.0108	0.0108		0.0108	0.0108	0.0000	37.8872	37.8872	3.9300e-003		37.9856
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.0441	0.2761	0.2313	5.3000e-004		0.0108	0.0108		0.0108	0.0108	0.0000	37.8872	37.8872	3.9300e-003		37.9856

Sativa Well #5 - Los Angeles-South Coast County, Winter

3.5 Paving - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0166	0.0122	0.1327	3.4000e-004	0.0335	2.9000e-004	0.0338	8.8900e-003	2.7000e-004	9.1600e-003		34.2639	34.2639	1.1800e-003		34.2934
Total	0.0166	0.0122	0.1327	3.4000e-004	0.0335	2.9000e-004	0.0338	8.8900e-003	2.7000e-004	9.1600e-003		34.2639	34.2639	1.1800e-003		34.2934

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Sativa Well #5 - Los Angeles-South Coast County, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	2.1000e-003	0.0109	0.0308	1.1000e-004	9.2300e-003	9.0000e-005	9.3200e-003	2.4700e-003	9.0000e-005	2.5600e-003		11.1592	11.1592	5.9000e-004		11.1740
Unmitigated	2.1000e-003	0.0109	0.0308	1.1000e-004	9.2300e-003	9.0000e-005	9.3200e-003	2.4700e-003	9.0000e-005	2.5600e-003		11.1592	11.1592	5.9000e-004		11.1740

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Light Industry	0.98	0.98	0.98	4,340	4,340
Total	0.98	0.98	0.98	4,340	4,340

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Light Industry	16.60	8.40	6.90	59.00	28.00	13.00	92	5	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Light Industry	0.547192	0.045177	0.202743	0.121510	0.016147	0.006143	0.019743	0.029945	0.002479	0.002270	0.005078	0.000682	0.000891

5.0 Energy Detail

Historical Energy Use: N

Sativa Well #5 - Los Angeles-South Coast County, Winter

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Light Industry	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

Sativa Well #5 - Los Angeles-South Coast County, Winter

5.2 Energy by Land Use - Natural Gas

Mitigated

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Light Industry	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0812	0.0000	3.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		7.9000e-004	7.9000e-004	0.0000		8.5000e-004
Unmitigated	0.0812	0.0000	3.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		7.9000e-004	7.9000e-004	0.0000		8.5000e-004

Sativa Well #5 - Los Angeles-South Coast County, Winter

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	9.2300e-003					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0719					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	3.0000e-005	0.0000	3.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		7.9000e-004	7.9000e-004	0.0000		8.5000e-004
Total	0.0812	0.0000	3.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		7.9000e-004	7.9000e-004	0.0000		8.5000e-004

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	9.2300e-003					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0719					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	3.0000e-005	0.0000	3.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		7.9000e-004	7.9000e-004	0.0000		8.5000e-004
Total	0.0812	0.0000	3.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		7.9000e-004	7.9000e-004	0.0000		8.5000e-004

7.0 Water Detail

Sativa Well #5 - Los Angeles-South Coast County, Winter

7.1 Mitigation Measures Water**8.0 Waste Detail**

8.1 Mitigation Measures Waste**9.0 Operational Offroad**

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number
----------------	--------

11.0 Vegetation

Appendix B

Biological Resources Assessment



Sativa Well No. 5 Water System Construction Project

Biological Resources Assessment

prepared for

KEH & Associates

On behalf of the Sativa Los Angeles County Water District and the
Water Replenishment District of Southern California

2901 N. Ventura Road, Suite 180

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October 2018

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1 Introduction and Setting

This report documents the findings of a biological resources assessment (BRA) conducted by Rincon Consultants, Inc. (Rincon) for a new wellhead treatment system at Sativa Los Angeles County Water District's Well No. 5 in unincorporated Los Angeles County near the City of Compton, California. The purpose of this report is to document existing conditions of the project site and to evaluate the potential for impacts to special-status biological resources for compliance with the California Environmental Quality Act (CEQA) review process.

Project Location and Description

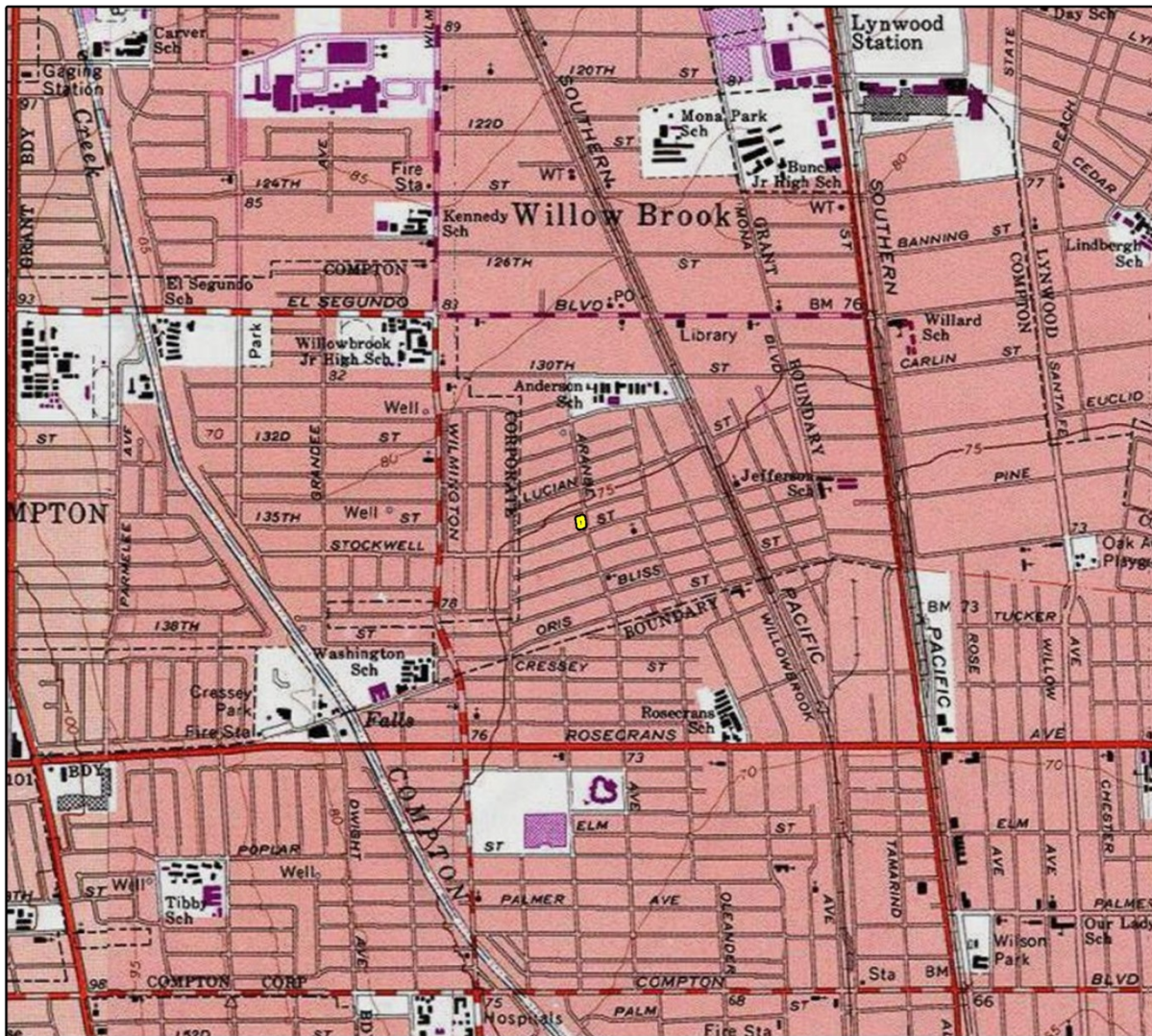
The project proposes the construction of a wellhead treatment system for the Sativa Los Angeles County Water District's Well No. 5. This well is currently producing water with levels of manganese that exceed the U.S. Environmental Protection Agency's maximum concentration levels mandated under the National Drinking Water Standards. Project development consists of removal of the existing hydropneumatics surge tank, site preparation, laying of foundations, installation of pipelines, tanks, pumps, and equipment, and paving of disturbed areas. Excavation depths for the current project are not expected to exceed 10 feet below the ground surface. The new treatment system would be located at the Sativa Well No. 5 in a previously graded area.

Area of Potential Effects and Study Area

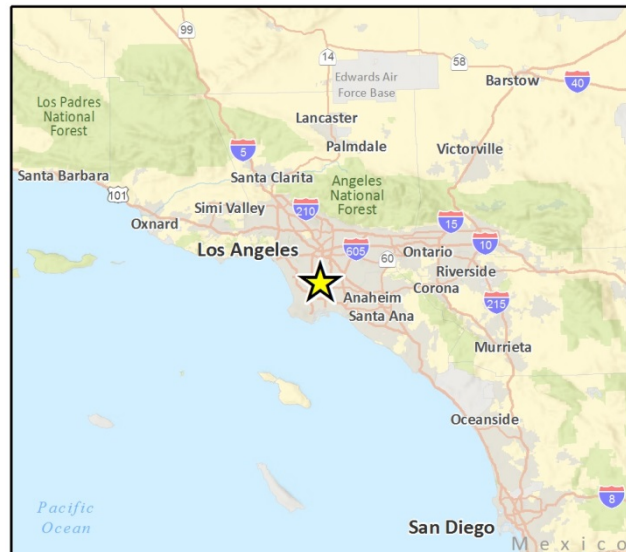
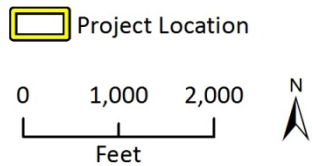
The area of potential effect (APE) generally depicts all areas that are expected to be affected by the proposed project, including staging and construction areas. For the purposes of the current project, the APE is limited to the project disturbance footprint which includes an equipment staging zone, material laydown yard, and parking areas, all contained within the project APE. The total area of the APE footprint is approximately 408 square meters (4,397 square feet). The APE must additionally be considered as a three-dimensional space, and includes any ground disturbance associated with the project. The vertical depth of the APE is not expected to exceed 10 feet below ground surface, consistent with the maximum depth necessary to install the subsurface utilities.

The APE is located within Township 3 south, Range 13 west, and Section 15 of the United States Geological Survey (USGS) *South Gate, CA* 7.5-minute quadrangle (Figure 1). It is located in a residential neighborhood at the street address of 2083 East Stockwell Street (APN), at the intersection of East Stockwell Street and South Aranbe Avenue in the community of Willowbrook in unincorporated Los Angeles County (Figure 2). The coordinates of the APE are: 33°54'35.57" N, 118°14'1.76" W. The APE is bordered by residences on all sides. The APE is currently developed within the Sativa Los Angeles County Water District. The study area for this report consists of the APE that includes equipment area, material laydown yard, and parking areas plus a 100-foot buffer surrounding the APE.

Figure 1 Topographic and Regional Vicinity Map



Imagery provided by National Geographic Society, Esri and its licensors © 2018. South Gate Quadrangle. T03S R13W S15. The topographic representation depicted in this map may not portray all of the features currently found in the vicinity today and/or features depicted in this map may have changed since the original topographic map was assembled.



011g 1 Proj Loc Map

Figure 2 APE and Study Area



Imagery provided by Los Angeles County and its licensors © 2011.
 Additional data provided by Water Replenishment District of Southern California, 2018.

Fig. 2.AM

Personnel

Rincon Senior Ecologist and Principal, Steven J. Hongola, managed this biological resources study. Senior Biologist Brenna Vredeveld conducted the pedestrian field survey. Associate Biologist Amy Leigh Trost completed the literature review and is the primary author of this report (Appendix A). Geographic Information Systems (GIS) Analyst Jon Montgomery prepared the figures found in this report. Program Manager David Daitch, reviewed this report for quality control.

Regulatory Overview

Regulated or sensitive resources studied and analyzed herein include special-status plant and wildlife species, nesting birds and raptors, sensitive plant communities, jurisdictional waters and wetlands, wildlife movement, and locally protected resources, such as protected trees.

The Water Replenishment District of Southern California is the lead agency for this project under CEQA. This project may also involve the use of funds provided by the federal government and administered by the State Revolving Fund Loan Program, and would need to meet CEQA-Plus regulatory standards. The State Water Resources Control Board would have the responsibility for CEQA-Plus review which applies federal standards to the CEQA process. For the purpose of this report, potential impacts to biological resources were analyzed based on the following statutes:

- Federal Endangered Species Act (ESA)
- California Endangered Species Act (CESA)
- Federal Clean Water Act
- California Fish and Game Code (CFGC)
- Migratory Bird Treaty Act (MBTA)
- The Bald and Golden Eagle Protection Act
- Porter-Cologne Water Quality Control Act

A more detailed account of the current regulatory framework that the proposed project is subject to is presented as Appendix B.

Methodology

This evaluation consisted of a review of relevant background literature followed by a field survey and preparation of this report. The analysis included an investigation to determine the presence/absence of sensitive vegetation, jurisdictional waters and streams, and habitat that could potentially support special-status species. Rincon conducted a search and review of the California Department of Fish and Wildlife (CDFW) California Natural Diversity Data Base (CNDDB) (CDFW 2018a) and Biogeographic Information and Observation System (CDFW 2018b) as reflected in the special-status species table in Appendix C, as well as the United States Fish and Wildlife Service (USFWS) Critical Habitat Portal (USFWS 2018a), to determine if there were any recorded observations of special-status species, habitats, or other special-status biological resources in the vicinity of the project site.

The literature review included information and data from the following additional sources:

- Los Angeles County Municipal Code
- Los Angeles County General Plan

- Project construction footprint provided via email by Charlene King of WRD on August 22, 2018
- National Wetlands Inventory Wetlands Mapper (USFWS 2018b)
- Essential Connectivity Area, California Essential Habitat Connectivity Project: A Strategy for Conserving a Connected California (California Department of Transportation and CDFW 2010).

Site Survey

Brenna Vredeveld, Senior Biologist, conducted a reconnaissance-level field survey on August 15, 2018, from 1:30 to 2:15 p.m. All plant species observed within the survey area were documented. The purpose of the survey was to document existing biological conditions within the study area, including plant and wildlife species, vegetation communities, jurisdictional waters and wetlands, and the potential for presence of special-status species and/or habitats. The biologist conducted the survey on foot. Where portions of the study area were inaccessible (e.g., private property), the biologist visually inspected those areas with binoculars (10 x 40). Weather conditions during the survey included an average temperature of 82 degrees Fahrenheit, with winds between 1 and 3 miles per hour, with clear skies. Site photographs are presented in Appendix D.

Existing Conditions

The project site was developed in 1993 as part of the Sativa Los Angeles County Water District. The site contains a parking lot, a tank, and two buildings. There are no waters or wetlands on site and vegetation present is ornamental or generally non-native species as described in further detail below.

Topography and Soils

The study area occurs 66 feet above mean sea level (Google Earth 2018). The topography of the study area is flat. According to the United States Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) Web Soil Survey, the study area has the soil map unit urban land – Biscailuz-Hueneme, drained complex, 0 to 2 percent slopes (USDA NRCS 2018).

Land Cover and Vegetation

The study area is comprised of urban/developed land which is defined to be areas that have been constructed upon or otherwise physically altered to an extent that native vegetation is no longer supported. Urban/developed lands are characterized by permanent or semi-permanent structures, pavement or hardscape, and landscaped areas that often require irrigation. Areas that have been physically disturbed (by previous human activity) and are no longer recognizable as a native or naturalized vegetation association, but continue to retain a soil substrate, may also be considered urban/developed lands. Ornamental trees are present on properties neighboring the project site within the study area. Plant species observed within the APE during the field reconnaissance survey were ornamental, and included low ground cover species and succulents.

General Wildlife

The APE and surrounding area provide habitat for wildlife species that commonly occur in urban areas of the city. Giant swallowtail butterfly (*Papilio cresphontes*) was the only wildlife species observed at the site reconnaissance survey on August 15, 2018. Other common wildlife species that could occur include western fence lizard (*Sceloporus occidentalis*), mourning dove (*Zenaida*

macroura), northern mockingbird (*Mimus polyglottos*), and Audubon cottontail (*Sylvilagus audubonii*).

Special-Status Biological Resources

This section evaluates the potential for the project site to support sensitive biological resources. No sensitive biological resources were observed during the site reconnaissance survey.

Special-Status Species

Local, state, and federal agencies regulate special-status species and may require an assessment of their presence or potential presence to be conducted on site prior to the approval of any proposed development on a property. Assessments for the potential occurrence of special-status species are based upon known ranges, habitat preferences for the species, species occurrence records from the CNDDDB species occurrence records from other sites in the vicinity of the study area, and previous reports for the project site. The potential for each special-status species to occur in the study area was evaluated according to the following criteria:

- **No Potential.** Habitat on and adjacent to the site is clearly unsuitable for the species requirements (foraging, breeding, cover, substrate, elevation, hydrology, plant community, site history, disturbance regime).
- **Low Potential.** Few of the habitat components meeting the species requirements are present, and/or the majority of habitat on and adjacent to the site is unsuitable or of very poor quality. The species is not likely to be found on the site.
- **Moderate Potential.** Some of the habitat components meeting the species requirements are present, and/or only some of the habitat on or adjacent to the site is unsuitable. The species has a moderate probability of being found on the site.
- **High Potential.** All of the habitat components meeting the species requirements are present and/or most of the habitat on or adjacent to the site is highly suitable. The species has a high probability of being found on the site.
- **Present.** Species is observed on the site or has been recorded (e.g., CNDDDB, other reports) on the site recently (within the last 5 years).

For the purpose of this report, special-status species are those plants and animals listed, proposed for listing, or candidates for listing as Threatened or Endangered by the USFWS under the ESA; those listed or candidates for listing as Rare, Threatened, Endangered under CESA or the Native Plant Protection Act; those identified as Fully Protected under Sections 3511, 4700, 5050, and 5515 of the CFGC; Species of Special Concern (SSC) identified by the CDFW; and plants occurring on Ranks 1 and 2 of the California Native Plant Society's California Rare Plant Rank system per the following definitions:

- **List 1A** = Plants presumed extinct in California.
- **List 1B.1** = Rare or endangered in California and elsewhere; seriously endangered in California (over 80% of occurrences threatened/high degree and immediacy of threat).
- **List 1B.2** = Rare or endangered in California and elsewhere; fairly endangered in California (20-80% occurrences threatened).

- **List 1B.3** = Rare or endangered in California and elsewhere, not very endangered in California (<20% of occurrences threatened or no current threats known).
- **List 2** = Rare, threatened or endangered in California, but more common elsewhere.

Based on a query of the CNDDDB there are seven special-status plant species and nine special-status animal species documented within a 5-mile radius of the project site. All 16 species were evaluated for potential to occur within the survey area and results of this evaluation can be found in Appendix C. No special-status plant species were detected during the field reconnaissance survey on August 15, 2018. Additionally, no special-status plant species are expected to occur given the high degree of urbanization within the study area and the specific biotypes or soil types each species requires.

Special-status wildlife species typically have very specific habitat requirements which may include, but are not limited to, vegetation communities, elevation levels and topography, and availability of primary constituent elements (i.e., space for individual and population growth, breeding, foraging, and shelter).

No special-status wildlife species were detected during the field reconnaissance survey on August 15, 2018. Additionally, no special-status wildlife species are expected to occur given the high degree of urbanization within the study area and the specific habitat types each species requires.

Given the high degree of urbanization within the project site and lack of suitable habitat for each species, no other special-status wildlife species are expected to occur. Additionally, there is no critical habitat designated by the USFWS within the study area.

Nesting Birds

Under the provisions of the Migratory Bird Treaty Act (MBTA), it is unlawful “by any means or manner to pursue, hunt, take, capture (or) kill” any migratory birds except as permitted by regulations issued by the USFWS. The term “take” is defined by the U.S. Fish and Wildlife Service (USFWS) regulation to mean to “pursue, hunt, shoot, wound, kill, trap, capture or collect” any migratory bird or any part, nest, or egg of any migratory bird covered by the conventions, or to attempt those activities. In addition, pursuant to Sections 3503, 3503.5, and 3511 of the California Fish and Game Code (CFGFC), it is unlawful to take, possess, or destroy any birds, nests, or eggs. Fully protected birds (Section 3511) may not be taken or possessed except under specific permit. Section 3503.5 of the CFGFC protects all birds-of-prey and their eggs and nests against take, possession, or destruction of nests or eggs.

Sensitive Plant Communities

Plant communities are considered sensitive biological resources if they have limited distributions, have high wildlife value, include sensitive species, or are particularly susceptible to disturbance. The CDFW ranks sensitive communities as "threatened" or "very threatened" and keeps records of their occurrences in CNDDDB. Similar to special-status plant and wildlife species, vegetation alliances are ranked 1 through 5 based on NatureServe's (2012) methodology, with those alliances ranked globally (G) or statewide (S) as 1 through 3 considered sensitive.

The CNDDDB has no records of sensitive plant communities or habitat types that have been reported within a 5-mile radius. Additionally, no sensitive plant communities or habitat types were identified at the site reconnaissance survey on August 15, 2018. Therefore, no further analysis of sensitive plant communities or habitats is included within this report.

Jurisdictional Waters and Wetlands

The APE does not contain any federally protected waters or wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.); riparian habitat or streambed as defined by Section 1600 et seq. of the CFGC; or “waters of the State,” as defined by the Porter-Cologne Water Quality Control Act. Compton Creek is the nearest mapped jurisdictional water and is located approximately 0.75 miles west of the study area. Further, the APE is not located within the watershed of a wild and scenic river. Therefore, no further analysis of jurisdictional waters or wetlands is included within this report.

Wildlife Movement

Wildlife movement corridors, or habitat linkages, are generally defined as connections between habitat patches that allow for physical and genetic exchange between otherwise isolated animal populations. Such linkages may serve a local purpose, such as providing a linkage between foraging and denning areas, or they may be regional in nature. Some habitat linkages may serve as migration corridors, wherein animals periodically move away from an area and then subsequently return. Others may be important as dispersal corridors for young animals. A group of habitat linkages in an area can form a wildlife corridor network.

The APE is located within developed urban area and surrounded by urbanized uses in each direction including roads, commercial uses and residential uses. Additionally, the project site is fenced on all four sides providing barriers to wildlife movement. Given the urban nature of the regional vicinity, it is unlikely that wildlife utilize the immediate area for regional movement. Furthermore, the CDFW does not include any mapped California Essential Habitat Connectivity areas within the study area. Therefore, no further analysis of wildlife movement is included within this report.

Resources Protected by Local Policies and Ordinances

The Los Angeles County Municipal Code Chapter 16.76 limits trimming, removal, or injury to any trees within the public right of way. No trees are located on the project site or proposed for removal as part of the project. Therefore, no further analysis of resources protected by local policies and ordinances is provided in this report.

Conservation Plans and Other Regulated Areas

The APE is not subject to any Habitat Conservation Plans, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan. Further, the APE does not occur within the Coastal Zone and is therefore not regulated by the Coastal Zone Management Act. Therefore, conservation plans are not addressed further within this analysis.

2 Impact Analysis and Recommended Actions

This section discusses the potential impacts and effects to biological resources that may occur from implementation of the proposed project, and recommends mitigation measures that would reduce those impacts where appropriate.

Special-Status Species

Special-status plant or wildlife species were not observed within the study area and no special-status plant or wildlife species are expected to occur in the study area based on habitat requirements. Therefore, the project is not expected to affect any special-status plant or wildlife species.

The study area contains habitat, such as on-site buildings and off-site trees that can support nesting birds, including raptors protected under the MBTA and CFGC. The timing for the proposed construction of the project is unknown at this time; however, if construction is scheduled during the breeding season (February 1 through August 31) adverse effects to nesting birds could occur if nests are destroyed or if nests are abandoned as a result of construction activity or noise. These adverse effects may be considered significant under CEQA.

If construction must occur within the bird breeding season (February 1 through August 31), then no more than one week prior to initiation of ground disturbance and/or vegetation removal, a nesting bird and raptor pre-construction survey shall be conducted by a qualified biologist within the disturbance footprint plus a 100-foot buffer, where practicable.

Pre-construction nesting bird and raptor surveys shall be conducted during the time of day when birds are active and should be of sufficient duration to reliably conclude presence/absence of nesting birds and raptors onsite and within the designated vicinity. A report of the nesting bird and raptor survey results, if applicable, shall be submitted to the lead agency for review and approval prior to ground and/or vegetation disturbance activities.

If nests are found, their locations shall be flagged. An appropriate avoidance-buffer ranging in size from 25 to 50 feet for song birds, and up to 100 feet for raptors depending upon the species and the proposed work activity, shall be determined and demarcated by a qualified biologist with suitable flagging. Active nests shall be monitored at a minimum of once per week until it has been determined that the nest is no longer being used by either the young or adults. No ground disturbance shall occur within this buffer until the qualified biologist confirms that the breeding/nesting is completed and all the young have fledged. If project activities must occur within the buffer, they shall be conducted at the discretion of the qualified biologist. If no nesting birds are observed during pre-construction surveys, no further actions would be necessary. If a bird initiates a nest while construction activities, such as ground disturbance, or demolition and construction, are ongoing it is unlikely to be significantly disturbed by those same activities.

Implementation of this measure would reduce the potential impact to nesting birds and raptors to a less than significant level.

Conclusions

If construction must occur within the bird breeding season (February 1 through August 31), a nesting bird and raptor pre-construction survey shall be conducted by a qualified biologist. Implementation of this measure would reduce the potential impact to nesting birds and raptors to a less than significant level. The project would not impact any other special-status species, sensitive communities/habitats, jurisdictional waters, wildlife movement, or conflict with adopted plans or ordinances including habitat conservation plans.

3 References

- California Department of Fish and Wildlife (CDFW). 2010. California Essential Habitat Connectivity Project: A Strategy for Conserving a Connected California.
- . 2018a. CDFW California Natural Diversity Data Base (CNDDDB), Rarefind V. 5.
- . 2018b. Biogeographic Information and Observation System.
- California Department of Transportation and CDFW. 2010. *California Essential Habitat Connectivity Project: A Strategy for Conserving a Connected California*.
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- United States Department of Agriculture, Natural Resources Conservation Service. Web Soil Survey. Retrieved from <http://websoilsurvey.nrcs.usda.gov/app> (August 7, 2018).

Appendix A

Resumes



Steven J. Hongola

PRINCIPAL AND SENIOR ECOLOGIST

Steven J. Hongola serves as a Principal and Senior Ecologist with more than 15 years of professional experience in the environmental field. His areas of expertise include biological resources assessments, focused surveys for sensitive species, jurisdictional waters and wetlands delineations, habitat restoration and management, conservation planning, regulatory permitting, and biological compliance monitoring. He specializes in avian field studies and holds a federal 10(a)(1)(A) permit to conduct protocol surveys for coastal California gnatcatcher. Mr. Hongola has authored numerous technical reports in support of CEQA/NEPA and regulatory permit compliance. As a program manager within the biological resources group, Mr. Hongola also co-manages Rincon's team of biologists and oversees the technical aspects of the program, among other responsibilities. Mr. Hongola has direct experience managing on-call contracts with multiple concurrent assignments and large numbers of field staff. He understands the importance of fulfilling assignments when requested and working with staff to resolve issues as they arise.

EDUCATION

B.S., Evolution and Ecology
(Minor - History), University of
California, Davis

PERMITS/TRAINING

Federal 10(a)(1)(A) Permit -
Coastal California Gnatcatcher,
TE 091463-2

SCCWRP, California Rapid
Assessment Method: Riverine
Module

Wetland Training Institute:
Difficult Situations, Arid West
Supplement, and Wetland
Delineation Manual

California Tiger Salamander
Larval Survey Techniques
Southwestern Willow
Flycatcher Workshop and
Training

Desert Tortoise Council
Surveying, Monitoring, and
Handling Techniques Workshop

CNPS Vegetation and Habitat
Rapid Assessment Method
Workshop

EXPERIENCE

Rincon Consultants, Inc. (2008
– present)

Michael Brandman Associates
(2003 – 2008)

California Waterfowl
Association (2002)

University of California, Davis
(2002)

PROJECT EXPERIENCE

UTILITIES AND INFRASTRUCTURE PROJECTS

- Palos Verdes Reservoir Upgrades Project Compliance Monitoring, Metropolitan Water District, Los Angeles County
- Santa Ana River Bridge Seismic Retrofit and Routine Maintenance Project Compliance Monitoring, Metropolitan Water District, Riverside County
- F.E. Weymouth Treatment Plant Environmental Compliance Monitoring, Metropolitan Water District, City of La Verne, Los Angeles County
- Sepulveda Temporary Pump Station Project Nesting Bird Surveys, Metropolitan Water District, City of Los Angeles
- Copper Sulfate Applications to Copper Basin and Gene Wash Reservoirs Biological Assessment, Metropolitan Water District, San Bernardino County
- Woodland Hills Water Recycling Project Biological Services, RMC Water and Environment, Los Angeles County

BIOLOGICAL RESOURCE ASSESSMENTS

- Distributed Solar Projects (Confidential Client), Central Valley and Mojave Desert
- Comprehensive Biological Resources Study, More Mesa, Santa Barbara County
- Conejo Mountain Memorial Park, Initial Study Biological Assessment, Ventura County
- Scripps Park West, Phase II, City of San Diego, San Diego County
- Lechua Beach Access Expansion Project, Mountains Recreation and Conservation Authority, Malibu, Los Angeles County

SENSITIVE SPECIES SURVEYS

- Least Bell's Vireo and Southwestern Willow Flycatcher Focused Surveys, Watershed Protection District, Conejo Creek and Santa Clara River



AFFILIATIONS

Society of Wetland Scientists
Western Field Ornithologists
California Society for Ecological
Restoration

- Maintenance Projects, Ventura County
- Nesting Raptor and Special-Status Species Surveys, Vegetation Management Program, Southern California Edison, Santa Barbara, Ventura, Los Angeles, Orange, and San Bernardino Counties
- Avian, Mammal, and Herpetological Surveys, More Mesa, Santa Barbara County
- Coastal California Gnatcatcher Surveys, Honor Rancho ROW Maintenance Project, Southern California Gas Company, Los Angeles County
- Desert Tortoise Surveys, Dagget Wind Farm, AES Seawest, San Bernardino County
- Burrowing Owl Focused Surveys, 1,600-Acre Bel Lago Property, Riverside County

JURISDICTIONAL WATERS AND WETLANDS DELINEATIONS AND CRAM SURVEYS

- Supplemental Geotechnical Investigations on the Santa Clara River, United Water Conservation District, Ventura County
- Ortega Bridge Project CRAM Surveys, Mission Creek, City of Santa Barbara
- J Street Drain Improvement, Watershed Protection District, Ormond Beach, Ventura County
- Access Road Water Crossings QA/QC, San Diego Gas and Electric, San Diego County
- California Avenue Widening Project, University of California, Irvine, Orange County
- San Joaquin Student Housing Project, University of California Santa Barbara
- Malibu 2008 - 2014 Housing Element EIR, City of Malibu
- Triton Substation Project, Southern California Edison, City of Temecula / Riverside County

HABITAT RESTORATION, MANAGEMENT, AND CONSERVATION PLANNING

- Habitat Conservation Plan, Freeman Diversion Fish Passage, Santa Clara River, United Water Conservation District, Ventura County
- Long Grade Canyon Creek Restoration, CSU Channel Islands, Ventura County
- The Crosby Habitat Management Program, The Crosby at Rancho Santa Fe Homeowners Association, San Diego County
- Coastal Region Conservation Program, Southern California Gas Company, Southern California
- Hollywood Water Quality Improvement Project, LADWP, City of Los Angeles

AVIAN AND WETLANDS RESEARCH

- Western Snowy Plover and California Least Tern Nest Monitoring, Ormond Beach, Oxnard
- Waterfowl Nesting Success Analysis, Grizzly Island Wildlife Area, Solano County
- Natural Floodplain Restoration, Cosumnes River Preserve, Sacramento County



DETAILED PROJECT EXPERIENCE

Palos Verdes Reservoir Upgrades Project, Metropolitan Water District, Los Angeles County

Mr. Hongola is currently overseeing a compliance monitoring team providing environmental monitoring for the Palos Verdes Reservoir Upgrades Project. This project includes nesting bird surveys, bi-weekly monitoring visits to assess compliance related to issues such as noise, air quality, and cultural resources; completion of monitoring checklists with supporting documentation, and preparation of survey reports. Mr. Hongola oversees staffing and QA/QC of submittals for the program.

Santa Ana River Bridge Seismic Retrofit and Routine Maintenance Project, Metropolitan Water District, Riverside County

Mr. Hongola managed biologists providing environmental compliance monitoring for the Santa Ana River Bridge Seismic Retrofit and Routine Maintenance Project. This assignment included nesting bird surveys, weekly monitoring visits, completion of monitoring checklists with supporting documentation, and preparation of survey and final project reports. Mr. Hongola is currently overseeing Rincon's support for regulatory permitting for the Bellows Joint Installation, an additional component of the seismic upgrade project.

F.E. Weymouth Treatment Plant Environmental Compliance Monitoring, Metropolitan Water District, City of La Verne, Los Angeles County

Mr. Hongola is currently overseeing a team that is providing general compliance monitoring for ongoing construction activities associated with multiple projects at the Weymouth Treatment Plant. Current projects include Filter Rehabilitation, Solar Generation, and Chemical Upgrades. Tasks include bi-weekly construction monitoring site visits to document compliance, nesting bird surveys, and arborist monitoring. The projects will be completed in various timeframes over the next 5 years. Project compliance is confirmed against the adopted Mitigation Monitoring and Reporting Program and other specifications for the projects using a monitoring checklist for ease of reporting. Documentation of site visits is provided to Metropolitan within 24 hours of each visit.

Sepulveda Temporary Pump Station Project, Metropolitan Water District, City of Los Angeles

Mr. Hongola conducted an evaluation of potentially protected trees and nesting birds for the Sepulveda Temporary Pump Station Project. The evaluation was completed to assess trees within the site for potential protection under Los Angeles Municipal Code Section 17.02 as well as constraints associated with protected nesting birds under California Fish and Game Code 3505 and the Migratory Bird Treaty Act. The findings of the evaluation were summarized in a technical memorandum submitted to Metropolitan. Mr. Hongola also oversaw Rincon biologists in completing subsequent surveys for protected nesting birds prior to tree trimming activities at the site.

Copper Sulfate Applications to Copper Basin and Gene Wash Reservoirs, Metropolitan Water District, San Bernardino County

Mr. Hongola conducted the field reconnaissance survey and prepared the Biological Resources section of the Initial Study / Mitigated Negative Declaration for Metropolitan's Copper Sulfate Application project at the Copper Basin and Gene Wash reservoirs. The survey documented the existing biological conditions at the reservoirs. Key resource issues included the potential presence of desert tortoise, nesting bald eagles, bat maternity roosts, and jurisdictional waters and wetlands. Mr. Hongola prepared Biological Resources section of the ISMND, which evaluated potential impacts to biological resources and provided mitigation measures to reduce potential impacts to less than significant.

Woodland Hills Water Recycling Project, RMC Water and Environment, Los Angeles County

Rincon provided Biological and Cultural Resources technical studies in support of the project located in the cities of Los Angeles and Calabasas. The project involves extension of a Las Virgenes Municipal Water District recycled water system to the Woodland Hills Country Club to meet the Los Angeles Department of Water and Power goal to achieve 59,000 acre-feet per year (AFY) of recycled water use by 2035. It includes expanding the recycled water system for



irrigation, industrial, and commercial uses and through groundwater replenishment with purified recycled water. Mr. Hongola is overseeing the technical staff providing biological services including: Literature/Database Research; Reconnaissance-level Field Survey; and preparation of a Biological Resources Technical Study.

J Street Drain Improvement Project, Ventura County Watershed Protection District, Oxnard

Mr. Hongola managed and conducted the biological resource studies for the Ventura County Watershed Protection District's J Street Drain Improvement project in the city of Oxnard, Ventura County, California. Rincon biologists completed the surveys to support the Coastal Development Permit (CDP) process. Studies included tidewater goby focused surveys, nesting bird surveys and a jurisdictional waters and wetlands delineation that identified wetlands subject to the jurisdiction of the California Coastal Commission (CCC). The survey also identified portions of the project site suitable for wetland enhancement. Results of the surveys were documented in a Biological Survey Report provided to the District and the CCC to support the CDP process.

More Mesa Comprehensive Biological Resources Study, Santa Barbara County

Mr. Hongola conducted biological surveys for a comprehensive biological resource study (BRS) of the 265-acre More Mesa property in Santa Barbara County. The survey was completed to determine portions of the site that qualified as Environmentally Sensitive Habitat Areas (ESHA) as defined by the California Coastal Commission and the County of Santa Barbara. The study determined the extent of important coastal biological resources on a large coastal mesa and included avian, reptile, amphibian, mammal, and invertebrate surveys, rare plant, wetland, and plant community mapping. Responsibilities included surveying to determine presence/absence and extent of passerine, raptor, and sensitive bird species, and providing technical support for:

- Floristic inventory / mapping of special-status plant species
- Habitat mapping
- Mammal trapping and inventory
- Reptile/amphibian trapping and inventory
- Formal delineation of on-site wetlands

The project included a state-of-the-art analysis of white-tailed kite breeding, roosting, and foraging activities. Data collected over the course of the BRS was entered into a GIS database and modeled using geographical analysis tools in ArcGIS Spatial Analyst to interpret spatial data, apply sensitivity rankings, and ultimately quantify sensitivity to determine those areas that met the definition of ESHA.

Multiple Species Habitat Conservation Plan, Freeman Diversion Fish Passage Project, United Water Conservation District, Ventura County

Mr. Hongola is managing Rincon's assistance with development of the United Water Conservation District's Multiple Species Habitat Conservation Plan (MSHCP) for modification of the Freeman Diversion on the Santa Clara River. Rincon is tasked with development of the impact analysis and mitigation program for terrestrial wildlife species covered by the plan, amongst other chapters for the MSHCP. Rincon biologists are also completing ongoing surveys for the federally and state endangered California least tern.

Biological Resources Study, Lechuza Beach Access Expansion Project, Malibu, Los Angeles County

Mr. Hongola completed a Biological Resources Study of Lechuza Beach on behalf of the Mountains Recreation and Conservation Authority (MRCA). The study was conducted to document the existing conditions and sensitive biological resources associated with the beach for an access expansion project. The study included vegetation mapping, habitat assessment for sensitive species such as California least tern and western snowy plover, jurisdictional assessment, and analysis of the beach and proposed project as it related to the City of Malibu's Local Coastal Program. The results of the analysis were documented in a Terrestrial Biological Resources Study report submitted to the MRCA.

PROGRAM MANAGEMENT



Individual Project Manager, Metropolitan Water District of Southern California – Environmental Services On-Call, Various Counties, California

Mr. Hongola oversees the biological resources assignments for Rincon's on-call with MWD. This includes managing species surveys, compliance monitoring, general biological assessments, and regulatory permitting assistance for projects related to infrastructure improvements. To date, he has managed projects in Riverside, San Bernardino, and Los Angeles Counties. A number of these projects involved Cultural Resources issues and Mr. Hongola assisted with management and assignments of staff as required.

Program Manager, Distributed Solar Projects, Biological Resource Assessments, Technical QA/QC – Southern and Central California

Mr. Hongola oversaw the technical aspects of the program, including the field studies and report preparation, for projects through southern and central California. Specific disciplines include field reconnaissance surveys, protocol surveys for special status plants and wildlife, jurisdictional waters and wetlands delineation, and impact analysis and mitigation program development.

Project Manager, Distributed Solar Projects, Compliance Monitoring Programs – Kern and San Bernardino Counties

Mr. Hongola oversaw compliance monitoring programs for construction of a number of solar projects in Kern and San Bernardino Counties. Management duties entail oversight of a team of biologists conducting preconstruction surveys for special status plants, desert tortoise, burrowing owl, desert kit fox, American badger, and compliance monitoring during project implementation. A key approach implemented with these projects as the identification of potential resource constraints well in advance of project construction and development of solutions that minimize impacts to the project schedule.

Program Manager, Southern California Edison (SCE), Compliance Monitoring Program, Vegetation Management – Southern and Central California

Mr. Hongola managed Rincon's team of biologists assisting with preconstruction surveys and compliance monitoring for the SCE Vegetation Management Program. Responsibilities included overseeing staff conducting pre-activity surveys for nesting birds and special status species, and biological monitoring during vegetation maintenance around SCE facilities, including transmission poles and lines. Surveys and monitoring were conducted at project sites throughout southern California to assure avoidance/minimization of effects to sensitive resources. Coordinated with SCE's project manager and provided QA/QC of monitoring reports documenting project compliance.

Program Manager, Ventura County Watershed Protection District, Ventura County, California

Mr. Hongola manages Rincon's contract to provide biological monitoring and assessments for various infrastructure projects. He has assisted with species surveys and monitoring programs under this contract.



EDUCATION

B.S., Wildlife, Humboldt State University, 2011

PERMITS

CDFW Scientific Collecting Permit (SC-12546)

CDFW MOU Field Assistant for Mohave ground squirrel and other sensitive small mammal species (formerly listed under Don Mitchell)

CERTIFICATIONS

OSHA 10-Hour Training

San Joaquin Kit Fox Ecology, Conservation, and Survey Techniques

Introduction to Desert Tortoises and Field Techniques

EXPERIENCE

Rincon Consultants, Inc. (2016–present)

ECORP Consulting, Inc. (2012–2016)

Wyoming Game and Fish Department (2012)

Desert Tortoise Preserve Committee (2012)

U.S. Forest Service (2011)

Humboldt State University (2009-2010)

Amy Leigh Trost

ASSOCIATE BIOLOGIST

Amy Leigh Trost is an Associate Biologist with Rincon Consultants. She has over seven years of professional experience providing biological resource services. Ms. Trost has served as an assistant project manager and field lead for numerous projects throughout California. Her duties at Rincon include biological field surveys for special status species, biological resources analyses, construction and mitigation monitoring, regulatory compliance, and the preparation of biological reports and environmental documents in support of CEQA, NEPA, Porter-Cologne Water Quality Control Act, Fish and Game Code 1600 et seq., Clean Water Act, and state and federal Endangered Species Acts.

PROJECT EXPERIENCE

Southern California Edison – Tehachapi Renewable Transmission Project, Los Angeles County, California

Ms. Trost worked on several segments of the TRTP providing biological surveys and habitat restoration services. For Segments 4-11 Ms. Trost served as the small mammal lead and was responsible for relocation of San Diego desert woodrat middens. She also provided construction monitoring. She provided habitat restoration services for segments 1, 2, and 3A.

Burns and McDonnell – Panoche Valley Solar Project Telecom and Little Panoche Road Mitigation, San Benito County, California

Ms. Trost conducted protocol surveys for giant kangaroo rat for the large solar project. She also assisted with pre-construction surveys for giant kangaroo rat, San Joaquin antelope squirrel, San Joaquin kit fox, California tiger salamander, blunt-nosed leopard lizard, and burrowing owl.

McGee and Associates – Leбата Big Rock Creek Surface Mining Project, Los Angeles County, California

Ms. Trost served as the Project Manager for the construction project located in Antelope Valley. She conducted a series of Biological Surveys for the project including protocol trapping for Mohave ground squirrel, protocol surveys for burrowing owl, and pre-construction nesting bird, desert kit fox, and burrowing owl surveys.

Los Angeles County Department of Public Works – Zuma Beach Restroom #2 Facility Upgrade Project, Los Angeles County, California

Ms. Trost served as a biologist for the facilities project located in Malibu. She prepared the project biological assessment report and nesting bird survey report. Ms. Trost also provided construction monitoring and prepared weekly reports.

Caltrans District 10 – Freeman Gulch Road Widening, Kern County, California

Ms. Trost worked as a monitor for a road widening project in the Mohave Desert along State Route 14 near Inyokern. She also assisted with preconstruction surveys, including focused trapping for Mohave ground squirrel and den/burrow excavation and relocation of desert tortoise.



PROJECT EXPERIENCE, CONT'D

CONSTRUCTION AND ENVIRONMENTAL COMPLIANCE MONITORING

- County of Monterey Resource Management Agency – California Flats Solar Project, Monterey and San Luis Obispo, California
- Burns and McDonnell – Panoche Valley Solar Project Telecom and Little Panoche Road Mitigation, San Benito, California
- County of San Bernardino Department of Public Works – Cactus Basin Improvement Project , San Bernardino County, California
- City of Farmersville – Farmersville Highway 198 Interchange Project, Tulare County, California
- Pyramid Network Services – Los Angeles-Regional Interoperable Communications System Project, Los Angeles County
- Panasonic – Coronal Lost Hills Solar Project, Kern County, California
- California Department of Transportation Districts 6 and 9 – State Route 14 Red Rock Canyon Bridge Replacement Monitoring, Kern County, California
- County of San Bernardino Public Works Department – Copper City Road Improvements Desert Tortoise Monitoring, San Bernardino County, California
- California Department of Transportation District 7 – State Route 2 Bighorn Sheep Monitoring, Los Angeles County, California
- Vulcan Materials Company – Rabbit Canyon Grading Monitoring, Los Angeles County, California
- County of San Bernardino Department of Public Works – Bear Valley Cutoff Road Improvements Monitoring, San Bernardino County, California

BIOLOGICAL SURVEYS

- Southern California Edison – Marathon-Agnicourt to Cottonwood Transmission Line Burrowing Owl Surveys, San Bernardino County, California
- Verizon – Fort Irwin Fiber Optic Project Mohave Ground Squirrel Camera and Live Trapping Studies, San Bernardino, California
- Green Light Energy Corporation/Z Global – Castor Solar Site Pre-construction Surveys, Kern County California
- California Department of Transportation District 7 – Northwest State Route 138 Project, Los Angeles County, California
 - Conducted nocturnal trapping for Tehachapi Pocket Mouse
 - Conducted a wildlife crossing study using passive track stations and remote cameras
- Pardee Homes – Christensen Property Burrowing Owl Survey, Riverside County, California
- U.S. Marine Corps – Marine Corps Base Camp Pendleton Aquatic Surveys, San Diego County, California
- California Department of Parks and Recreation – Crystal Cove Historical District Coastal California Gnatcatcher Surveys, Orange County, California
- U.S. Forest Service – Angeles National Forest San Gabriel Canyon OHV Area Southwestern Willow Flycatcher Surveys, Los Angeles County, California
- California Department of Fish and Wildlife – Mohave Ground Squirrel Trapping, San Bernardino County, California
- Desert Tortoise Preserve Committee – Mohave Ground Squirrel Occupancy Study, Kern County, California



Appendix B

Regulatory Guidance

Appendix B

Regulatory Framework

The following is a brief summary of the regulatory context under which biological resources are managed at the federal and state levels. A number of federal and state statutes provide a regulatory structure that guides the protection of biological resources. Agencies with the responsibility and regulatory guiding documents for protection of biological resources within the project area include:

- *U.S. Army Corps of Engineers (wetlands and other waters of the United States);*
- *U.S. Fish and Wildlife Service (federally listed species and migratory birds);*
- *California Department Fish and Wildlife (formerly California Department of Fish and Game) (riparian areas and other waters of the State, state-listed species);*
- *Regional Water Quality Control Board (waters of the State).*

These agencies are responsible for ensuring the implementation of regulations under the following acts and laws:

- *California Environmental Quality Act (CEQA);*
- *Federal Endangered Species Act (ESA);*
- *California Endangered Species Act (CESA);*
- *Federal Clean Water Act (CWA);*
- *California Fish and Game Code (CFGC);*
- *Migratory Bird Treaty Act (MBTA);*
- *The Bald and Golden Eagle Protection Act; and*
- *Porter-Cologne Water Quality Control Act.*

Federal Statutes and Administering Agencies

Federal Endangered Species Act.

The Endangered Species Act (ESA; 16 USC § 153 *et seq.*) provides a program for the conservation of threatened and endangered plants and animals and the habitats in which they are found. The lead federal agencies for implementing ESA are the U.S. Fish and Wildlife Service (USFWS) and the National Oceanic and Atmospheric Administration's National Marine Fisheries Service (NMFS). The USFWS generally implements the ESA for terrestrial and freshwater species, while the NMFS implements the ESA for marine and anadromous species. The law requires federal agencies, in consultation with the USFWS and/or NMFS, to ensure that actions they authorize, fund, or carry out are not likely to jeopardize the continued existence of any listed species or result in the destruction or adverse modification of designated critical habitat of such species. Further, the ESA prohibits the unauthorized "take" of any listed species of endangered fish or wildlife, as well as the import, export, possession, or sale of listed species or their parts. "Take" is defined to mean to harass, harm (which includes habitat modification), pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct.

Projects that would result in “take” of any federally listed threatened or endangered animal species are required to obtain authorization from the USFWS or NMFS through either Section 7 (interagency consultation with a federal nexus) or Section 10 (Habitat Conservation Plan) of the ESA, depending on whether the project is a “federal action” funded, authorized, or carried out by a federal agency. Threatened and endangered plants receive lesser protection under the ESA; take of listed plants is prohibited only on federal land or if conducted in violation of state law. The permitting process involves an evaluation of whether a project would jeopardize the continued existence of a listed species or result in the destruction or adverse modification of critical habitat, and what measures or alternatives would be required to avoid jeopardizing the species.

Clean Water Act and U.S. Army Corps of Engineers.

Under Section 404 of the Clean Water Act, the U.S. Army Corps of Engineers (USACE) has authority to regulate activities that discharge fill of material into wetlands or other “waters of the United States.” Perennial and intermittent creeks are considered waters of the United States if they are hydrologically connected to other jurisdictional waters. The USACE also implements the federal policy embodied in Executive Order 11990, which is intended to result in no net loss of wetlands. In achieving the goals of the Clean Water Act, the USACE seeks to avoid and minimize adverse impacts where practicable, and to offset unavoidable adverse impacts, on existing aquatic resources. Any fill of wetlands that are hydrologically connected to jurisdictional waters would require a permit from the USACE prior to the start of work. Typically, when a project involves impacts to waters of the United States, the goal of no net loss of wetland acres or values is met through compensatory mitigation involving the creation or enhancement of similar habitats.

State Water Resources Control Board.

The State Water Resources Control Board (SWRCB) and nine Regional Water Quality Control Boards are responsible for controlling water quality in California. These agencies implement the Porter-Cologne Water Quality Control Act and the State’s responsibilities under the Clean Water Act, setting and enforcing standards for water quality, and regulating the discharge of pollutants from point and non-point sources. The SWRCB was additionally authorized to establish water quality guidelines for long range resource planning concerning ground and surface water management and the use of recycled water.

Migratory Bird Treaty Act.

The Migratory Bird Treaty Act (16 United States Code [USC] Section 703-711) implements various treaties and conventions between the U.S. and Canada, Japan, Mexico and the former Soviet Union for the protection of migratory birds. Under the Act, taking, killing or possessing migratory birds is unlawful. Unless permitted by regulations, the Act provides that it is unlawful to pursue, hunt, take, capture or kill; attempt to take, capture or kill; possess, offer to or sell, barter, purchase, deliver or cause to be shipped, exported, imported, transported, carried or received any migratory bird, part, nest, egg or product, manufactured or not. According to the Act, a person, association, partnership or corporation which violates the Act or its regulations is guilty of a misdemeanor and subject to a fine of up to \$500, jail up to six months, or both. Anyone who knowingly takes a migratory bird and intends to, offers to, or actually sells or barter the bird is guilty of a felony, with fines up to \$2,000, jail up to two years, or both. (Permissible fines are increased significantly by the Sentencing Reform Act of 1984, as amended). The Act should not be construed to prevent states and territories from making or enforcing laws or

regulations not inconsistent with the Act or which give further protection to migratory birds, nests and eggs, if such laws and regulations do not extend open seasons.

The Bald and Golden Eagle Protection Act.

The Bald and Golden Eagle Protection Act (16 U.S.C. 668-668c), enacted in 1940 and amended several times since then, prohibits anyone, without a permit issued by the Secretary of the Interior, from "taking" bald eagles, including their parts, nests, or eggs. The Act provides criminal penalties for persons who "take, possess, sell, purchase, barter, offer to sell, purchase or barter, transport, export or import, at any time or any manner, any bald eagle ... [or any golden eagle], alive or dead, or any part, nest, or egg thereof." The Act defines "take" as "pursue, shoot, shoot at, poison, wound, kill, capture, trap, collect, molest or disturb." As defined by the act "Disturb" means: "to agitate or bother a bald or golden eagle to a degree that causes, or is likely to cause, based on the best scientific information available, 1) injury to an eagle, 2) a decrease in its productivity, by substantially interfering with normal breeding, feeding, or sheltering behavior, or 3) nest abandonment, by substantially interfering with normal breeding, feeding, or sheltering behavior." In addition to immediate impacts, this definition also covers impacts that result from human-induced alterations initiated around a previously used nest site during a time when eagles are not present, if, upon the eagle's return, such alterations agitate or bother an eagle to a degree that interferes with or interrupts normal breeding, feeding, or sheltering habits, and causes injury, death or nest abandonment. A violation of the Act can result in a fine of \$100,000 (\$200,000 for organizations), imprisonment for one year, or both, for a first offense. Penalties increase substantially for additional offenses, and a second violation of the Act is a felony.

State Statutes and Administering Agencies

Porter-Cologne Water Quality Control Act.

The Porter-Cologne Water Quality Control Act (Cal. Water Code § 13000 *et seq.*) provides for implementation of portions of the federal Clean Water Act by the SWRCB, including issuance of Section 401 Certifications and Section 402 NPDES Permits. Issuance of a Section 401 Certification requires documenting compliance with state water quality standards, including watershed plans, designated beneficial uses, and the total maximum daily load (TMDL) program. The Porter-Cologne Water Quality Control Act requires the regulation of all pollutant discharges, including wastes in project runoff that could affect the quality of the state's water. Any entity proposing to discharge a waste must file a Report of Waste Discharge with the appropriate RWQCB or SWRCB. The act also provides for the development and periodic reviews of basin plans that designate beneficial uses of California's major rivers and groundwater basins and establish water quality objectives for those waters. The limits of waters subject to the Porter-Cologne Act are not dependent on federal jurisdiction. The Act regulates discharges that could affect the quality of waters of the state and requires that waste discharge requirements (WDR) be obtained for discharges, including discharges of fill material, that are not otherwise authorized by Section 404 or Section 402 of the federal Clean Water Act.

California Endangered Species Act and Native Plant Protection Act.

The California Endangered Species Act (CESA) is intended to conserve, protect, restore, and enhance species designated as endangered or threatened, and their habitat. (CFG Section 2052). Plants and wildlife designated as threatened or endangered under CESA are listed in 14 CCR Sections 670.2 and 670.5, respectively. CESA directs all state agencies, boards, and commissions to seek to conserve

endangered and threatened species, and to utilize their authority in furtherance of that policy (CFGF Section 2055). Further, CESA emphasizes that state agencies should not approve projects which would jeopardize the continued existence of any endangered or threatened species or result in the destruction or adverse modification of habitat essential to the continued existence of those species, if there are reasonable and prudent alternatives available consistent with conserving the species or its habitat that would prevent jeopardy (CFGF Section 2052.1).

CESA provides statutory protection to species listed as threatened or endangered, as well as to species that are candidates for listing. Specifically, the law prohibits the unauthorized take, possession, purchase, sale, or import/export into or out of the State of any CESA-protected species or their parts or products. "Take" is defined specifically in the CFGF (Section 86) to mean "hunt, pursue, catch, capture, or kill," or an attempt to do any such act. However, CDFW may authorize, by permit, the take of endangered, threatened, or candidate species if all of the following conditions are met (CFGF Sections 2081 (b) and (c):

- (1) The authorized take is incidental to an otherwise lawful activity;
- (2) The impacts of the authorized take are minimized and fully mitigated;
- (3) The measures required to minimize and fully mitigate the impacts of the authorized take:
 - (a) Are roughly proportional in extent to the impact of the take on the species;
 - (b) Maintain the applicant's objectives to the greatest extent possible; and
 - (c) Are capable of successful implementation;
- (4) Adequate funding is provided to implement the required minimization and mitigation measures and to monitor compliance with, and the effectiveness of, the measures; and,
- (5) Issuance of the permit will not jeopardize the continued existence of a state-listed species.

The incidental take of listed species is authorized by CDFG on a discretionary basis. Full mitigation for take of listed species is determined on a project-specific basis, and various combinations of mitigation actions can substantiate a conclusion that the full mitigation standard has been met for a particular project. Generally, full mitigation can be achieved by offsetting the project's incidental take of individuals of the covered species, along with the other direct, indirect, and cumulative impacts on the species, including habitat loss, such that the covered species continues to survive and thrive after completion of the project and required mitigation.

The CDFW is also responsible for administering the Native Plant Protection Act (NPPA) (CDFG Section s1900 *et seq.*). The NPPA authorizes the CDFW to establish criteria for determining if a species, subspecies, or variety of native plant is endangered or rare, and provides some protection for listed plants. However, the NPPA is an older statute, pre-dating the CESA, and most of the NPPA's requirements have been integrated into CDFW's procedures for implementing CESA. When CESA was enacted, all plants listed as Endangered under the NPPA were also granted Endangered status under CESA. However, species listed as "Rare" under the NPPA were not correspondingly listed as "Threatened" under CESA at that time. Effective in 2015, CDFW promulgated regulations (14 CCR 786.9) under the authority of the NPPA, establishing that CESA's permitting procedures would be applied to plants listed under the NPPA as "Rare." With this change, there is little practical difference for the regulated public between plants listed under CESA and those listed under the NPPA.

California Department of Fish and Wildlife.

The California Department of Fish and Wildlife (CDFW) derives its authority from the CFGF. In addition to administering the CESA, CDFW has additional responsibilities under the CFGF, some of which are summarized below.

California Fish and Game Code sections 3503, 3503.5, and 3513 describe unlawful take, possession, or destruction of birds, nests, and eggs. Section 3503 prohibits the needless destruction of birds' nests, Section 3503.5 protects all birds-of-prey and their eggs and nests against take, possession, or destruction, and Section 3513 makes it a state-level offense to take or possess birds protected by the federal MBTA. CDFW administers these requirements.

Sections 3511, 4700, 5050, and 5515 of the CFGC designate "Fully Protected" birds, mammals, reptiles and amphibians, and fishes, respectively. Fully Protected species may not be taken, except for conservation purposes or in conjunction with an approved Natural Community Conservation Plan (NCCP). The CESA permitting process cannot be used to authorize take of Fully Protected species, and projects must be designed to avoid incidental take of these species unless an NCCP is in place.

Perennial and intermittent streams and associated riparian vegetation, when present, also fall under the jurisdiction of the CDFW. Section 1600 et seq. of the Fish and Game Code (Lake and Streambed Alteration Agreements) gives the CDFW regulatory authority over work within the stream zone (which could extend to the 100-year flood plain) consisting of, but not limited to, the diversion or obstruction of the natural flow or changes in the channel, bed, or bank of any river, stream or lake.

Section 1602 of the CFGC states that it is unlawful for any person to "substantially divert or obstruct the natural flow of, or substantially change or use any material from the bed, channel, or bank of, any river, stream, or lake" without first notifying CDFW of that activity. Thereafter, if CDFW determines and informs the entity that the activity will not substantially adversely affect any existing fish or wildlife resources, the entity may commence the activity. If, however, CDFW determines that the activity may substantially adversely affect an existing fish or wildlife resource, the entity may be required to obtain from CDFW a Streambed Alteration Agreement, which will include reasonable measures necessary to protect the affected resource(s), before the entity may conduct the activity or activities described in the notification. (Fish & G. Code, § 1602). Streambed Alteration Agreements are typically required for activities such as excavation or placement of fill within a stream channel, vegetation clearing, installation (and sometimes operation) of structures that divert the flow of water, installation of culverts and bridge supports, cofferdams for construction dewatering, and bank reinforcement.

Under State law the CDFW is responsible for the conservation, protection, and management of wildlife, native plants, and habitat necessary to maintain biologically sustainable populations. In this trustee capacity, CDFW reviews environmental documents and provides recommendations to lead agencies regarding conservation of biological resources. The CDFW has also developed lists of "Species of Special Concern" (SSC), an advisory sensitivity designation intended to draw attention to species that are not listed as Threatened or Endangered under CESA, but that are experiencing declines or other conservation needs. The purpose of the SSC designation is to:

- Focus attention on animals at conservation risk by CDFW, other State, local and Federal governmental entities, regulators, land managers, planners, consulting biologists, and others;
- Stimulate research on poorly known species; and,
- Achieve conservation and recovery of these animals before they meet CESA criteria for listing as threatened or endangered.

Appendix C

Special Status Species Evaluation Tables

18-05729: Sativa Well No. 5 Water System Construction Project

Scientific Name Common Name	Status	Habitat Requirements	Potential to Occur in Project Area	Habitat Suitability/ Observations
Plants and Lichens				
<i>Atriplex coulteri</i> Coulter's saltbush	None/None G3 / S1S2 1B.2	Coastal bluff scrub, coastal dunes, coastal scrub, valley and foothill grassland. Ocean bluffs, ridgetops, as well as alkaline low places. Alkaline or clay soils. 2-460 m. perennial herb. Blooms Mar-Oct	None	Suitable coastal habitats do not occur on the project site. This species was documented within 5 miles of the project site in 1902.
<i>Atriplex parishii</i> Parish's brittlescale	None/None G1G2 / S1 1B.1	Vernal pools, chenopod scrub, playas. Usually on drying alkali flats with fine soils. 5-1420 m. annual herb. Blooms Jun-Oct	None	Suitable vernal pool habitat does not occur on the project site. This species was documented within 5 miles of the project site at an unknown date.
<i>Centromadia parryi ssp. australis</i> southern tarplant	None/None G3T2 / S2 1B.1	Marshes and swamps (margins), valley and foothill grassland, vernal pools. Often in disturbed sites near the coast at marsh edges; also in alkaline soils sometimes with saltgrass. Sometimes on vernal pool margins. 0-975 m. annual herb. Blooms May-Nov	None	Suitable vernal pool habitat does not occur on the project site. This species was documented at a public park approximately 2.25 miles from the project site in 2009.
<i>Lasthenia glabrata ssp. coulteri</i> Coulter's goldfields	None/None G4T2 / S2 1B.1	Coastal salt marshes, playas, vernal pools. Usually found on alkaline soils in playas, sinks, and grasslands. 1-1375 m. annual herb. Blooms Feb-Jun	None	Suitable vernal pool habitat does not occur on the project site. This species was documented within 5 miles of the project site in 1917 and 1973.
<i>Navarretia prostrata</i> prostrate vernal pool navarretia	None/None G2 / S2 1B.1	Coastal scrub, valley and foothill grassland, vernal pools, meadows and seeps. Alkaline soils in grassland, or in vernal pools. Mesic, alkaline sites. 3-1235 m. annual herb. Blooms Apr-Jul	None	Suitable habitats for this species do not occur on the project site. This species was documented within 5 miles of the project site in 1882 and 1963.
<i>Orcuttia californica</i> California Orcutt grass	Endangered/Endangered G1 / S1 1B.1	Vernal pools. 10-660 m. annual herb. Blooms Apr-Aug	None	Suitable vernal pool habitat does not occur on the project site. This species was documented within 5 miles of the project site in 1946.
<i>Symphotrichum defoliatum</i> San Bernardino aster	None/None G2 / S2 1B.2	Meadows and seeps, cismontane woodland, coastal scrub, lower montane coniferous forest, marshes and swamps, valley and foothill grassland. Vernal mesic grassland or near ditches, streams and springs; disturbed areas. 2-2040 m. perennial rhizomatous herb. Blooms Jul-Nov	None	Suitable habitats for this species do not occur on the project site. This species was documented within 5 miles of the project site in 1930.
Invertebrates				

<i>Glaucopsyche lygdamus palosverdesensis</i> Palos Verdes blue butterfly	Endangered/None G5T1 / S1	Restricted to the cool, fog-shrouded, seaward side of Palos Verdes Hills, Los Angeles County. Host plant is <i>Astragalus trichopodus</i> var. <i>lonchus</i> (locoweed).	None	The project site is out of the known distribution of this species and the host plant does not occur on the project site. This species has not been documented within 5 miles of the project site.
Reptiles				
<i>Anniella stebbinsi</i> southern California legless lizard	None/None G3 / S3 SSC	Generally south of the Transverse Range, extending to northwestern Baja California. Occurs in sandy or loose loamy soils under sparse vegetation. Disjunct populations in the Tehachapi and Piute Mountains in Kern County. Variety of habitats; generally in moist, loose soil. They prefer soils with a high moisture content.	None	Suitable soils for this species do not occur on the project site. This species was documented within 5 miles of the project site in 1939.
<i>Phrynosoma blainvillii</i> coast horned lizard	None/None G3G4 / S3S4 SSC	Frequents a wide variety of habitats, most common in lowlands along sandy washes with scattered low bushes. Open areas for sunning, bushes for cover, patches of loose soil for burial, and abundant supply of ants and other insects.	None	Suitable scrub habitat for this species does not occur on the project site. This species was documented within the general vicinity of the project site in 1952.
Birds				
<i>Agelaius tricolor</i> tricolored blackbird	None/Threatened G2G3 / S1S2 SSC	Highly colonial species, most numerous in Central Valley & vicinity. Largely endemic to California. Requires open water, protected nesting substrate, and foraging area with insect prey within a few km of the colony.	None	Suitable open water habitats do not occur on the project site. This species was documented within 5 miles of the project site in 1940.
<i>Athene cucularia</i> burrowing owl	None/None G4 / S3 SSC	Open, dry annual or perennial grasslands, deserts, and scrublands characterized by low-growing vegetation. Subterranean nester, dependent upon burrowing mammals, most notably, the California ground squirrel.	None	Suitable habitat with small mammal burrows do not occur on the project site. This species was documented within 5 miles of the project site in 1921.
<i>Coccyzus americanus occidentalis</i> western yellow-billed cuckoo	Threatened/Endangered G5T2T3 / S1	Riparian forest nester, along the broad, lower flood-bottoms of larger river systems. Nests in riparian jungles of willow, often mixed with cottonwoods, with lower story of blackberry, nettles, or wild grape.	None	Suitable riparian habitat does not occur on the project site. This species was documented within 5 miles of the project site in 1910 and 1921.
<i>Empidonax traillii extimus</i> southwestern willow flycatcher	Endangered/Endangered G5T2 / S1	Riparian woodlands in Southern California.	None	Suitable riparian habitat does not occur on the project site. This species was documented within the general vicinity of the project site in 1895.
<i>Vireo bellii pusillus</i> least Bell's vireo	Endangered/Endangered G5T2 / S2	Summer resident of Southern California in low riparian in vicinity of water or in dry river bottoms; below 2000 ft. Nests placed along margins of bushes or on twigs projecting into pathways, usually willow, Baccharis, mesquite.	None	Suitable riparian habitat does not occur on the project site. This species was documented within 5 miles of the project site in 1895.
Mammals				

<p><i>Eumops perotis californicus</i> western mastiff bat</p>	<p>None/None G5T4 / S3S4 SSC</p>	<p>Many open, semi-arid to arid habitats, including conifer & deciduous woodlands, coastal scrub, grasslands, chaparral, etc. Roosts in crevices in cliff faces, high buildings, trees and tunnels.</p>	<p>None</p>	<p>Buildings in the study area would not provide suitable roosting habitat for this species. This species was documented within 5 miles of the project site in 1929 and 1987.</p>
<p><i>Taxidea taxus</i> American badger</p>	<p>None/None G5 / S3 SSC</p>	<p>Most abundant in drier open stages of most shrub, forest, and herbaceous habitats, with friable soils. Needs sufficient food, friable soils and open, uncultivated ground. Preys on burrowing rodents. Digs burrows.</p>	<p>None</p>	<p>Suitable open habitats with connectivity do not occur on the project site. This species was documented within 5 miles of the project site at an unknown date.</p>

Appendix D

Site Photographs



Photograph 1. View of existing hydropneumonic surge tank facing north.



Photograph 2. View of backup generator facing north.



Photograph 3. View of gas chlorinator facilities facing north.



Photograph 4. View of back side of hydropneumonic surge tank adjacent to residences facing west.

Appendix C

Cultural Resources



Sativa Well #5 Project

Cultural Resources Assessment Report

prepared for

KEH & Associates

*On behalf of the Sativa Los Angeles County Water District Water System and the
Water Replenishment District of Southern California*

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Executive Summary

Rincon Consultants, Inc. (Rincon) was retained by KEH & Associates, on behalf of the Sativa Los Angeles County Water District Water System (Sativa) and the Water Replenishment District of Southern California, to perform a cultural resources assessment for the Sativa Well 5 Project (project) in unincorporated Los Angeles County, California. The purpose of this report is to document the tasks conducted by Rincon; specifically, a cultural resources records search, Native American outreach, local historic group consultation, and a field survey. This study has been completed in accordance with the requirements of a California Environmental Quality Act (CEQA)-Plus investigation, which includes an evaluation of project impacts under CEQA, Section 106 of the National Historic Preservation Act (NHPA), and the National Environmental Policy Act in the case that a federal nexus (i.e., federal funding and/or permitting) is established during the course of the project.

Based on the results of the records search, Native American outreach, local historic consultation, and field survey, no cultural resources (prehistoric or historic) were identified within the project's area of potential effects. Therefore, Rincon recommends a finding of ***no effect to historic properties*** under Section 106 of NHPA and ***no impact to historical resources*** under CEQA. No further cultural resources work is recommended for the current project.

Rincon presents the following recommendations in case of unanticipated discoveries of cultural resources or human remains during project development.

Unanticipated Discovery of Cultural Resources

If cultural resources are encountered during ground-disturbing activities, work in the immediate area must halt and an archaeologist meeting the Secretary of the Interior's Professional Qualifications Standards for archaeology (National Park Service 1983) should be contacted immediately to evaluate the find. If the discovery proves to be significant under NHPA and/or CEQA, additional work such as data recovery excavation and Native American consultation may be warranted to mitigate any significant impacts.

Human Remains

The discovery of human remains is always a possibility during ground disturbing activities. If human remains are found, the State of California Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the 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 must be notified immediately. If the human remains are determined to be prehistoric, the Coroner will notify the Native American Heritage Commission, which will determine and notify a most likely descendant (MLD). The MLD has 48 hours from being granted site access to make recommendations for the disposition of the remains. If the MLD does not make recommendations within 48 hours, the land owner shall reinter the remains in an area of the property secure from subsequent disturbance.

1 Introduction

Rincon Consultants, Inc. (Rincon) was retained by KEH & Associates, on behalf of the Sativa Los Angeles County Water District (Sativa) and the Water Replenishment District (WRD) of Southern California, to perform a cultural resources assessment for the Sativa Well 5 Project (project) in unincorporated Los Angeles County, California. The purpose of this report is to document the tasks conducted by Rincon; specifically, a cultural resources records search, Native American outreach, local historic group consultation, and a field survey. Rincon understands that the project is subject to the National Environmental Policy Act (NEPA), Section 106 of the National Historic Preservation Act (NHPA), and the California Environmental Quality Act (CEQA).

1.1 Project Description

Sativa was incorporated on December 30, 1938 and supplies domestic water services. Sativa's service area includes a portion of the Willowbrook area, an unincorporated census-designated place within Los Angeles County, and a small area of the city of Compton in Los Angeles County. Sativa serves an approximately 0.5 square mile, with a population of 6,837 and 1,642 service connections. The Sativa water supply consists entirely of groundwater, specifically from three wells: Well 2, Well 3 and Well 5.

Sativa and WRD are working together under a Memorandum of Understanding established in March 2016 to apply for funding via WRD's Safe Drinking Water Program. WRD and Sativa are applying for funding through the Drinking Water State Revolving Fund administered by the State Water Resources Control Board (SWRCB). This funding will provide a wellhead treatment system and supporting facilities for Well #5. The proposed project would implement an oxidation-filtration treatment method of iron manganese removal for groundwater produced from Well 5. The proposed treatment facilities would be located exclusively at the Well 5 site alongside existing facilities. Existing facilities include Well 5, gas chlorinator facilities, an electrical room, a backup generator, and a hydropneumatics surge tank. Under the proposed project, all existing facilities would be left in place with the exception of the hydropneumatics surge tank, which would be removed.

1.2 Project Location

The project area consists of a 0.1-acre area located in unincorporated Los Angeles County, just outside of the Compton city limits within Township 3 south, Range 13 west, Section 15 of the United States Geological Survey *South Gate, CA* 7.5-minute quadrangle (Figure 1). The project area is situated at the northwest corner of South Aranbe Avenue and East Stockwell Street, within a residential neighborhood (Figure 2). The coordinates of the project area are: 33°54'35.75" N, 118°14'01.77" W.

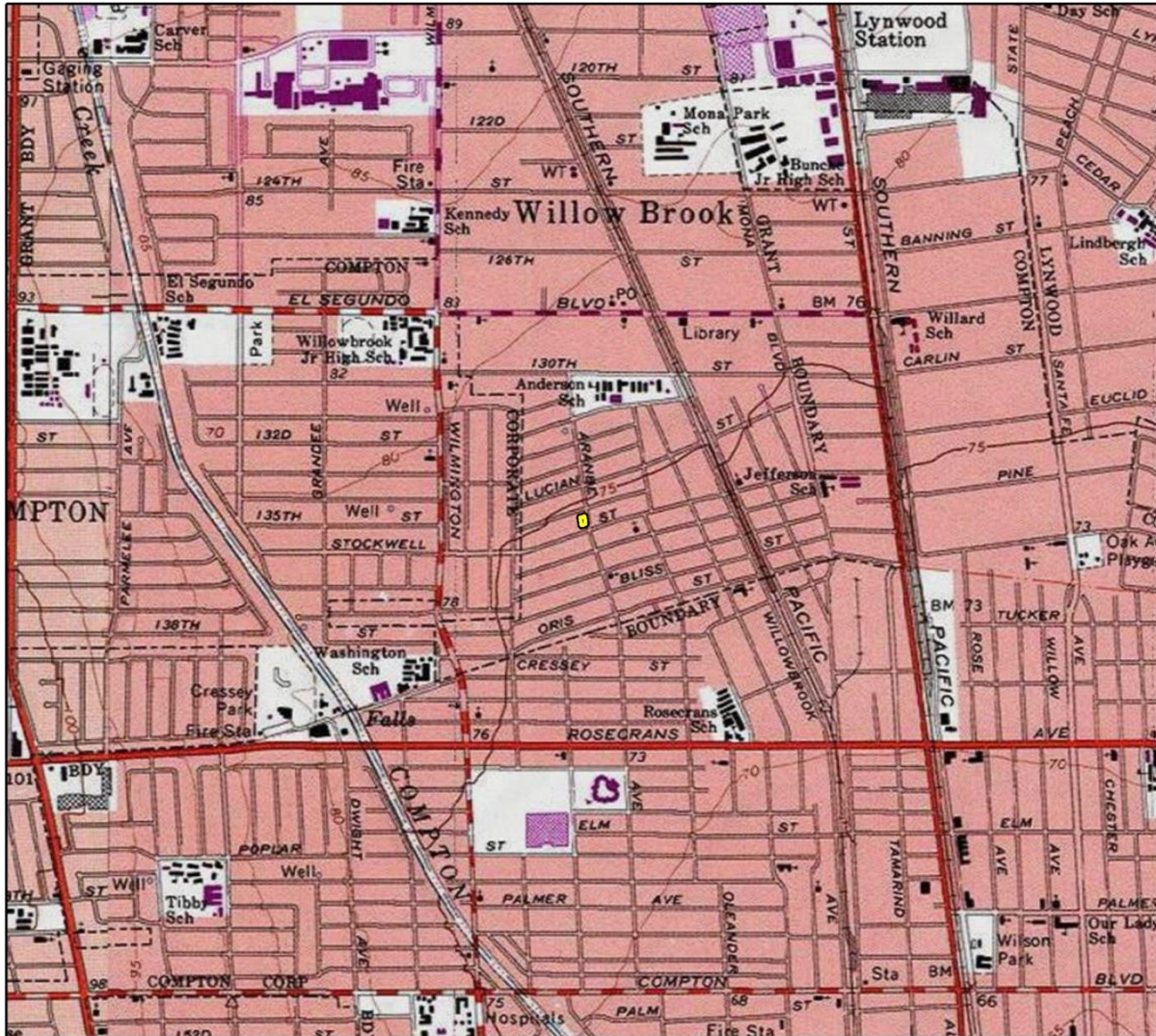
1.3 Area of Potential Effects

The area of potential effects (APE) of a project is defined in 36 Code of Federal Regulations (CFR) 800.16(d) as the "geographic area or areas within which an undertaking may directly or indirectly cause alterations in the character or use of historic properties, if any such property exists." The APE generally depicts all areas that are expected to be affected by the proposed project, including staging and construction areas. Construction would include removal and relocation of the existing hydropneumatics surge tank, site preparation, laying of foundations, installation of pipelines, tanks, pumps, and

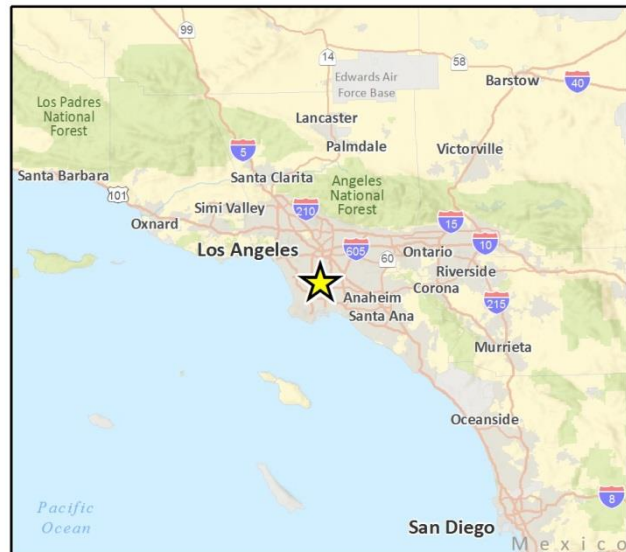
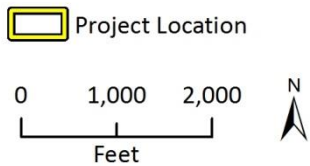
equipment, and paving of disturbed areas. As defined for this project, the APE encompasses the entire 0.1-acre project area.

The APE must additionally be considered as a three-dimensional space, and includes any ground disturbance associated with the project. Construction of the pads that would underlie the backwash tank, iron manganese filtration system, treated water storage tank, and booster pump system would require excavation to a depth of four to six feet. In addition, installation of yard piping would require construction via open trench measuring two feet in width and three feet in depth. Therefore, the vertical depth of the APE is not expected to exceed six feet below ground surface, consistent with the maximum depth necessary to install the subsurface utilities. No indirect effects (i.e., visual, auditory, or atmospheric) are anticipated for the project.

Figure 1 Project Location Map

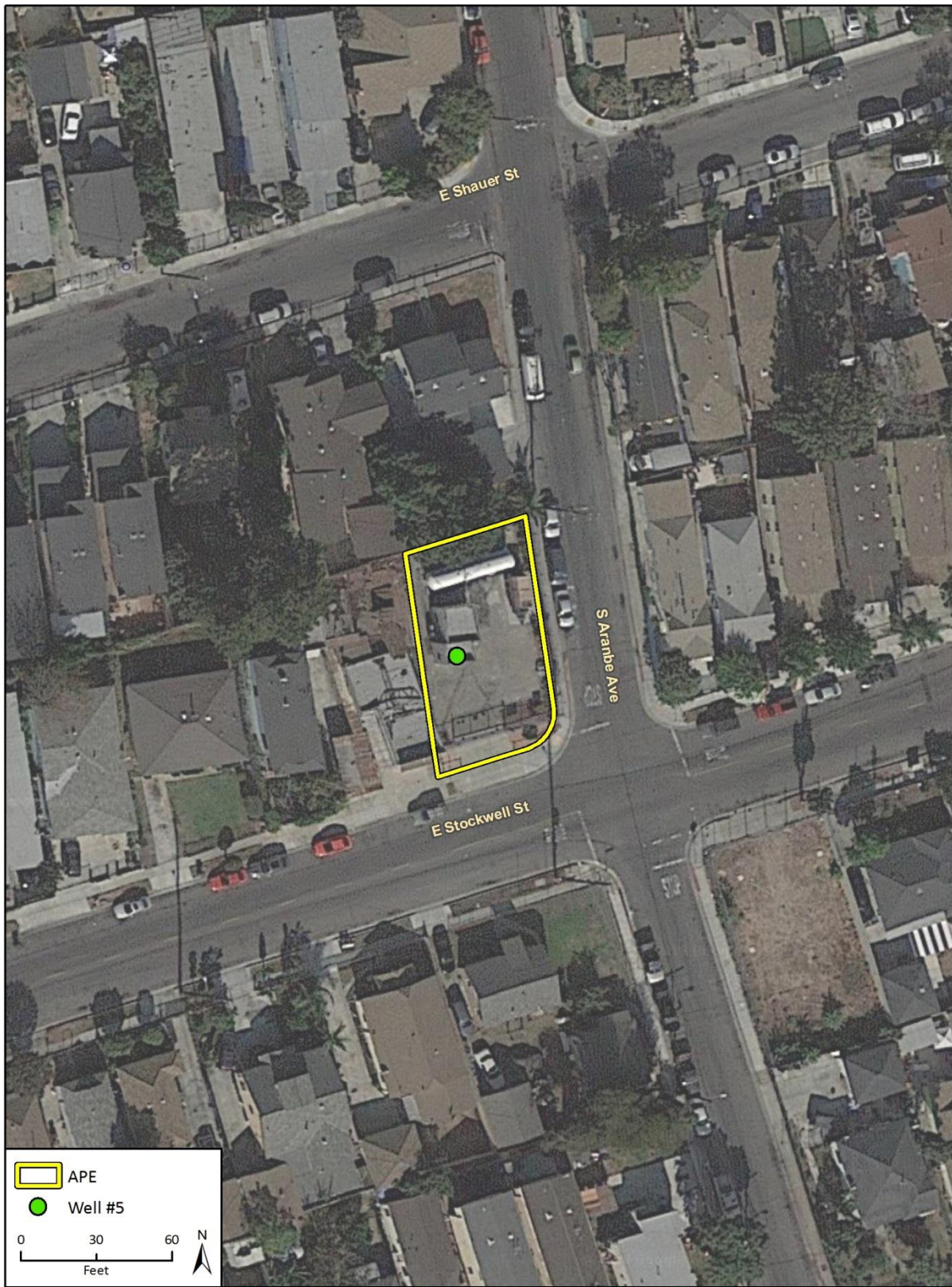


Imagery provided by National Geographic Society, Esri and its licensors © 2018. South Gate Quadrangle. T03S R13W S15. The topographic representation depicted in this map may not portray all of the features currently found in the vicinity today and/or features depicted in this map may have changed since the original topographic map was assembled.



©2018 Proj Location Map

Figure 2 APE Map



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Fig. 2 APE

1.4 Personnel

Rincon Archaeologist and Principal Investigator Tiffany Clark, PhD, Registered Professional Archaeologist (RPA) provided management oversight for this cultural resources study. Dr. Clark meets the Secretary of the Interior's Professional Qualifications Standards for prehistoric and historic archaeology (National Park Service [NPS] 1983). Archaeologist Meagan Szromba, MA, RPA assisted with the Native American outreach and is the primary author of this report (Appendix A). Archaeologist Breana Campbell-King, MA, RPA assisted with Native American outreach and is a contributing author of this report. Archaeologist Peter Pham performed the cultural resources records search and field survey. Architectural Historian Rachel Perzel conducted the local historic group consultation. Geographic Information Systems Analyst Allysen Valencia prepared the figures found in this report. Principal Jennifer Haddow, PhD, reviewed this report for quality control.

2 Regulatory Setting

This section includes a discussion of the applicable state and local laws, ordinances, regulations, and standards governing cultural resources that should be adhered to before and during implementation of the proposed project.

2.1 Federal Regulations

2.1.1 Cultural Resources

The proposed project is considered a federal undertaking due to the potential for federal funding and is subject to Section 106 of NHPA. Section 106 applies when a project, activity, or program is funded in whole or in part under the direct or indirect jurisdiction of a federal agency, including those carried out by or on behalf of a federal agency; those carried out with federal financial assistance; and those requiring a federal permit, license or approval. Cultural resources are considered during federal undertakings chiefly under Section 106 of NHPA of 1966 (as amended) through one of its implementing regulations, 36 CFR 800 (Protection of Historic Properties), as well as the National Environmental Policy Act. Properties of traditional, religious, and cultural importance to Native Americans are considered under Section 101 (d)(6)(A) of NHPA, and Section 106 36 CFR 800.3-800.10. Other federal laws include the Archaeological Data Preservation Act of 1974, the American Indian Religious Freedom Act of 1978, the Archaeological Resources Protection Act of 1979, and the Native American Graves Protection and Repatriation Act of 1989, among others.

Section 106 of NHPA (16 United States Code 470f) requires federal agencies to take into account the effects of their undertakings on historic properties and to afford the Advisory Council on Historic Preservation a reasonable opportunity to comment on such undertakings (36 CFR 800.1). Under Section 106, the significance of any adversely affected historic property is assessed and mitigation measures are proposed to reduce any impacts to an acceptable level. Historic properties are those significant cultural resources that are listed in or are eligible for listing in the National Register of Historic Places (NRHP) per the criteria listed below (36 CFR 60.4):

The quality of significance in American, state, and local history, architecture, archaeology, engineering, and culture is present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association and meet one or more of the following criteria:

- a. Are associated with events that have made a significant contribution to the broad patterns of our history
- b. Are associated with the lives of persons significant in our past
- c. Embody the distinctive characteristics of a type, period, or method of installation, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction
- d. Have yielded, or may be likely to yield, information important in prehistory or history

Ordinarily, cemeteries, birthplaces, or graves of historic figures; properties owned by religious institutions or used for religious purposes; structures that have been moved from their original locations; reconstructed historic buildings; and properties that are primarily commemorative in nature are not

considered eligible for the NRHP, unless they satisfy certain conditions. In general, a resource must be 50 years of age to be considered for the NRHP, unless it satisfies a standard of exceptional importance.

2.2 State Regulations

2.2.1 Cultural Resources

CEQA requires a lead agency to determine whether a project may have a significant effect on historical resources (Public Resources Code [PRC], Section 21084.1) or tribal cultural resources (PRC Section 21074[a][1][A]-[B]). A historical resource is a resource listed, or determined to be eligible for listing in the California Register of Historical Resources (CRHR); a resource included in a local register of historical resources; or an object, building, structure, site, area, place, record, or manuscript that a lead agency determines to be *historically significant* (State CEQA Guidelines, Section 15064.5[a][1-3]).

A resource shall be considered *historically significant* if it meets any of the following criteria:

- 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 to 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
- 4) Has yielded, or may be likely to yield, information important in prehistory or history

Generally, a cultural resource must be at least 50 years of age to be considered for listing on the CRHR. Resources that have achieved significance within the past 50 years may also be eligible for inclusion in the CRHR, provided that enough time has lapsed to obtain a scholarly perspective on the events or individuals associated with the resource (Office of Historic Preservation N.d.:3).

In addition, if it can be demonstrated that a project will cause damage to a *unique archaeological resource*, the lead agency may require reasonable efforts be made to permit any or all of these resources to be preserved in place or left in an undisturbed state. To the extent that resources cannot be left undisturbed, mitigation measures are required (PRC Section 21083.2[a], [b]).

PRC Section 21083.2(g) defines a *unique archaeological resource* as an 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:

- 1) Contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information
- 2) Has a special and particular quality such as being the oldest of its type or the best available example of its type
- 3) Is directly associated with a scientifically recognized important prehistoric or historic event or person

As of July 1, 2015, California Assembly Bill 52 (AB 52) was enacted and expands CEQA by defining a new resource category called *tribal cultural resources* (TCRs). AB 52 establishes that "a project with an effect that may cause a substantial adverse change in the significance of a TCR is a project that may have a significant effect on the environment" (PRC Section 21084.2). It further states that the lead agency shall establish measures to avoid impacts that would alter the significant characteristics of a TCR, when feasible (PRC Section 21084.3).

PRC Section 21074(a)(1)(A) and (B) defines TCRs 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:

- 1) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources, as defined in PRC Section 5020.1(k)
- 2) 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 5024.1. In applying these criteria, the lead agency shall consider the significance of the resource to a California Native American tribe

AB 52 also establishes a formal consultation process for California tribes regarding TCRs. The consultation process must be completed before a CEQA document can be certified. Under AB 52, lead agencies are required to “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 within the jurisdiction of the lead agency.

3 Setting

The APE lies within the Los Angeles Basin at an approximate elevation of 20 meters (66 feet) above mean sea level. None of the surrounding area retains its natural setting, with the APE located in a residential area characterized by a mix of single-family homes and apartment complexes. Vegetation within the vicinity of the APE consists of ornamental trees, including low ground cover and succulents, consistent with urban environmental settings. The area has been occupied continuously from prehistory through the present.

3.1 Prehistoric Setting

During the latter half of the twentieth century, many archaeologists developed chronological sequences to explain prehistoric cultural changes within all or portions of southern California (c.f., Moratto 1984; Jones and Klar 2007). Wallace (1955, 1978) devised a prehistoric chronology 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. Though initially lacking the chronological precision of absolute dates (Moratto 1984), Wallace's (1955) synthesis has been modified and improved using thousands of radiocarbon dates obtained by southern California researchers over recent decades (Koerper and Drover 1983; Koerper et al. 2002; Byrd and Raab 2007). The prehistoric chronological sequence for southern California presented below is a composite based on Wallace (1955, 1978) as well as later studies, including Koerper and Drover (1983).

3.1.1 Early Man Horizon (10,000 – 6000 BCE)

Numerous pre-8000 Before Common Era (BCE) sites have been identified along the mainland coast and Channel Islands of southern California (c.f., Moratto 1984; Erlandson 1991; Rick et al. 2001; Johnson et al. 2002; Jones and Klar 2007). The Arlington Springs site on Santa Rosa Island produced human femurs dated to approximately 13,000 years ago (Johnson et al. 2002; Arnold et al. 2004). On San Miguel Island, human occupation at Daisy Cave (CA-SMI-261) has been dated to nearly 13,000 years ago and included basketry greater than 12,000 years old, the earliest recorded on the Pacific Coast (Arnold et al. 2004).

Although few Clovis or Folsom style fluted points have been found in southern California (e.g., Erlandson et al. 1987; Dillon 2002), Early Man Horizon sites are generally associated with a greater emphasis on hunting than later horizons. Recent data indicate that the Early Man economy was a diverse mixture of hunting and gathering, including a significant focus on aquatic resources in coastal areas (e.g., Jones et al. 2002) and on inland Pleistocene lakeshores (Moratto 1984). A warm and dry 3,000-year period called the Altithermal began around 6000 BCE. The conditions of the Altithermal are likely responsible for the change in human subsistence patterns at this time, including a greater emphasis on plant foods and small game.

3.1.2 Milling Stone Horizon (6000 – 3000 BCE)

Wallace (1955:219) defined the Milling Stone Horizon as “marked by extensive use of milling stones and mullers, a general lack of well-made projectile points, and burials with rock cairns.” The dominance of such artifact types indicate a subsistence strategy oriented around collecting plant foods and small animals. A broad spectrum of food resources were consumed including small and large terrestrial mammals, sea mammals, birds, shellfish and other littoral and estuarine species, near-shore fishes, and seeds and other plant products (Kennett 2005). Variability in artifact collections over time and from the

coast to inland sites indicates that Milling Stone Horizon subsistence strategies adapted to environmental conditions (Jones 1996; Byrd and Raab 2007). Lithic artifacts associated with Milling Stone Horizon sites are dominated by locally available tool stone and in addition to ground stone tools such as manos and metates, chopping, scraping, and cutting tools are very common. The mortar and pestle, associated with acorns or other foods processed through pounding, were first used during the Milling Stone Horizon and increased dramatically in later periods (Wallace 1955, 1978; Jones 1996).

Two types of artifacts that are considered diagnostic of the Milling Stone period are the cogged stone and discoidal, most of which have been found within sites dating between 4000 and 1000 BCE (Moratto 1984), though possibly as far back as 5500 BCE (Couch et al. 2009). The cogged stone is a ground stone object that has gear-like teeth on the perimeter and is produced from a variety of materials. The function of cogged stones is unknown, though ritualistic or ceremonial uses have been postulated (Eberhart 1961). Similar to cogged stones, discoidals are found in the archaeological record subsequent to the introduction of the cogged stone. Cogged stones and discoidals were often purposefully buried, or “cached.” Cogged stones have been collected in Los Angeles County though their distribution appears to center on the Santa Ana River basin (Eberhart 1961).

3.1.3 Intermediate Horizon (3000 BCE – CE 500)

Wallace’s Intermediate Horizon dates from approximately 3000 BCE – Common Era (CE) 500 and is characterized by a shift toward a hunting and maritime subsistence strategy, as well as greater use of plant foods. During the Intermediate Horizon, a noticeable trend occurred towards a greater adaptation to local resources including a broad variety of fish, land mammals, and sea mammals along the coast. Tool kits for hunting, fishing, and processing food and materials reflect this increased diversity, with flake scrapers, drills, various projectile points, and shell fishhooks being manufactured.

Mortars and pestles became more common during this transitional period, gradually replacing manos and metates as the dominant milling equipment. This change in milling stone technology is believed to signal a transition from the processing and consumption of hard seed resources to the increased reliance on acorns (Jones 1996). Mortuary practices during the Intermediate typically included fully flexed burials oriented toward the west (Wallace 1955).

3.1.4 Late Prehistoric Horizon (CE 500 – Historic Contact)

During Wallace’s (1955, 1978) Late Prehistoric Horizon, the diversity of plant food resources and land and sea mammal hunting increased even further than during the Intermediate Horizon. More classes of artifacts were observed during this period and high quality exotic lithic materials were used for small, finely worked projectile points associated with the bow and arrow. Steatite containers were made for cooking and storage and an increased use of asphalt for waterproofing is noted. More artistic artifacts were recovered from Late Prehistoric sites and cremation became a common mortuary custom. Larger, more permanent villages supported an increased population size and social structure (Wallace 1955). This change in material culture, burial practices, and subsistence focus coincides with the westward migration of Uto-Aztecan language speakers from the Great Basin region to Los Angeles, Orange, and western Riverside counties (Sutton 2008; Potter and White 2009). This tradition manifested in the Los Angeles Basin and adjacent areas as the Angeles Pattern of the Del Rey Tradition, which ultimately led to the ethnographic Gabrieliño (Sutton 2008:36).

3.2 Ethnographic Context

The APE is located in the traditional territory of the Native American group known as the Gabrieliño, Tongva, or Kizh (Johnston 1962; Kroeber 1976:Plate 57; Bean and Smith 1978:538; McCawley 1996). What the Native Americans who inhabited southern California called themselves has long been a topic of

discussion among scholars and living descendants of these people (Johnston 1962; Dakin 1978; McCawley 1996). While the name Gabrieliño was applied by the Spanish to those natives that were associated with the Mission San Gabriel Arcángel (Bean and Smith 1978), that name does not necessarily correlate to how the inhabitants of the region referred to themselves. Today, most contemporary Gabrieliño prefer to identify themselves as Tongva, though some use the name Kizh. Generally, the names Tongva and Kizh are derivatives of placenames or village names in and around Mission San Gabriel, or referents to inhabitants of those villages. The name Tongva is used throughout the remainder of this report as it is currently most commonly used by present day descendants (McCawley 1996).

Tongva territory included a large area in and around Los Angeles County, as well as the southern Channel Islands and coastlines from Aliso Creek in the south to Topanga Creek in the north. Their territory encompassed several biotic zones, including coastal marsh, coastal strand, prairie, chaparral, oak woodland, and pine forest (Bean and Smith 1978; McCawley 1996). The watersheds of the Rio Hondo, the Los Angeles, and the Santa Ana rivers as well as many tributaries and creeks such as Ballona Creek, Tujunga Wash, Arroyo Seco and others were within the territory of the Tongva. The Tongva territory was bordered by several different Native American groups including the Serrano to the north and northeast, the Tataviam to the north, the Chumash to the northwest, the Cahuilla to the east, and the Luiseño and Juaneño to the south and southeast.

The Tongva language belongs to the Takic branch of the Uto-Aztecan language family (Campbell 2016), which can be traced to the Great Basin region. This language family includes dialects spoken by the nearby Juaneño and Luiseño, but is considerably different from those of the Chumash people living to the north and the Diegueño (including Ipai, Tipai, and Kumeyaay) people living to the south.

Tongva society was organized along patrilineal non-localized clans, a common Takic pattern. Each clan had a ceremonial leader and contained several lineages. The Tongva established permanent villages and smaller satellite camps throughout their territory. At the time of Spanish contact, there were an estimated 5,000 mainland Tongva, and village populations ranged from approximately 50 to 100 people (Bean and Smith 1978). Tongva subsistence was oriented around acorns supplemented by the roots, leaves, seeds, and fruits of a wide variety of plants and animals. Meat sources included large and small mammals, freshwater and saltwater fish, shellfish, birds, reptiles, and insects (Kroeber 1976; Bean and Smith 1978; McCawley 1996; Langenwalter et al. 2001).

The Tongva employed a wide variety of tools and implements to gather and hunt food. The digging stick, used to extract roots and tubers, was frequently noted by early European explorers (Rawls 1984). Other tools included the bow and arrow, traps, nets, blinds, throwing sticks and slings, spears, harpoons, and hooks. Like the Chumash, the Tongva made oceangoing plank canoes (known as a *ti'at*) capable of holding 6 to 14 people used for fishing, travel, and trade between the mainland and the Channel Islands. Tule reed canoes were employed for near-shore fishing (Miller 1991; McCawley 1996).

The Tongva lived in circular domed structures made up of thatched tule covering a frame of wooden poles usually of willow. Size estimates vary for these houses, and very few have been identified in archaeological contexts; however, some are said to have been able to house up to 50 people (Bean and Smith 1978). In cases where houses have been identified and recovered archaeologically, extramural features such as hearths and storage pits have been identified (Vargas et al. 2016).

Chinigchinich, the last in a series of heroic mythological figures, was central to Tongva religious life at the time of Spanish contact (Kroeber 1976). The belief in Chinigchinich was spreading south among other Takic-speaking groups at the same time the Spanish were establishing Christian missions. Elements of Chinigchinich beliefs suggest it was a syncretic mixture of Christianity and native religious practices (McCawley 1996). Prior to European contact, deceased Tongva were either buried or cremated, with burial more common on the Channel Islands and the adjacent mainland coast and cremation on the remainder of the coast and in the interior (Harrington 1942; McCawley 1996). However, after pressure

from Spanish missionaries, cremation essentially ceased during the post-contact period (McCawley 1996).

3.3 History

The post-contact history of California is generally divided into three time spans: the Spanish period (1769 – 1821), the Mexican period (1821 – 1848), and the American period (1848 – present). Each of these periods is briefly described below.

3.3.1 Spanish Period (1769 – 1821)

Spanish exploration of California began when Juan Rodriguez Cabrillo led the first European expedition into the region in 1542. For more than 200 years after his initial expedition, Spanish, Portuguese, British, and Russian explorers sailed the California coast and made limited inland expeditions, but they did not establish permanent settlements (Bean 1968; Rolle 1987). In 1769, Gaspar de Portolá and Franciscan Father Junipero Serra established the first Spanish settlement in what was then known as Alta (upper) California at Mission San Diego de Alcalá. This was the first of 21 missions erected by the Spanish between 1769 and 1823. It was during this time that initial Spanish settlement of the project vicinity began.

Mission San Gabriel, approximately 20 miles to the northeast of the project APE, was first founded in 1771, and was the fourth mission to be established in California (California Missions Foundation, N.d.). In 1775 the mission was moved approximately three miles to its present location to improve conditions for planting and cultivating crops. Mission San Gabriel became one of the most productive and affluent missions in Alta California, providing support for surrounding missions (California Missions Foundation, N.d.).

3.3.2 Mexican Period (1821 – 1848)

The Mexican Period commenced when news of the success of the Mexican War of Independence (1810 – 1821) against the Spanish crown reached California in 1822. This period saw the privatization of mission lands in California with the passage of the Secularization Act of 1833. This act federalized mission lands and enabled Mexican governors in California to distribute former mission lands to individuals in the form of land grants. Successive Mexican governors made approximately 700 land grants between 1833 and 1846 (Shumway 2007), putting most of the state's lands into private ownership for the first time. During this era, a class of wealthy landowners known as *rancheros* worked large ranches based on cattle hide and tallow production.

The beginnings of a profitable trade in cattle hide and tallow exports opened the way for larger, commercially driven farms. Land grants owned by the Spanish crown and clergy were distributed to mostly Mexican settlers born in California, or the “Californios.” While this shift marked the beginning of the *rancho* system that would “dominate California life for nearly half a century” (Poole 2002:13), the rural character of emerging cities in and around Los Angeles remained intact. *Ranchos* were largely self-sufficient enterprises (partly out of necessity, given California's geographic isolation), producing goods to maintain their households and operations.

In 1846, the Mexican-American War was initiated following the annexation of Texas by the United States and a dispute over the boundary of the state between the U.S. and Mexico. Governor Pío de Jesus Pico, the last governor of Alta California, began selling off 12 million acres of public land to financially support the war (Los Angeles Almanac 2018a). Mexican forces fought and lost to combined U.S. Army and Navy forces in the Battle of the San Gabriel River on January 8 and in the Battle of La Mesa on January 9 (Nevin 1978). On January 10, leaders of the pueblo of Los Angeles surrendered peacefully after Mexican General Jose Maria Flores withdrew his forces. Shortly thereafter, newly appointed Mexican Military Commander

of California Andrés Pico surrendered all of Alta California to U.S. Army Lieutenant Colonel John C. Fremont in the Treaty of Cahuenga (Nevin 1978).

3.3.3 American Period (1848 – Present)

The Mexican Period officially ended in early January 1848 with the signing of the Treaty of Guadalupe Hidalgo, formally concluding the Mexican-American War. Per the treaty, the United States agreed to pay Mexico \$15 million for conquered territory, including California, Nevada, Utah, and parts of Colorado, Arizona, New Mexico, and Wyoming. California gained statehood in 1850, and this political shift set in motion a variety of factors that began to erode the rancho system. Given the size of their holdings, the initiation of property taxes proved onerous for many southern California ranchers. In addition, the creation of the U.S. Land Commission in 1851 required that property owners prove the validity of their property titles, many of which had been granted relatively informally and without the benefit of formal survey. Ranchers often paid for legal debts with portions—or all—of their ranchos. During this period, 40 percent of rancho-held lands in the County of Los Angeles passed to the U.S. government. The large-scale rancho system also suffered greatly from the 1860s droughts, which decimated the cattle industry upon which southern Californian ranchers depended.

In 1848, the discovery of gold in northern California led to the California Gold Rush, though the first gold was found in 1842 in San Francisquito, about 35 miles northwest of Los Angeles (Workman 1935:107; Guinn 1976). The Gold Rush significantly transformed northern California and also contributed to an exponential increase in California's population overall. During this time, San Francisco became California's first true city, growing from a population of 812 to 25,000 in only a few years (Rolle 1987). By 1853, the population of California exceeded 300,000. Thousands of settlers and immigrants continued to immigrate to the state, particularly after the completion of the First Transcontinental Railroad in 1869.

In the 1880s, a dramatic boom arrived in southern California, fueled by various factors including increasingly accessible rail travel, agricultural development, and favorable advertisement (Dumke 1994). In 1883, the California Immigration Commission designed an advertisement declaring the state as “the Cornucopia of the World” (Poole 2002:36). New southern Californian towns were promoted as havens for good health and economic opportunity. Between 1880 and 1890, the population of Los Angeles expanded fivefold, from approximately 11,000 to 50,000 (Los Angeles Almanac 2018b). Following the collapse of the real estate market in 1888, economic stagnancy lasted through the mid-1890s in the region. Despite the economic downturn however, the industrial and commercial transformation of the region was well entrenched.

4 Background Research

4.1 Cultural Resources Records Search

On August 8, 2018, Rincon conducted a search of the California Historical Resources Information System at the South Central Coastal Information Center (SCCIC) located at California State University, Fullerton. The search was conducted to identify any previously recorded cultural resources and previously conducted cultural resources studies within the APE and a 0.5-mile radius surrounding it. The records search included a review of the NRHP, the CRHR, and the Historic Resources Inventory. The records search also included a review of all available historic maps and aerial photographs (Appendix B).

The SCCIC records search identified one previously recorded cultural resource within a 0.5-mile radius of the APE, listed in Table 1.

Table 1 Previously Recorded Cultural Resources within 0.5 mile of APE

Primary Number	Resource Type	Description	Recorder(s) and Year(s)	NRHP/CRHR Eligibility Status	Relationship to APE
P-19-187545	Historic building	Second Benevolent Baptist Church	C. Taniguchi 2004	Not eligible for NRHP; not evaluated for CRHR	Outside

NRHP: National Register of Historic Places; CRHR: California Register of Historical Resources; APE: Area of Potential Effects

Source: South Central Coastal Information Center 2018

The SCCIC records search also identified five previously conducted cultural resources studies within a 0.5-mile radius of the APE, listed in Table 2. None of these prior cultural resource studies encompassed the APE.

Table 2 Previously Conducted Cultural Resources Studies within 0.5 mile of APE

Report Number	Author(s)	Year	Title	Relationship to APE
LA-00444	Ryan, Thomas M.	1976	<i>Archaeological Reconnaissance Report of Gabrielino Trail</i>	Outside
LA-04542	Maki, Mary K.	1999	<i>Negative Phase I Archaeological Survey and Impact Assessment of 0.42 Acres for the 2010 El Segundo Boulevard Project, Los Angeles County, California</i>	Outside

Report Number	Author(s)	Year	Title	Relationship to APE
LA-07648	Taniguchi, Christeen	2004	<i>Historic Architectural Survey and Section 106 Compliance for a Proposed Wireless Telecommunications Service Facility Located on a Monopine at 2237 East El Segundo Boulevard in the Community of Willowbrook (Los Angeles County), California</i>	Outside
LA-10045	Maki, Mary K.	2004	<i>CDC-Mason Court Construction Project</i>	Outside
LA-10624	Maki, Mary K.	2010	<i>LACDC Willowbrook Senior Housing Project, Los Angeles County</i>	Outside

APE: Area of Potential Effects

Source: South Central Coastal Information Center 2018

4.1.1 Historic Imagery Review

A review of historical aerial photographs (NETRonline 2018) determined that prior to at least 1980, the APE was completely undeveloped. Thus, all of the structures within the APE are less than 50 years old and do not require management consideration as potential historic properties under NHPA or historical resources under CEQA.

4.2 Native American Outreach

Rincon assisted WRD in fulfilling its Native American consultation efforts as part of the Section 106 process. Towards this end, Rincon contacted the Native American Heritage Commission (NAHC) on August 7, 2018 to request a Sacred Lands File (SLF) search of the APE and a 0.5-mile radius surrounding it. As part of this request, Rincon asked the NAHC to provide a list of Native American groups and/or individuals culturally affiliated with the area who may have knowledge of cultural resources within the APE. Rincon sent anticipatory letters to known Native American contacts on August 10, 2018. The NAHC responded on August 13, 2018 stating that the results of the SLF search were negative. Rincon sent letters to the NAHC-listed contacts on August 24, 2018 and followed up with contacts by telephone on September 4 and September 18, 2018 (Appendix C).

On August 16, 2018, Brandy Salas, on behalf of the Gabrieleño Band of Mission Indians – Kizh Nation, responded stating that if there were to be any ground disturbance for the project, the tribe would like to consult. Rincon assumes that WRD will be responsible for continued consultation with the Kizh Nation under Section 106 guidelines.

On September 4, 2018, Chairperson Anthony Morales for the Gabrielino/Tongva San Gabriel Band of Mission Indians stated that he has concerns for the project given the general sensitivity of the area and proximity to nearby waterways that may have supported prehistoric populations. If discoveries are made during execution of the project, he has requested additional consultation and potential monitoring and/or spot checking.

On September 4, 2018, Jairo Avilla, on behalf of the Fernandeño Tataviam Band of Mission Indians, stated that the project was outside of the tribe’s territory and they would defer to the Gabrieleno for the project.

On September 4, 2018, Patrick Tumamait of the Barbareño/Ventureño Band of Mission Indians stated that he did not have any concerns for the project, as it is outside of his area, and asked that local tribes be notified of the project.

On September 4, 2018, Robert Robinson of the Kern Valley Indian Community stated that the project was outside of his tribal territory.

On September 4, 2018, Joseph Ontiveros of the Soboba Band of Luiseno Indians stated that the project was outside of the tribe's territory and deferred to the San Gabriel Band of Mission Indians.

On September 5, 2018, Jessica Mauck, on behalf of the San Manuel Band of Mission Indians, responded stating that she did not receive correspondence of the project, and asked that a project location map be sent to her to determine if the APE was outside of the tribe's territory. Rincon sent her a map the same day, and Ms. Mauck responded by confirming that the APE was well outside of the tribe's territory.

On September 5, 2018, Eleanor Arrellanes of the Barbareño/Ventureño Band of Mission Indians responded stating that the project is outside of her tribal territory.

On September 18, 2018, Chairperson Robert Dorame for the Gabrielino Tongva Indians of California Tribal Council stated that in the event of any discoveries during the project, he would like to be notified. He additionally asked to be contacted if any human remains are identified during the project, if he is not named the Most Likely Descendant by the NAHC.

On September 18, 2018, Rincon spoke with the assistant to Chairperson Kenneth Kahn of the Santa Ynez Band of Chumash Indians who stated that the project details were forwarded to the tribe's cultural resources department, and because they did not respond, they have no comments on the project.

On September 19, 2018, Chairperson Julie Tumamait-Stenslie of the Barbareño/Ventureño Band of Mission Indians stated that she would defer to local tribes for the project.

Rincon did not receive any additional responses from Native American contacts. Rincon assumes that the lead agency, WRD, conducted or will conduct AB 52 consultation with interested Native Americans as a separate effort, if applicable.

4.3 Local Historic Consultation

On August 10, 2018, Rincon contacted three local historic groups to request input on potential or known historic resources within the APE or vicinity. These groups include: the Los Angeles County Department of Regional Planning, the Los Angeles Conservancy, and the Hawthorne Historical Society. Rincon followed up with these groups by telephone and email on August 23 and September 19, 2018 (Appendix D).

On August 23, 2018, Dean Edwards of the Los Angeles County Department of Regional Planning responded stating he has no concerns for the project.

Rincon did not receive any additional responses from local historic groups.

5 Field Survey

5.1 Methods

On August 9, 2018, Rincon performed a pedestrian field survey of the APE. During the field survey, Rincon examined all exposed ground surfaces for artifacts (e.g., flaked stone tools, tool-making debris, stone milling tools, ceramics, fire-affected rock), ecofacts (marine shell and bone), soil discoloration that might indicate the presence of a cultural midden, soil depressions, and features indicative of the former presence of structures or buildings (e.g., standing exterior walls, postholes, foundations) or historic debris (e.g., metal, glass, ceramics). Ground disturbances such as burrows and drainages were also visually inspected. Transect spacing throughout the survey was no less than 15 meters.

5.2 Results

The APE is mostly developed with infrastructure, including water storage tanks and utility and office buildings; areas without standing buildings or structures appear to have been graded or paved (Figure 3). Given the level of development within the APE, visibility of the ground surfaces throughout the survey area was minimal, at approximately 5 percent. No cultural resources were identified within the APE during the field survey.

Figure 3 Representative View of APE



6 Findings and Recommendations

The results of the cultural resources records search, Native American outreach, local historic group consultation, and field survey did not identify any prehistoric or historic cultural resources within the APE. According to historical aerial photographs, the APE was undeveloped prior to at least 1980 (NETRonline 2018). Thus, none of the standing buildings or structures on the property are eligible for consideration as historic properties under NHPA or historical resources per CEQA and require no further management.

Based on the results of this cultural resources assessment report, Rincon recommends a finding of ***no effect to historic properties*** under Section 106 of NHPA and ***no impact to historical resources*** under CEQA. No further cultural resources work is recommended for the current project.

Rincon recommends measures in case of unanticipated discoveries of cultural resources or human remains during execution of the current project scope.

Unanticipated Discovery of Cultural Resources

If cultural resources are encountered during ground-disturbing activities, work in the immediate area must halt and an archaeologist meeting the Secretary of the Interior's Professional Qualifications Standards for archaeology (NPS 1983) should be contacted immediately to evaluate the find. If the discovery proves to be significant under NHPA and/or CEQA, additional work such as data recovery excavation and Native American consultation may be warranted to mitigate any significant impacts.

Unanticipated Discovery of Human Remains

The discovery of human remains is always a possibility during ground disturbing activities. If human remains are found, the State of California Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the 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 must be notified immediately. If the human remains are determined to be prehistoric, the Coroner will notify the NAHC, which will determine and notify a most likely descendant (MLD). The MLD has 48 hours to make recommendations for the disposition of the remains. The MLD has 48 hours from being granted site access to make recommendations for the disposition of the remains. If the MLD does not make recommendations within 48 hours, the land owner shall reinter the remains in an area of the property secure from subsequent disturbance.

7 References

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Appendix A

Resumes



Meagan Szromba, MA, RPA

ARCHAEOLOGIST – PROJECT MANAGER

Meagan Szromba is an archaeologist and project manager with extensive experience conducting cultural resources studies in California. She has performed a full range of archaeological and historical studies in support of the California Environmental Quality Act and Section 106 of the National Historic Preservation Act. Ms. Szromba has a Master's Degree in Public Archaeology, and has specialized training and experience conducting archaeological technical studies including excavation, mitigation and data recovery, site documentation, site evaluations, monitoring, and surveys.

EDUCATION

MA, Public Archaeology,
California State University,
Northridge, 2016

BA, Anthropology, California
State University, Long Beach,
2013

REGISTRATIONS

Registered Professional
Archaeologist, ID#: 41783154

EXPERIENCE

Rincon Consultants, Inc. (2015
through present)

Totah Archaeological Project
(2014 through 2015)

Anthropological Research
Institute (2015)

Autry National Center (2014)

Los Angeles County
Department of Parks and
Recreation (2014)

William S. Hart Museum (2012
through 2014)

PROJECT EXPERIENCE

- Heritage Recovery and Archaeological Excavation for the Paradise Cove Project, Malibu, California (2018) – Client: The Kissel Company, Inc.
- Archaeological Survey Report for the Olive Mill Road Interchange Project, Santa Barbara, California (2018) – Client: City of Santa Barbara
- Archaeological Survey Report for the San Ysidro Road Interchange Project, Santa Barbara, California (2018) – Client: County of Santa Barbara
- Cultural Resources Evaluation for the Ortega Hill Road Geotechnical Investigation, Summerland, California (2018) – Client: SoCalGas
- Cultural Resources Study for the Ararat Homes Project, Los Angeles, California (2018) – Client: Ararat Homes of Los Angeles
- Phase I Cultural Resources Study for the 600 South San Gabriel Project, San Gabriel, California (2018) – Client: City of San Gabriel
- Archaeological Study and Environmental Impact Report for the Walnut Ridge Specific Plan Project, Walnut, California (2018) – Client: City of Walnut
- Archaeological Technical Analysis for the Cochran Street Senior Living and Memory Care Project, Simi Valley, California (2018) – Client: JM Squared Development/Lauterbach and Associates Architects, Inc.
- Extended Phase I/Phase II Archaeological Testing for the Hollister Avenue – State Street Improvements Project, Goleta, California (2018) – Client: County of Santa Barbara
- Monitoring Mitigation Compliance Report for the Gaskell West Solar Project, Neenach, California (2018) – Client: Recurrent Energy
- Cultural Resources Technical Study for the Select by LaTerra Mixed Use Project, Burbank, California (2017) – Client: City of Burbank
- Cultural Resources Analysis for the Shen Residence Project, Rolling Hills, California (2017) – Client: Meyers Nave
- Archaeological Site Update and Mitigation Recommendations for the Gaviota State Park Valve Automation Project, Gaviota State Park, California (2017) – Client: SoCalGas
- Archaeological Resources Technical Study for the Lancaster Warehouse Project, Lancaster, California (2017) – Client: M.M.M. Maxwell Engineering



- Phase I Archaeological Resources Investigation for the Thacher School Dining Hall Project, Ojai, California (2017) – Client: Thacher School
- Cultural Resources Technical Study for the 650 Tank Farm Road Project, San Luis Obispo, California (2017) – Client: City of San Luis Obispo
- Cultural Resources Constraints Analysis for the Foxen Canyon Parcel Project, Los Olivos, California (2017) – Client: Thomas J. Motherway
- Cultural Resources Analysis for the Maywood Mutual No. 2 Water System Construction Project, Maywood, California (2017) – Client: KEH & Associates
- Cultural Resources Technical Study for the United Water Conservation District Recycled Water Pipelines Project, Oxnard, California (2017) – Client: United Water Conservation District
- Cultural Resources Investigation for the Palos Verdes Recycled Water Pipelines Project, Palos Verdes Estates and Torrance, California (2017) – Client: MNS Engineers
- Phase I Archaeological Resources Evaluation for the Wright Property Remodel Project, Pismo Beach, California (2017) – Client: Ernie Kim Architects
- Cultural Resources Technical Study for the Clover Energy Storage and Generation Tie-in Line Project, Lancaster, California (2017) – Client: 8minutenergy
- Archaeological Site Testing, Excavation, and Mitigation Planning for the Goleta Extended Phase I Project, Goleta, California (2017) – Client: SoCal Gas
- Cultural Resources Investigation for the Civic Center Way Improvements Project, Malibu, California (2017) – Client: Kimley-Horn
- Archaeological Study for the Dockweiler Residential Development Project, Santa Clarita, California (2017) – Client: Trevion Investments, LLC
- Historic Properties Survey Report Package for the Moorpark Road North Sidewalk and Bike Lane Improvements Project, Thousand Oaks, California (2017) – Client: City of Thousand Oaks Public Works Department
- Phase I Archaeological Resources Analysis for the 3720 Broad Street Project, San Luis Obispo, California (2017) – Client: People’s Self-Help Housing
- Archaeological Study for the Faith Lutheran Church Project, Carpinteria, California (2017) – Client: Faith Lutheran Church
- Archaeological Survey Report and Historic Properties Survey Report for the Yerba Buena Road Guardrails Project, Ventura County, California (2017) – Client: Caltrans
- Cultural Resources Technical Study for the Farms at Malibu Valley Project, Calabasas, California (2017) – Client: Farms at Malibu Valley
- Archaeological Resources Technical Study for the 751 West Los Angeles Avenue Project, Simi Valley, California (2017) – Client: Brack Manufacturing

PROJECT EXPERIENCE, CONT'D

- Archaeological Testing and Excavation for the Templeton to Atascadero Connector Project, Atascadero, California (2016) – Client: Caltrans
- Archaeological Reconnaissance for the Puerco Canyon Project, Malibu, California (2016) – Client: Weintraub Real Estate Group
- Phase I Cultural Resources Study for the Belridge and Berranda Mesa Project, Kern County, California (2016) – Client: SolarCity



- Archaeological Resources Technical Evaluation for the Artesia Live II Project, Artesia, California (2016) – Client: Willdan Engineering
- Cultural Resources Technical Study for the Westpark Community Center Improvements Project, Ventura, California (2016) – Client: City of Ventura
- Archaeological Survey Report for the Cabrillo Boulevard Rail Bridge Replacement Project, Santa Barbara, California (2016) – Client: TY Lin
- Protection Plan for the Old Ridge Route for the Line 2000 Anomaly 7 Repair Project, Angeles National Forest, California (2016) – Client: USDA Forest Service
- Update to County Guidelines for Archaeological Sensitivity Determinations and Permitting Requirements, Ventura, California (2016) – Client: County of Ventura
- Cultural Resources Technical Study for the San Jose State University Science Building Project, San Jose, California (2016) – Client: San Jose State University
- Phase II Archaeological Testing Services for the Orcutt Area Specific Plan Project, San Luis Obispo, California (2016) – Client: Ambient Communities LLC
- Phase II Archaeological Testing and Evaluation of the San Luis Ranch Complex, San Luis Obispo, California (2016) – Client: City of San Luis Obispo
- Cultural Resources Impact Assessment for the Coptic Orthodox Church Project, Chino Hills, California (2016) – Client: City of Chino Hills
- Cultural Resources Evaluation for the Lupe’s Mixed Use Project, Thousand Oaks, California (2016) – Client: Daly Group Inc.
- Cultural Resources Study for the Roosevelt Walker Community Center, Santa Ana, California (2016) – Client: City of Santa Ana
- Archaeological Study for the Shaver Lake Boat Launch Facility Site Improvements Project, Shaver Lake, California (2016) – Client: Blair, Church & Flynn Consulting Engineers, Inc.
- Archaeological Resources Evaluation for the Pothole Trailhead Parking Project, Lake Piru, California (2016) – Client: United Water Conservation District
- Cultural Resources Study for the Avalon Homes Project, Oxnard, California (2016) – Client: City of Oxnard
- Emergency Evaluation and Cultural Resources Mitigation Planning for the Hall Canyon Oil Spill Response, Ventura, California (2016) – Client: Crimson Pipeline
- Archaeological Evaluation for the Vista Pacifica Project, Oxnard, California (2016) – Client: City of Oxnard Housing Department
- Cultural Resources Evaluation for the Cherry Canyon Unauthorized Trail Project, La Cañada Flintridge, California (2016) – Client: City of La Cañada Flintridge
- Cultural Resources Evaluation for the Padres Trail Desilting Basin Project, La Cañada Flintridge, California (2016) – Client: City of La Cañada Flintridge
- Cultural Resources Investigation for the Widening of Willow Avenue Project, Clovis, California (2016) – Client: Blair, Church & Flynn Consulting Engineers, Inc.



EDUCATION

Ph.D., Anthropology, Arizona State University, Tempe 2003
M.A., Anthropology (emphasis Bioarchaeology), Arizona State University, Tempe 1997
B.A., Biology, Occidental College, 1992

CERTIFICATIONS/REGISTRATIONS

Register of Professional Archaeologists (ID#989197)
California BLM Permit, Principal Investigator, Statewide

EXPERIENCE

Rincon Consultants, Inc. (April 2018 – present)
Applied EarthWorks, Inc. (2013-April 2018)
Sapphos Environmental (2011-2013)
Cotsen Institute of Archaeology, University of California, Los Angeles (2008-2009)
Desert Archaeology, Inc. (2000-2007)

Tiffany C. Clark, PhD, RPA

SENIOR ARCHAEOLOGIST/PRINCIPAL INVESTIGATOR

Tiffany Clark is a Senior Archaeologist/Project Manager with Rincon Consultants. She has over 20 years of experience in cultural resource management in California, Arizona, and New Mexico. Her professional experience includes all phases of survey, excavation, laboratory analysis, research design, report preparation, construction monitoring, Native American consultation, and project management. She has prepared numerous technical reports and environmental documents for compliance with the National Environmental Policy Act (NEPA), California Environmental Quality Act (CEQA), and Section 106 and 110 of the National Historic Preservation Act (NHPA). Dr. Clark is a member of the Register of Professional Archaeologists and exceeds the Secretary of Interior's Professional Qualifications Standards in Archaeology.

DETAILED PROJECT EXPERIENCE

Coachella Valley Water District Groundwater Replenishment Project, City of Palm Desert, Riverside County. Role: Project Archaeologist. Rincon was contracted by the Coachella Valley Water District to provide cultural and paleontological services per the project's Mitigation and Monitoring Program. Dr. Clark was responsible for supervising the preparation of an archaeological monitoring plan, archaeological sensitivity training, and archaeological spot checking for the Phase 1 portion of the project.

Coachella Valley Water District, Westside School Water Consolidation Project, Thermal, Riverside County. Role: Principal Investigator. The Coachella Valley Water District is proposing the construction and installation of an extension of a domestic water mainline located near the Westside School in the community of Thermal. Rincon was contracted to conduct a cultural resource assessment for the project. Dr. Clark was responsible for supervising the record search, Native American outreach, pedestrian survey, and preparation of a technical report.

San Bernardino County Distribution System Infrastructure Protection Program for the Metropolitan Water District, San Bernardino County. Role: Senior Archaeologist. Supervised an archaeological assessment for the Project that included literature review and record searches, a Phase I survey, and preparation of a technical report and mitigation measures for the Metropolitan Water District water distribution infrastructure project.

Orange County Distribution System Infrastructure Protection Program for the Metropolitan Water District, Orange, Riverside, and San Bernardino Counties. Role: Senior Archaeologist. Supervised an archaeological assessment for the Project that included literature review and record searches, a Phase I survey, Phase II testing, and preparation of a technical report and mitigation measures for the Metropolitan Water District water distribution infrastructure project.

Sycamore Canyon Business Park Buildings 1 and 2, Riverside County. Role: Principal Investigator and Project Manager. Supervised a Phase I survey and Phase II evaluation study in support of a proposed warehouse development in the City of Riverside. Work



PROJECT EXPERIENCE, CONT'D

efforts involved the significance evaluation of three prehistoric bedrock milling sites located within the Project area, development and implementation of a focused cultural landscape study, preparation of an archaeological monitoring plan, 3-dimensional modeling of bedrock milling features, and a protein residue study. The Project was conducted in compliance with CEQA and Section 106 of the NHPA.

Sidewalk Improvement Project, City of Riverside, Riverside County, California. Role: Principal Investigator. The City of Riverside, in conjunction with the Caltrans District 8, proposed sidewalk improvements in three residential areas within the City of Riverside. Dr. Clark supervised cultural resource records searches and literature reviews; archival research; reconnaissance surveys; Native American consultation and coordination; coordination with local and federal agencies; and preparation of Area of Potential Effect Maps, Archaeological Survey Report, and Historic Properties Survey Report. The Project was conducted in compliance with CEQA and Section 106 of the NHPA.

City of Pasadena Water and Power, Azusa Hydroelectric Project, City of Azusa, Los Angeles County. Role: Principal Investigator and Project Manager. Responsible for conducting cultural resources studies in support of a conduit exemption application with the Federal Energy Regulatory Commission. Dr. Clark coordinated with the USDA Forest Service to delineate the Project's Area of Potential Effect and supervised archaeological and historical background research, communication with Native American tribal representatives, a pedestrian survey of the APE, documentation of identified cultural resources, and significance evaluations of cultural resources associated with the Azusa Conduit.

ADDITIONAL PROJECT EXPERIENCE

TECHNICAL STUDIES

- City of Coachella and California Department of Transportation, District 8 – State Route 86/Avenue 50 New Interchange Project, City of Coachella, Riverside County
- California Department of Transportation, Interstate-10 Corridor Project, Los Angeles and San Bernardino Counties
- City of Los Angeles Department of Public Works and Bureau of Engineering – Sixth Street Park, Arts, River & Connectivity Improvements Project, City of Los Angeles, Los Angeles County
- California Army National Guard – Los Alamitos Joint Forces Training Base Buried Site Testing Program, Orange County
- Terra Verde Group – Tapestry Specific Plan Project, City of Hesperia, San Bernardino County, Environmental Document CEQA Assistance Open Services, Santa Barbara County Air Pollution Control District
- California Energy Commission – Amended Carlsbad Energy Center Project, City of Carlsbad, San Diego County
- San Bernardino County Transportation Authority (SBCTA), Interstate 10 Eastbound Truck Climbing Lane Improvement Project, San Bernardino and Riverside Counties
- Interstate-10 Corridor Project, Los Angeles and San Bernardino Counties
- Los Angeles International Airport Runway 6L-24R Safety Area and Associated Improvements Project, Los Angeles County
- San Bernardino County Transportation Authority, Interstate 215 / University Parkway Interchange Project, City of San Bernardino, San Bernardino County
- California Department of Conservation – Analysis of Oil and Gas Well Stimulation Treatments in California Environmental Impact Report, California (Statewide)



Appendix B

Records Search Results



CHRIS Information Center Records Search Data Sheet

Project Name: 18-05729 Sativa Well #5

Project Number: 18-05729 Date: 8-8-18

Information Center: Fullerton

Search Radius: Half Mile: One Mile: Other:

USGS Quadrangle: Southgate

Public Land Survey System (PLSS): Township: 03S Range: 13W Section: 19, 15, 16, 22

County: Los Angeles

Previously Recorded Sites: P-19-187545

P-19-187545

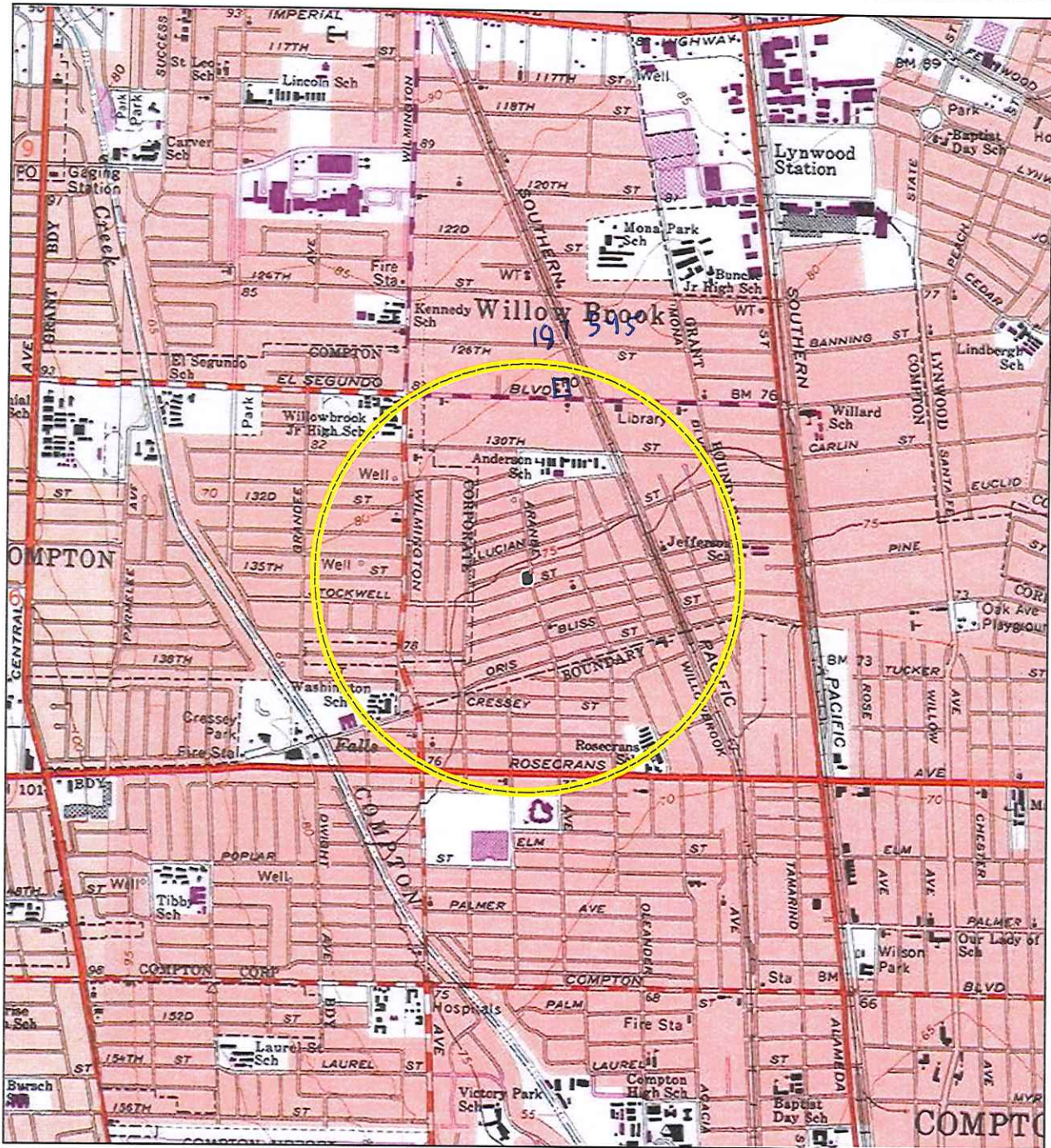
Previous Studies: LA-00444, LA-04542, LA-07648

LA-10045, LA-10624



National Register of Historic Places:	Copies:	Y	N
California Register of Historical Resources:	Copies:	Y	N
California Points of Historical Interest:	Copies:	Y	N
California Historical Landmarks List:	Copies:	Y	N
Archaeological Determinations of Eligibility:	Copies:	Y	N
California Historical Resources Inventory:	Copies:	Y	N

Historic Maps: Compton 1903

Notes:



Imagery provided by National Geographic Society, ESRI and its licensors © 2018. South Gate Quadrangle. T03S R13W S10,15,16,22. The topographic representation depicted in this map may not portray all of the features currently found in the vicinity today and/or features depicted in this map may have changed since the original topographic map was assembled.

 Half Mile Buffer
 Area of Potential Effects



0 1,000 2,000 Feet

0 250 500 Meters

1:24,000

Handwritten signatures and scribbles in blue ink.

Records Search Map

Resource List

Primary No.	Trinomial	Other IDs	Type	Age	Attribute codes	Recorded by	Reports
P-19-187545		Resource Name - 2nd Benelovent Baptist Church	Building	Historic	HP16 (Religious building)	2004 (C. Taniguchi, Galvin & Associates)	LA-07648, LA-10624

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
PRIMARY RECORD

Primary #
HRI #
Trinomial
CHR Status Code

19-187545

Other Listings
Review Code

Reviewer

Date

Page 1 of 12

*Resource Name or #: 2237 E. El Segundo Blvd.; Los Angeles, CA 90222

P1. Other Identifier:

*P2. Location: Not for Publication Unrestricted
and

*a. County: Los Angeles

*b. USGS 7.5' Quad: Inglewood, CA Date:

T. ;R. ; ¼ of ¼ of Sec unsectioned; S. B. B.M.

c. Address: 2237 East El Segundo Boulevard City: Inglewood

Zip: 90302

d. UTM: Zone: ; mE/ mN (G.P.S.)

e. Other Locational Data: APN: 6152-003-012

Elevation:

***P3a. Description:**

The subject property is located at 2237 E. El Segundo Boulevard in Willowbrook, Los Angeles County. It includes two buildings located at the north side of East El Segundo Boulevard, just west of Willowbrook Avenue. The area surrounding the subject property is primarily a mixture of multiple-family residential, with some commercial. There is a 1950 United States post office located directly to the east.

(continued on page 2)

***P3b. Resource Attributes:** HP16. Religious building

***P4. Resources Present:** Building Structure Object Site District Element of District Other

P5a. Photo or Drawing (Photo required for buildings, structures, and objects.)



P5b. Description of Photo:

View looking northeast at the south and west elevations, December 7, 2004

***P6. Date Constructed/Age and**

Sources: Historic

Prehistoric Both

circa 1913, Los Angeles County Assessor

***P7. Owner and Address:**

Second Benevolent Baptist Church
2237 East El Segundo Boulevard
Compton, CA 90222

***P8. Recorded by:**

Christeen Taniguchi
Galvin & Associates
3819 Via La Selva
Palos Verdes Estates, CA 90274

***P9. Date Recorded:**

December 14, 2004

***P10. Survey Type:** Intensive

***P11. Report Citation:** Section 106 compliance report for Nextel telecommunications facility candidate CA-7734B (Sibre Park)

***Attachments:** NONE Location Map Sketch Map Continuation Sheets Building, Structure, and Object Record
 Archaeological Record District Record Linear Feature Record Milling Station Record Rock Art Record
 Artifact Record Photograph Record Other (List):

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
PRIMARY RECORD

Primary # 19-187545
HRI #
Trinomial
CHR Status Code

Other Listings
Review Code

Reviewer

Date

Page 2 of 12

*Resource Name or #: 2237 E. El Segundo Blvd.; Los Angeles, CA 90222

P1. Other Identifier: 2229 E. El Segundo Boulevard

*P2. Location: Not for Publication Unrestricted
and

*a. County: Los Angeles

On Southgate Quad
*b. USGS 7.5' Quad: Inglewood, CA Date:

T.;R. ; ¼ of ¼ of Sec unsectioned; S. B. B.M.

c. Address: 2237 East El Segundo Boulevard City: Inglewood

Zip: 90302

d. UTM: Zone: ; mE/ mN (G.P.S.)

e. Other Locational Data: APN: 6152-003-012

Elevation:

***P3a. Description:**

The subject property is located at 2237 East El Segundo Boulevard in an unincorporated community of Los Angeles County called Willowbrook. It includes two buildings located at the north side of East El Segundo Boulevard, west of Willowbrook Avenue. The area surrounding the subject property is primarily a mixture of multiple-family residential, with some commercial. There is a 1950 United States post office located directly to the east.

(continued on page 2)

***P3b. Resource Attributes:** HP16. Religious building

*P4. Resources Present: Building Structure Object Site District Element of District Other

P5a. Photo or Drawing (Photo required for buildings, structures, and objects.)



P5b. Description of Photo:

View looking northwest at the façade, December 14, 2004

***P6. Date Constructed/Age and Sources:** Historic

Prehistoric Both

circa 1947, Los Angeles County Assessor

***P7. Owner and Address:**

Second Benevolent Baptist Church
2237 East El Segundo Boulevard
Compton, CA 90222

***P8. Recorded by:**

Christeen Taniguchi
Galvin & Associates
3819 Via La Selva
Palos Verdes Estates, CA 90274

***P9. Date Recorded:**

December 14, 2004

***P10. Survey Type:** Intensive

***P11. Report Citation:** Section 106 compliance report for Nextel telecommunications facility candidate CA-7734B (Sibre Park)

*Attachments: NONE Location Map Sketch Map Continuation Sheets Building, Structure, and Object Record
 Archaeological Record District Record Linear Feature Record Milling Station Record Rock Art Record
 Artifact Record Photograph Record Other (List):

P3a. Description:

(continued from page 1)

This circa 1913 one-story building was originally constructed as a church; today it is being used as a multi-purpose building by the congregation that owns the property. Foundation and footprint remnants of the now demolished front section exist to the south of the existing building. The building is today rectangular in plan. The building's east and west facing gabled roof has a cross gable at the south elevation; each gable has a vertical vented opening; the roof is clad with composite material. The overhanging eaves have exposed common rafters.

The east elevation, as well as the top gabled section of the west elevation, are still clad with its original horizontal wood boards. The other walls, however, have been resurfaced with a highly textured stucco. There is a florescent light fixture located just below the vented opening at the west elevation. All of the windows are original wood double hung windows; each sash has a single light; at the west elevation, there are two sets of paired windows, while at the north elevation are two sets, with three windows each. The east elevation has three windows. There are no windows at the south elevation, where the demolished section once stood. The single doors located at each of the stucco elevations, however, appear to have been replaced; they all have metal security doors. There is also one door at the north elevation, which has been boarded up. Concrete stairs lead into each entrance. The entrance at the south elevation has a non-original metal railing. The entry at the west elevation also has metal rails, with a makeshift plywood ramp on the stairs to make it handicap accessible. There is no entrance at the east elevation.

(continued from page 2)

This circa 1947 one-story building was likely originally constructed for ancillary use for the 1913 building, which was the main church at that time. Today, the purposes have been reversed; this building serves as the main church building. The building is rectangular in plan, with a symmetrical façade. The front 8' deep section of the building was added in 1989; thus, the entire gabled façade was constructed at that time; its roofline is trimmed with a wood border. At the façade are four vertical window openings flanking a cross-shaped opening in the center; all five have glass blocks, with separate stained glass panels placed on the exterior sides of the blocks. The rear gable is original. The front gable is higher than the rest of the building, so there is an irregular surface on the roof, which slopes down to the rest of the gabled roof. The roof is clad with composite material. The slightly overhanging eaves are boxed. There are skylights, as well as a cross gable roofed projection on either slope of the roof, to provide light for the sanctuary. There is an addition located at the north (rear) elevation; this was likely constructed in 1972. This section has a flat roof with various air conditioning and other units mounted onto it.

The exterior walls are of a non-original highly textured stucco. Most of the windows are louvered with small openings; these are protected with non-original slender vertical metal security bars. The rear addition has horizontal windows at its north elevation; the window at the west end has metal security bars. There are also glass blocks at the larger vertical window openings located at the east elevation; both these and the east and west elevation small window openings have separate stained glass panels placed on the interior sides. All exterior doors have been replaced. The front double doors are likely from the 1989 alteration; they are wood, with round fanlights. This primary entrance is protected by a porch shelter with a plywood gabled roof clad with composite material. The shelter is supported by two simple metal poles, and there are square tiles at the landing. Slanted concrete surfaces make this a handicap accessible entrance. Located above the door is a mounted rectangular sign for the Second Benevolent Baptist Church. There is also a metal and plastic backlit sign located at the east end of the façade, indicating service information for the Church. On the opposite west end is a granite plaque mounted into the wall; this plaque had previously been mounted on the original façade in a similar location before the redesign. It is likely that this plaque was originally installed in the 1960s when the Second Benevolent Baptist Church began to occupy the property; it has since been updated with new engravings.

BUILDING, STRUCTURE, AND OBJECT RECORD

B1. Historic Name: *circa 1913-circa 1961*: Congregational Church of Willowbrook (also later known as First Congregational Church of Willowbrook); *circa 1961-1967*: the 1913 building was occupied by the New Zion Church of God

B2. Common Name: Second Benevolent Baptist Church (1964-1967): leased the 1947 building; (1967-present): own and occupy the entire property)

B3. Original Use: church

B4. Present Use: church

*B5. Architectural Style: *1913 building*: none; *1947 building*: Neo-Modern (originally a utilitarian style)

*B6. Construction History: *1913 building*: This building was constructed in circa 1913. According to a 1930 *Southwest Builder & Contractor*, two rooms (30' x 23') were added onto this building; it is not known where this addition was made. The Willowbrook Congregational Church was both owner and builder for this addition. The front section of the 1913 building was demolished when El Segundo Boulevard was widened (personal account, Reverend Harvey Sim, Jr., Pastor) . The remnants of its foundation and footprint still exist; it appears the original building was about double the size of the remaining section. There was apparently a church steeple/tower, which contained a bell; this bell is currently mounted in front of the 1947 building at grade level. Except for the east wall and the upper section of the west elevation, the other three exterior walls have been reclad with a highly textured stucco surface that was likely done in the 1980s.

1947 building: This second building was constructed in 1947. In 1972, a 6' deep addition was made at the north elevation to create a baptism room. The Los Angeles based William K Spencer was the architect for this addition. Further alterations were made in 1989 when a gabled 8' deep front section was added, which changed what was a modest utilitarian building into one with a more distinctive Neo-Modern façade. The originally flat roof was changed to a front gabled roof with the building's gabled front sloping down to the lower gabled roof covering the rest of the building. In addition, further additions were made at the north elevation to extend the baptism room. It is likely that the building was also restuccoed at this time. Robert L. Deines, A.I.A. Architect and Associates, based in Lynwood, was the architectural firm contracted to design the addition. In 2004 the building was re-roofed with composite material.

*B7. Moved? No Yes Unknown Date:

Original Location:

*B8. Related Features: (see page 6)

B9a. Architect/Engineer: unknown

b. Builder: unknown

Area: Willowbrook

*B10. Significance: Theme: Church Architecture

Period of Significance: circa 1913 and 1947

Property Type: religious architecture

Applicable Criteria: N/A

(see page 5)

B11. Additional Resource Attributes: none

*B12. References:

(see page 6)

B13. Remarks:

*B14. Evaluator:

Christeen Taniguchi
Galvin & Associates
3819 Via La Selva
Palos Verdes Estates, CA 90274

*Date of Evaluation: December 14, 2004

(This space reserved for official comments.)

Terraserver-usa.com (March 29, 2004 aerial) (north is up; the building to the southeast is from circa 1913 and the one to the northwest is from 1947)



(from page 4)

B10. Significance:

The building is located in the unincorporated Los Angeles County community of Willowbrook. There are two buildings located on this property that currently comprises portions of multiple adjacent lots that had been merged over the history of the development of the parcel. The lot with the circa 1913 building was acquired by the Willowbrook Congregational Church in 1908. Their name listed with the Los Angeles County assessor alternated between Willowbrook Congregational Church and the First Congregational Church of Willowbrook during their ownership of the property. In 1936, the pastor was Rev. J. K. Higginbotham. He was elected secretary-treasurer of the Congregational Church Ministerial Association of Southern California. The 1940 Willowbrook city directory listed Rev. Arthur Porter as the pastor. His wife was Gertrude, and he lived nearby at 2343 E. El Segundo Boulevard. In 1948, the church acquired the lot with the 1947 building. This congregation continually owned the property until 1961. No further information could be obtained at this time about the Willowbrook Congregation Church.

The current owner and occupant of the property is the Second Benevolent Baptist Church. The Church had its beginnings in the mid-1950s. It was originally formed with 98 members under the guidance of the Paradise Baptist Church; this offshoot was called "Little Paradise Mission." They were located at 118 Wilmington Avenue. Rev. Albert Reese was their pastor. In 1959, the congregation decided to break free from the Paradise Baptist Church. Continuing under the guidance of Rev. Albert Reese, the Second Benevolent Baptist Church was formed and named by him. The congregation moved into a building located at Central Avenue and 146th Street. After six months, and a growth in their membership, the church moved into a larger facility at 2240 East El Segundo Boulevard. Eventually, the congregation needed to look for less expensive accommodations. The 1913 building was being used by the New Zion Church of God, but the 1947 building was vacant. New Zion had acquired the property from the First Congregational Church of Willowbrook in 1961. In 1963, Los Angeles County assessor ownership, however, was listed under Samuel M. and Lottie B. Crouch. When a lease was signed by the Second Benevolent Baptist Church in 1964 to occupy the 1947 building, William M. and Lillian A. Morris were the owners. In 1967, William Morris died; this meant that the congregation would have to either vacate or purchase the property. They acquired it that same year. Reese continued to lead his parish until 1969 when he resigned; Rev. L. T. King took over. Under his guidance, the membership continued to grow, to 565 people. After King left in 1981, Rev. Arthur Jupiter was briefly the pastor from 1982 to 1984; Rev. Clarence E. Stewart, Jr. was the pastor from 1984 until 1989. After Stewart's resignation, the current pastor, Rev. Harvey Sims, Jr. took over.

Willowbrook is located just north of the city of Compton, and just south of the community of Watts. Willow trees and a slow, shallow brook were originally characteristics of this part of Los Angeles County. Willowbrook was once part of the 4,500 acre Rancho Tajauta that was granted by the Mexican governor to Anastacio Abila in 1843; as early as 1820, Abila was already raising cattle on this land. The first subdivisions in Willowbrook occurred in 1894; the name became official in 1903 when the Willowbrook Tract was recorded with the Los Angeles County assessor. Apparently, the name came into common use for its entire area because the Pacific Electric Railroad Company red cars stopped at 126th Street in Willowbrook. Even into the early 1980s, this community was distinguishable from the rest of Los Angeles County because it was a mixture of residential and rural, within an urban setting. Deep lot sizes allowed for extensive yard space to grow fruits and vegetables, as well as raise hogs and chickens. Vacant lots covered with mustard plants also added to the community's rural character. Willowbrook also has the distinction of being the location of the first library of the Los Angeles County library system, which today has well over 100 branches. Willowbrook was affected by the 1965 Watts Riots; the county library, which by then had relocated into its own building constructed in 1950, was one of the properties that was damaged. The community's unique rural character was lost when the Watts Labor Community Action Committee drafted a redevelopment plan that focused on new commercial and residential development for Willowbrook. In 1990, its population was 32,772.

(continued on page 6)

(continued from page 5)

B10. Significance:

Integrity Statement

The seven aspects of integrity include location, design, setting, materials, workmanship, feeling, and association. The buildings on the property retain their original locations. The setting of the surrounding neighborhood has changed, at least since construction of the 1913 building. No buildings in the immediate vicinity appear to date from this period. The area surrounding the subject property is primarily a mixture of circa 1920s to 1990s multiple-family residential, with some commercial. There is a 1950 United States post office located directly to the east. The setting of Willowbrook as a whole changed in the early 1980s when its unique rural character was lost as a result of redevelopment; there are, however, areas of vacant land located to the north and northeast of the property, that may be original. The 1913 building's original feeling and association have changed. The adjacent property to the west became part of church property when the 1947 building was constructed. In addition, the design, material and workmanship of both buildings have been significantly compromised. About half of the 1913 building was demolished; currently, three of the four exterior walls are clad with a non-original highly textured stucco. Only the east wall and the upper section of the west elevation still have their original horizontal wood boards. The doors have also been replaced, and there are non-original metal security doors protecting the entries. The wood windows, however, are original. The 1947 building has also been significantly altered. What was originally a flat roofed building with a modest façade, was altered in 1989 to a gable roofed building with a new front section. There are also additions from 1972 and 1989 at the rear of the building. In addition, the exterior wall surfaces were likely originally a cementitious stucco; today, this has been covered over with a more highly textured stucco. All vertical window openings at the east elevations were replaced with glass blocks. Other openings have louvered windows that appear to have been installed in the circa 1960s or 1970s. The doors have also been replaced. Due to these significant alterations, the integrity of both buildings is poor. The condition of the buildings is fair.

(continued to page 7)

(continued from page 4)

B8. Related Features:

There is a metal storage shed, which is a former Mayflower moving company trailer; it was brought to the east end of the property in the mid-1990s. Located at the southwest corner of the property is a gable roofed open caged shed used to shade church owned cars. There is an asphalt paved basketball court located north of the 1947 building. Located south of the 1913 building, where its demolished section once stood, is a lawn; there is also minimal landscaping here. There are also plants, including bushes, directly adjacent to the façade of the 1947 building. Also located in front of this building is a bell mounted on a concrete base. Installed circa early 1990s, this was the church bell formerly located in the demolished section of the 1913 building. The words "The C. S. Bell Co.," "34" and "Hillsboro O." are cast into it. Except for a patch of unpaved surface located at the northeast corner of the property between the two buildings, most of the rest is paved with asphalt for parking. There is a metal and plastic backlit street sign mounted on a metal pole located at East El Segundo Boulevard. A tall black metal fence surrounds the entire property; installed during the early 1990s; it replaced a chain link fence.

B12. References:

County of Los Angeles (Firestone), Building and Safety Office: various building permits and plans (original permit was not found).

City of Los Angeles, Central Public Library: Willowbrook city directory (1940), *Los Angeles Times* database, *Southwest Builder & Contractor* (March 14, 1930, p. 63), (note: no Sanborn maps for this area of Los Angeles County).

County of Los Angeles, Assessor: assessor books.

<http://www.colapublib.org/libs/willowbrook/> (histories of Willowbrook and its County library branch)

<http://www.fpk.homestead.com/files/willowbrook.htm> (Willowbrook history).

Pitt, Leonard and Dale Pitt. *Los Angeles A to Z*. Berkeley, California: University of California Press, c1997 (history of Willowbrook).

"Second Benevolent Baptist Church, 30th Anniversary" booklet.

Sims, Reverend Harvey Sims, Jr., Pastor, Second Benevolent Baptist Church, personal interview, December 14, 2004.

(continued from page 6)

B10. Significance:

National Register of Historic Places Eligibility Evaluation

The property was evaluated under Criteria Consideration A (religious properties):

The property was assessed under National Register Criterion A for its potential significance as part of a historic trend that may have made a significant contribution to the broad patterns of our history. This religious property was purchased by the Willowbrook Congregational Church in 1908, and a church building was constructed by circa 1913. They owned and occupied the property until 1961. A 1960s owner and tenant was the New Zion Church of God; the current owner and occupants, the Second Benevolent Baptist Church began to occupy the property in 1964, initially sharing it with the New Zion Church. Although the congregations and denominations have changed over the decades, the property has consistently been associated with religious use. For religious properties such as this, historic significance cannot be established on the merits of a religious doctrine, but rather for important historic or cultural forces that the property represents. No such significant historic events were discovered during the assessment. In addition, because of the poor integrity level of the property, it no longer reflects the history of the historic congregation, the Willowbrook Congregational Church. Therefore, the property does not appear to qualify for the National Register of Historic Places (NRHP) under Criterion A.

The property was considered under Criterion B for its association with the lives of persons significant in our past. J. K. Higginbotham was the pastor in 1936, and by 1940, Arthur Porter led the congregation. No additional names could be obtained at this time. Higginbotham was the secretary-treasurer of the Congregational Church Ministerial Association of Southern California. However, no evidence could be found to show that these people had a secular significance to our past. Therefore, the property does not appear to qualify for the National Register of Historic Places (NRHP) under Criterion B.

The property was evaluated for Criterion C for embodying the distinctive characteristics of a type, period, or method of construction, or representing the work of a master, or possessing high artistic values, or representing a significant and distinguishable entity whose components may lack individual distinction. The 1913 building was likely designed in a church vernacular style. The 1947 building was likely originally constructed in a utilitarian vernacular style; it has since then been remodeled into a Neo-Modern style. The integrity level for both buildings is poor. Significant alterations and a demolition have severely compromised the buildings' design, workmanship and materials. About half of the 1913 building was demolished; currently, three of the four exterior walls are clad with a non-original highly textured stucco. The east wall, as well as the upper section of the west elevation, still have their original horizontal wood boards. The doors have also been replaced, and there are metal security doors protecting the entries. The wood windows, however, are original. The 1947 building has also been significantly altered. What was originally a flat roofed building with a modest façade, was altered in 1989 to a gable roofed building with a new front section. There are also additions from 1972 and 1989 at the rear of the building. In addition, the exterior wall surfaces were likely originally a cementitious stucco; today, this has been covered over with a more highly textured stucco. All vertical window openings at the east elevations were replaced with glass blocks. Other openings have louvered windows that appear to have been installed in circa 1960s or 1970s. The doors have also been replaced. The buildings no longer reflect their original architectural styles and designs. No potential historic district could be identified at this time. Thus, this property also does not represent a significant and distinguishable entity whose components may lack individual distinction. The original architect and builder names for both buildings are unknown. The architects for the additions and changes to the building in 1972 and 1989 are known; they did not produce the works of masters. Therefore, the property does not appear to qualify for the National Register of Historic Places (NRHP) under Criterion C.

The property was considered for Criterion D for the potential to yield, or may be likely to yield, information important to prehistory or history. In order for buildings, structures, and objects to be eligible under this criterion, they would need to "be, or must have been, the principal source of important information." This is not the case with this property. Therefore, it does not appear to qualify for the National Register of Historic Places (NRHP) under Criterion D.

In summary, the property does not appear to qualify for the NRHP under these criteria. Therefore, the buildings are not historic properties for the purposes of Section 106 of the National Historic Preservation Act (NHPA). The property was not assessed for California Register or local designation eligibility.



1913 building: View looking northeast at the west and south elevations



1913 building: View looking east at the south section of the west elevation



1913 building: View looking northeast at the south and west elevations



1913 building: View looking north at the entrance at the south elevation



1913 building: View looking north at the east section of the south elevation; in the foreground are the foundation remnants of the rest of the building that had been demolished



1913 building: View looking northwest at the east elevation

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
CONTINUATION SHEET

Primary #
HRI#

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*Resource Name or #: 2237 E. El Segundo Blvd.; Los Angeles, CA 90222

*Recorded by: Christeen Taniguchi

*Date: December 14, 2004 Continuation Update



1913 building: View looking west at the windows at the east elevation



1913 building: View looking southeast at the north elevation



1913 building: View looking south at the east section of the north elevation



1947 building: View looking north at the façade



1947 building: View looking northwest at the primary entrance



1947 building: View looking northeast at the west elevation

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
CONTINUATION SHEET

Primary #
HRI#

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*Resource Name or #: 2237 E. El Segundo Blvd.; Los Angeles, CA 90222

*Recorded by: Christeen Taniguchi

*Date: December 14, 2004 Continuation Update



1947 building: View looking southeast at the west elevation



1947 building: View looking southeast at the north elevation; the basketball court is in the foreground



1947 building: View looking south at the east section of the north elevation



1947 building: View looking northwest at the east elevation



1947 building: Detailed view looking west at the east elevation



1947 building: View looking northwest at the south section of the east elevation, and the façade

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
CONTINUATION SHEET

Primary #
HRI#

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*Resource Name or #: 2237 E. El Segundo Blvd.; Los Angeles, CA 90222

*Recorded by: Christeen Taniguchi

*Date: December 14, 2004 Continuation Update



1947 building: View looking north at a granite plaque mounted into the façade



1947 building: View looking northwest at a bell that was once located in the bell tower of the original church



1947 building: View looking north inside the sanctuary



View looking southeast at a Mayflower moving company trailer now used for storage



View looking south at an open caged shed used to park church owned automobiles



View looking east at the street sign for the property

State of California — The Resources Agency
 DEPARTMENT OF PARKS AND RECREATION
CONTINUATION SHEET

Primary #
 HRI#

Page 12 of 12

*Resource Name or #: 2237 E. El Segundo Blvd.; Los Angeles, CA 90222

*Recorded by: Christeen Taniguchi

*Date: December 14, 2004 Continuation Update



Circa 1989 view looking north at the original façade of the 1947 building (courtesy of the Second Benevolent Baptist Church)

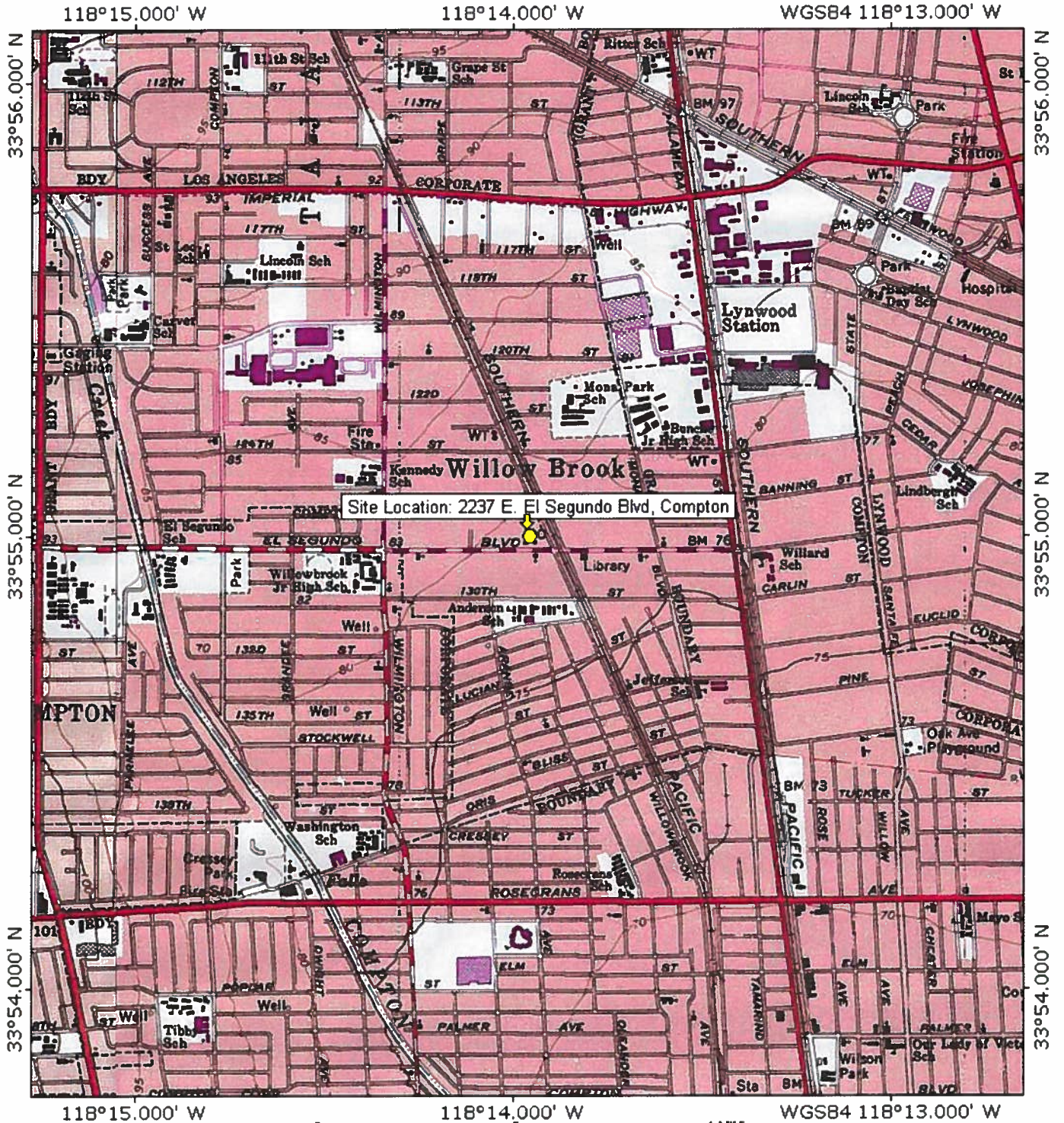


1989 view looking north while the façade of the 1947 building was being reconstructed (courtesy of the Second Benevolent Baptist Church)



1989 view looking northeast at the newly completed façade of the 1947 building (courtesy of the Second Benevolent Baptist Church)

19-187545



Site Location: 2237 E. El Segundo Blvd, Compton



EarthTouch, Inc.
 3135 North Fairfield Drive
 Layton, Utah 84041
 Tel: 801.771.2800
 Fax: 801.771.2838

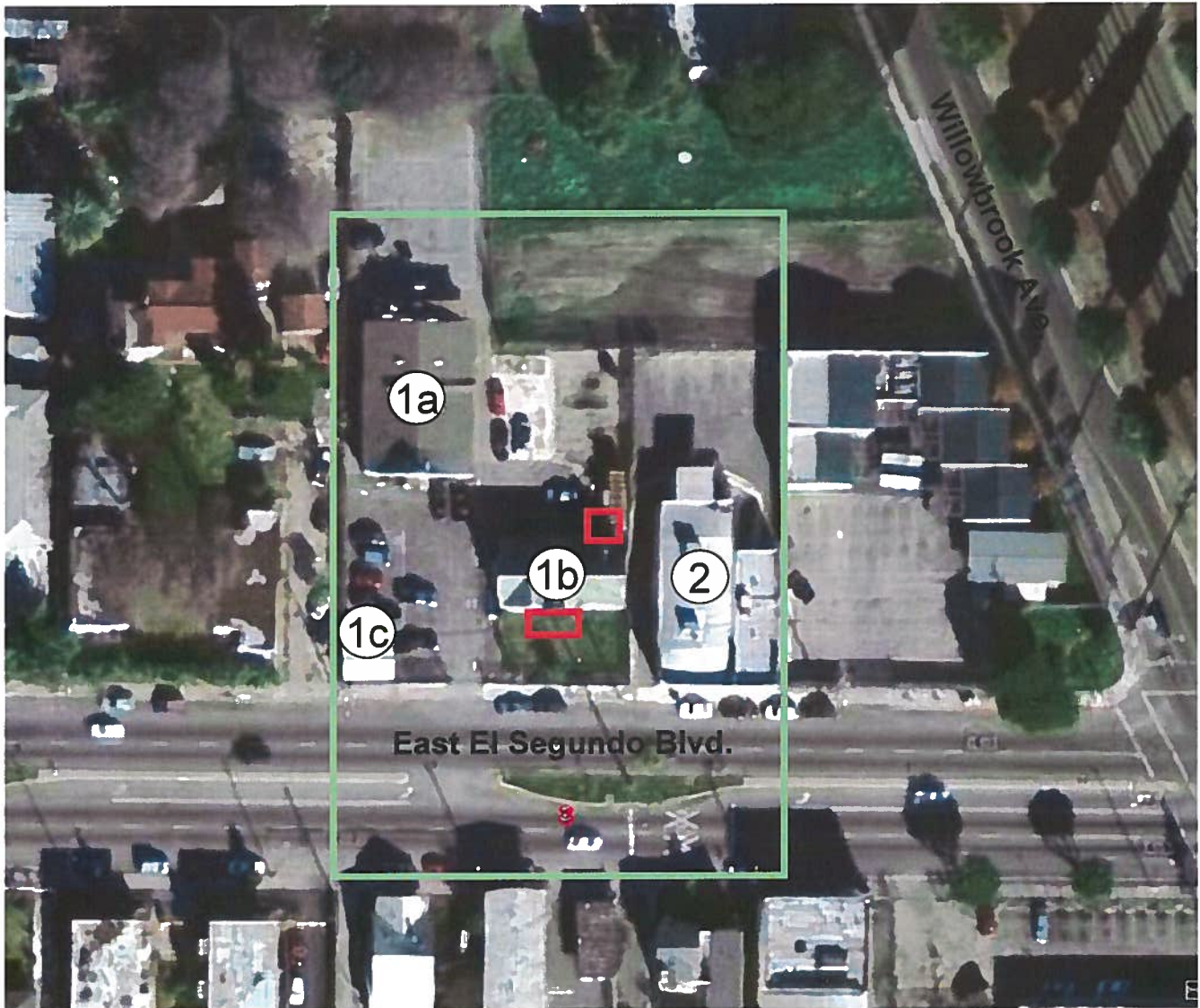
**Site Location
 (Topographic Map)**

**Tt-CA-7734B / Sibre Park
 2237 E. El Segundo Blvd
 Compton, Los Angeles County, California**

Project: Tt-CA-7734B / Sibre Park

Source: USGS 7.5-minute Quadrangle
 Inglewood & South Gate,

AREA OF POTENTIAL EFFECTS (APE) MAP

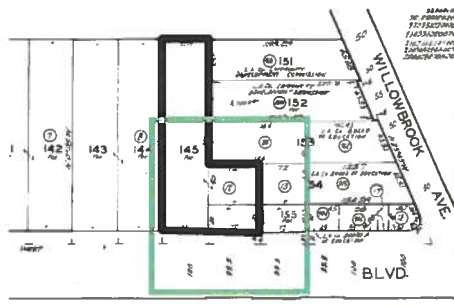


Legend	
	APE for Direct Effects
	APE for Indirect Effects
	Antenna and Equipment Locations
	Building Reference Numbers

#	APN Number	Address	Yr. Built
1a	6152-003-012	2237 E. El Segundo Blvd.	1947
1b	6152-003-012	2237 E. El Segundo Blvd.	1913
1c	6152-003-012	2237 E. El Segundo Blvd.	N/A (shed)
2	6152-003-013	2241 E. El Segundo Blvd.	1950



GALVIN & ASSOCIATES
 Historic Preservation Planning Company
 3819 Via La Selva
 Palos Verdes Estates, CA 90274
 (310) 375-6775



PARCEL NO.

6152-003-012

ADDRESS

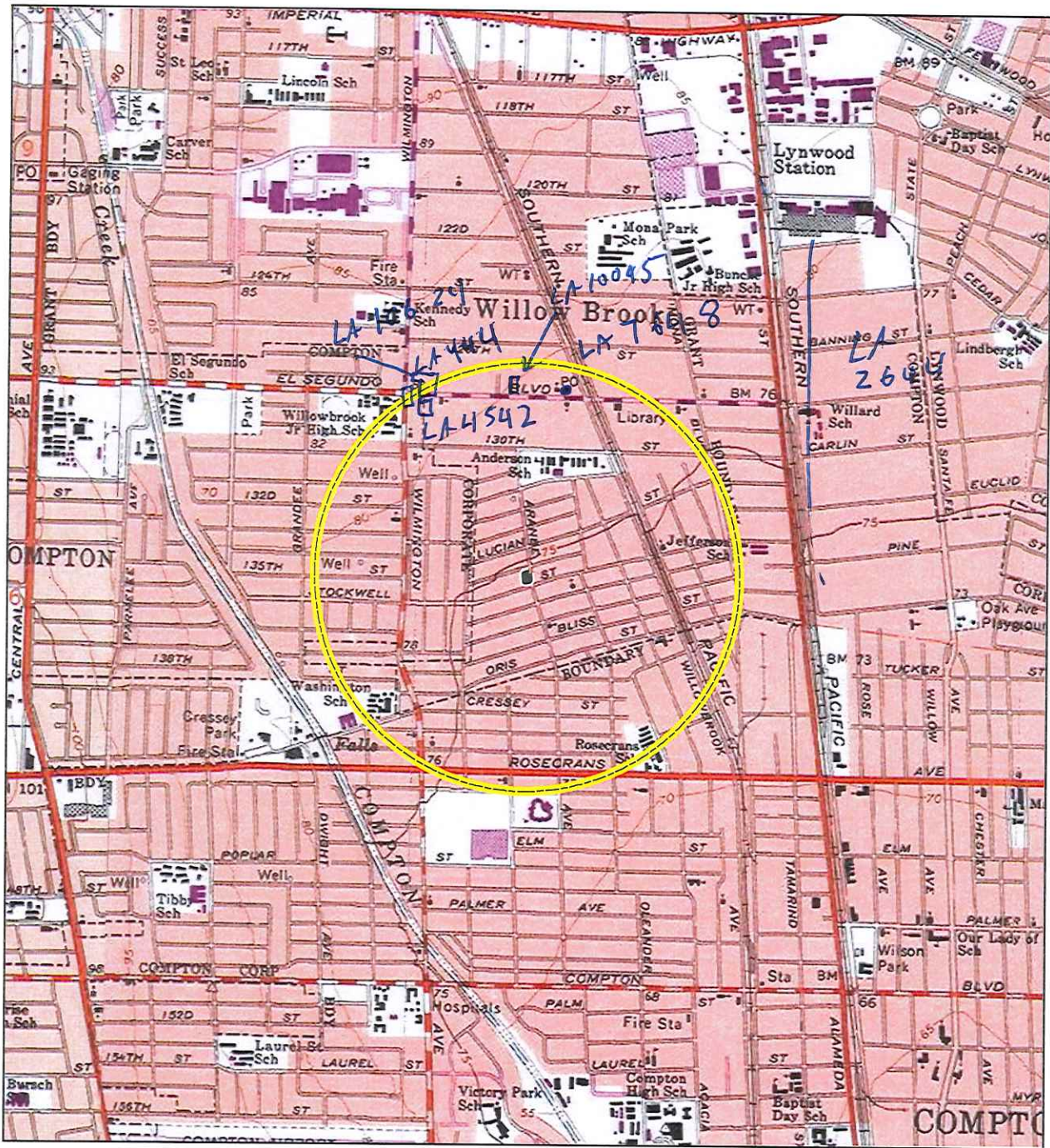
2237 E El Segundo Blvd. Compton CA

PROJECT NAME & NO.



Sibre Park CA-7734B

MAP NOT TO SCALE





Imagery provided by National Geographic Society, ESRI and its licensors © 2018. South Gate Quadrangle. T03S R13W S10,15,16,22. The topographic representation depicted in this map may not portray all of the features currently found in the vicinity today and/or features depicted in this map may have changed since the original topographic map was assembled.

-  Half Mile Buffer
-  Area of Potential Effects



0 1,000 2,000 Feet

0 250 500 Meters

1:24,000

Records Search Map



Report List

Report No.	Other IDs	Year	Author(s)	Title	Affiliation	Resources
LA-00444		1976	Ryan, Thomas M.	Archaeological Reconnaissance Report of Gabrielino Trail	U.S. Forest Service	
LA-04542		1999	Maki, Mary K.	Negative Phase I Archaeological Survey and Impact Assessment of 0.42 Acre for the 2010 El Segundo Boulevard Project, Los Angeles County, California	Conejo Archaeological Consultants	
LA-07648		2004	Taniguchi, Christeen ✓	Historic Architectural Survey and Section 106 Compliance for a Proposed Wireless Telecommunications Service Facility Located on a Monopine at 2237 East El Segundo Boulevard in the Community of Willowbrook (Los Angeles County), California	Galvin & Associates	19-187545
LA-10045		2004	Maki, Mary K. ✓	Cdc-mason Court Construction Project	Conejo Archaeological Consultants	
LA-10624		2010	Maki, Mary	LACDC Willowbrook Senior Housing Project, Los Angeles County	Conejo Archaeological Consultants	19-187545

Appendix C

Native American Outreach



Rincon Consultants, Inc.

250 East 1st Street, Suite 301
Los Angeles, California 90012

213 788 4842
FAX 908 2200

info@rinconconsultants.com
www.rinconconsultants.com

August 7, 2018
Project No: 18-05729

Native American Heritage Commission
1550 Harbor Boulevard, Suite 100
West Sacramento, CA 95691
Via email: nahc@nahc.ca.gov

Subject: SLF Search and Contact List for the Sativa Los Angeles County Water District – Well 5
Project, Los Angeles County, California

Dear NAHC,

Rincon Consultants, Inc. (Rincon) has been retained to conduct a cultural resources study for the Sativa Los Angeles County Water District – Well 5 Project (project) in unincorporated Los Angeles County. Rincon understands the project to involve the design of a wellhead treatment system with a storage tank and booster pump for Well 5.

As part of this effort, Rincon will contact any Native American tribal organizations or individuals who may have knowledge of cultural resources existing within the project area. The project boundary is depicted on Township 3 south, Range 13 west, Sections 10, 15, 16 and 22 of the U.S. Geological Survey *South Gate*, CA 7.5-minute topographic quadrangle. The Records Search Map (attached) includes a 0.5-mile buffer. This study is being performed under the requirements of both the California Environmental Quality Act and Section 106 of the National Historic Preservation Act.

Thank you for your assistance with Rincon's efforts to address any possible Native American concerns that may arise from the proposed project. Please respond to mszromba@rinconconsultants.com and bcampbell@rinconconsultants.com with the results of this request.

Sincerely,
Rincon Consultants, Inc.

A handwritten signature in black ink, appearing to read "M. Szromba".

Meagan Szromba, MA, RPA
Associate Archaeologist



Rincon Consultants, Inc.

250 East 1st Street, Suite 301
Los Angeles, California 90012

213 788 4842
FAX 908 2200

info@rinconconsultants.com
www.rinconconsultants.com

**Sacred Lands File & Native American Contacts List Request
Native American Heritage Commission**

1550 Harbor Blvd, Suite 100
West Sacramento, CA 95691
(916) 373-3710
(916) 373-5471 – Fax
nahc@nahc.ca.gov

Information below is required for a Sacred Lands File Search

Project Title: Sativa Los Angeles County Water District – Well 5 Project

County: Los Angeles County

USGS Quadrangle Name: South Gate

Township: 3 south

Range: 13 west

Sections: 10, 15, 16, 22

Contact Person: Meagan Szromba

Company/Firm/Agency: Rincon Consultants, Inc.

Street Address: 180 N Ashwood Ave.

City, CA: Ventura, CA

Zip: 93003

Phone: (805) 644 4455

Email: mszromba@rinconconsultants.com; bcampbell@rinconconsultants.com

Project Description: Rincon understands the project to involve the design of a wellhead treatment system with a storage tank and booster pump for Well 5.

NATIVE AMERICAN HERITAGE COMMISSION

Environmental and Cultural Department
1550 Harbor Blvd., ROOM 100
West SACRAMENTO, CA 95691
(916) 373-3710
Fax (916) 373-5471



August 13, 2018

Meagan Szromba

Rincon Consultants

Sent by Email: mszromba@rinconconsultants.com

Re: Sativa Los Angeles County Water District Well 5 Project, Los Angeles County

Dear Ms. Szromba,

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 preclude the presence of cultural resources in any project area. Other sources for cultural resources should also be contacted for information regarding known and/or recorded sites.

Enclosed is a list of Native Americans tribes who may have knowledge of cultural resources in the 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 to ensure that the project information has been received.

If you receive notification of change of addresses and phone numbers from any of these tribes, please notify me. With your assistance we are able to assure that our lists contain current information. If you have any questions or need additional information, please contact me at 916-573-1033 or frank.lienert@nahc.ca.gov.

Sincerely,


Frank Lienert
Associate Governmental Program Analyst

Native American Heritage Commission

Native American Contacts

August 13, 2018

Santa Ynez Band of Chumash Indians
Kenneth Kahn. Chairperson
P.O. Box 517 Chumash
Santa Ynez , CA 93460
kkahn@santaynezchumash.org
(805) 688-7997

(805) 686-9578 Fax

Fernandeno Tataviam Band of Mission Indians
Rudv Ortega Jr., Tribal President
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San Fernando , CA 91340 Tataviam
rortega@tataviam-nsn.us
(818) 837-0794

(818) 837-0796 Fax

Barbareno/Ventureno Band of Mission Indians
Julie Lynn Tumamait-Stenslie. Chair
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itumamait@hotmail.com
(805) 646-6214

Barbareno/Ventureno Band of Mission Indians
Patrick Tumamait
992 El Camino Corto Chumash
Ojai , CA 93023
(805) 216-1253 Cell

Kitanemuk & Yowlumne Teion Indians
Delia Dominquez. Chairperson
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Bakersfield , CA 93305 Kitanemuk
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(626) 339-6785

Gabrieleno/Tongva San Gabriel Band of Mission Indians
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(626) 483-3564 Cell

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Gabrielino /Tonava Nation
Sandonne Goad. Chairperson
106 1/2 Judge John Aiso St., #231 Gabrielino Tongva
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Lee Clauss. Director-CRM Dept.
26569 Community Center Drive Serrano
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Kern Vallev Indian Community
Robert Robinson. Chairperson
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Lake Isabella , CA 93283 Kawaiisu
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(760) 378-2915 Cell

Gabrielino-Tonava Tribe
Linda Candelaria. Chairperson
No Current Address on File Gabrielino

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**Native American Heritage Commission
Native American Contacts
August 13, 2018**

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Joseph Ontiveros, Cultural Resource Department
P.O. BOX 487 Luiseno
San Jacinto, CA 92581 Cahuilla
iontiveros@soboba-nsn.gov
(951) 663-5279
~~(951) 654-5544 ext 4137~~
(951) 654-4198 Fax

San Manuel Band of Mission Indians
Lynn Valbuena
26569 Community Center Dr. Serrano
Highland, CA 92346
(909) 864-8933

Gabrielino Band of Mission Indians - Kizh Nation
Andrew Salas, Chairperson
P.O. Box 393 Gabrielino
Covina, CA 91723
admin@gabrielenoindians.org
(626) 926-4131

Barbareno/Ventureno Band of Mission Indians
Eleanor Arrellanes
P.O. Box 5687 Chumash
Ventura, CA 93005
(805) 701-3246

Barbareno/Ventureno Band of Mission Indians
Raudel Joe Banuelos, Jr.
331 Mira Flores Court Chumash
Camarillo, CA 93012
(805) 427-0015

Gabrielino-Tonava Tribe
Charles Alvarez, Councilmember
23454 Vanowen St. Gabrielino
West Hills, CA 91307
roadkincharles@aol.com
(310) 403-6048

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Rincon Consultants, Inc.

250 East 1st Street, Suite 301
Los Angeles, California 90012

213 788 4842
FAX 908 2200

info@rinconconsultants.com
www.rinconconsultants.com

August 10, 2018

Charles Alvarez
Gabrielino-Tongva Tribe
23454 Vanowen Street
West Hills, California 91307

Subject: Cultural Resources Technical Study for the Sativa Los Angeles County Water District Well 5 Project, Los Angeles County, California

Dear Mr. Alvarez,

Rincon Consultants, Inc. (Rincon) was retained by KEH & Associates to conduct a cultural resources technical study for the Sativa Los Angeles County Water District (Sativa) Well 5 Project (project). Sativa supplies domestic water services to a portion of the Willowbrook area, an unincorporated census-designated place within Los Angeles County, and to a small area within the City of Compton. The Sativa water supply consists entirely of groundwater, specifically from two active wells: Well 3 and Well 5. In March 2016, Sativa applied for the Water Replenishment District of Southern California's Safe Drinking Water Disadvantage Community Program to obtain funding from the Safe Drinking Water State Revolving Fund to design a wellhead treatment system for Well 5 which is currently contaminated with manganese. In addition to the wellhead treatment, the funding request included a storage tank and booster pump. This funding was awarded to Sativa by the State Water Resources Control Board in early 2018.

As part of the process of identifying cultural resources issues for the project, Rincon contacted the Native American Heritage Commission to request a Sacred Lands File (SLF) search of the project area and a list of Native American tribal organizations and individuals who may have knowledge of cultural resources within or near the project area. The SLF search is pending results; however, we are aware that the project is within your area of concern.

This project is subject to the California Environmental Quality Act and may involve federal funding; thus, this cultural resources study is also being prepared in conformance with the National Environmental Policy Act and Section 106 of the National Historic Preservation Act (NHPA). We are writing to provide you with an opportunity to be involved in the Section 106 process as a consulting party. If you or your organization has any knowledge or specific concerns regarding cultural resources in the project area, please respond by telephone at (805) 644 4455 extension 165, or by email at mszromba@rinconconsultants.com. Under Section 106 of NHPA, you have 30 days from receipt of this letter to respond. Thank you for your assistance.



Sincerely,
Rincon Consultants, Inc.

Meagan Szromba, MA, RPA
Associate Archaeologist

Enclosure: Project Location Map



Rincon Consultants, Inc.

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Los Angeles, California 90012

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www.rinconconsultants.com

August 10, 2018

Robert Dorame, Chairperson
Gabrielino Tongva Indians of California Tribal Council
PO Box 490
Bellflower, California 90707

Subject: Cultural Resources Technical Study for the Sativa Los Angeles County Water District Well 5 Project, Los Angeles County, California

Dear Chairperson Dorame,

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Associate Archaeologist

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August 10, 2018

Sandonne Goad, Chairperson
Gabrielino/Tongva Nation
106 ½ Judge John Aiso Street, #231
Los Angeles, California 90012

Subject: Cultural Resources Technical Study for the Sativa Los Angeles County Water District Well 5 Project, Los Angeles County, California

Dear Chairperson Goad,

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Associate Archaeologist

Enclosure: Project Location Map



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August 10, 2018

Anthony Morales, Chairperson
Gabrieleno/Tongva San Gabriel Band of Mission Indians
PO Box 693
San Gabriel, California 91778

Subject: Cultural Resources Technical Study for the Sativa Los Angeles County Water District Well 5 Project, Los Angeles County, California

Dear Chairperson Morales,

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Meagan Szromba, MA, RPA
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August 10, 2018

Andrew Salas, Chairperson
Gabrieleno Band of Mission Indians – Kizh Nation
PO Box 393
Covina, California 91723

Subject: Cultural Resources Technical Study for the Sativa Los Angeles County Water District Well 5 Project, Los Angeles County, California

Dear Chairperson Salas,

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Sincerely,
Rincon Consultants, Inc.

Meagan Szromba, MA, RPA
Associate Archaeologist

Enclosure: Project Location Map

NATIVE AMERICAN HERITAGE COMMISSION

Environmental and Cultural Department
1550 Harbor Blvd., ROOM 100
West SACRAMENTO, CA 95691
(916) 373-3710
Fax (916) 373-5471



August 13, 2018

Meagan Szromba

Rincon Consultants

Sent by Email: mszromba@rinconconsultants.com

Re: Sativa Los Angeles County Water District Well 5 Project, Los Angeles County

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Sincerely,


Frank Lienert
Associate Governmental Program Analyst

Native American Heritage Commission

Native American Contacts

August 13, 2018

Santa Ynez Band of Chumash Indians
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(760) 378-2915 Cell

Gabrielino-Tonava Tribe
Linda Candelaria. Chairperson
No Current Address on File Gabrielino

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Native American Contacts
August 13, 2018**

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Joseph Ontiveros, Cultural Resource Department
P.O. BOX 487 Luiseno
San Jacinto, CA 92581 Cahuilla
iontiveros@soboba-nsn.gov
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Lynn Valbuena
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Andrew Salas, Chairperson
P.O. Box 393 Gabrielino
Covina, CA 91723
admin@gabrielenoindians.org
(626) 926-4131

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Eleanor Arrellanes
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Ventura, CA 93005
(805) 701-3246

Barbareno/Ventureno Band of Mission Indians
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331 Mira Flores Court Chumash
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Gabrielino-Tonava Tribe
Charles Alvarez, Councilmember
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Los Angeles, California 90012

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August 24, 2018

Kenneth Kahn, Chairperson
Santa Ynez Band of Chumash Indians
P.O. Box 517
Santa Ynez, California 93460

Subject: Cultural Resources Technical Study for the Sativa Los Angeles County Water District Well 5 Project, Los Angeles County, California

Dear Mr. Kahn,

Rincon Consultants, Inc. (Rincon) was retained by KEH & Associates to conduct a cultural resources study for the Sativa Los Angeles County Water District (Sativa) Well 5 Project (project). Sativa supplies domestic water services to a portion of the Willowbrook area, an unincorporated census-designated place within Los Angeles County, and to a small area within the City of Compton. The Sativa water supply consists entirely of groundwater, specifically from two active wells: Well 3 and Well 5. In March 2016, Sativa applied for the Water Replenishment District of Southern California's Safe Drinking Water Disadvantage Community Program to obtain funding from the Safe Drinking Water State Revolving Fund. In addition to the wellhead treatment, the funding request included a storage tank and booster pump. This funding was awarded in early 2018 to Sativa by the State Water Resources Control Board.

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Sincerely,

Rincon Consultants, Inc.

A handwritten signature in black ink, appearing to read "Breana Campbell-King", written in a cursive style.

Breana Campbell-King, MA, RPA
Archaeologist

Enclosure: Project Location Map



Rincon Consultants, Inc.

250 East 1st Street, Suite 301
Los Angeles, California 90012

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FAX 908 2200

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www.rinconconsultants.com

August 24, 2018

Rudy Ortega Jr., Tribal President
Fernando Tataviam Band of Mission Indians
1019 Second Street, Suite 1
San Fernando, California 91340

Subject: Cultural Resources Technical Study for the Sativa Los Angeles County Water District Well 5 Project, Los Angeles County, California

Dear Mr. Ortega,

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August 24, 2018

Julie Lynn Tumamait-Stenslie
Barbareno/ Ventureno Band of Mission Indians
365 North Poli Avenue
Ojai, California 93023

Subject: Cultural Resources Technical Study for the Sativa Los Angeles County Water District Well 5 Project, Los Angeles County, California

Dear Ms. Tumamait-Stenslie,

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This project is subject to the California Environmental Quality Act and may involve federal funding; thus, this cultural resources study is also being prepared in conformance with the National Environmental Policy Act and Section 106 of the National Historic Preservation Act (NHPA). We are writing to provide you with an opportunity to be involved in the Section 106 process as a consulting party. If you or your organization has any knowledge or specific concerns regarding cultural resources in the project area, please respond by telephone at (760)918-9444 extension 217, or by email at bcampbell@rinconconsultants.com. Under Section 106 of NHPA, you have 30 days from receipt of this letter to respond. Thank you for your assistance.

Sincerely,

Rincon Consultants, Inc.

A handwritten signature in black ink, appearing to read "Breana Campbell-King". The signature is fluid and cursive.

Breana Campbell-King, MA, RPA
Archaeologist

Enclosure: Project Location Map



Rincon Consultants, Inc.

250 East 1st Street, Suite 301
Los Angeles, California 90012

213 788 4842
FAX 908 2200

info@rinconconsultants.com
www.rinconconsultants.com

August 24, 2018

Lee Clauss
San Manuel Band of Mission Indians
26569 Community Center Drive
Highland, California 92346

Subject: Cultural Resources Technical Study for the Sativa Los Angeles County Water District Well 5 Project, Los Angeles County, California

Dear Mr. Clauss,

Rincon Consultants, Inc. (Rincon) was retained by KEH & Associates to conduct a cultural resources study for the Sativa Los Angeles County Water District (Sativa) Well 5 Project (project). Sativa supplies domestic water services to a portion of the Willowbrook area, an unincorporated census-designated place within Los Angeles County, and to a small area within the City of Compton. The Sativa water supply consists entirely of groundwater, specifically from two active wells: Well 3 and Well 5. In March 2016, Sativa applied for the Water Replenishment District of Southern California's Safe Drinking Water Disadvantage Community Program to obtain funding from the Safe Drinking Water State Revolving Fund. In addition to the wellhead treatment, the funding request included a storage tank and booster pump. This funding was awarded in early 2018 to Sativa by the State Water Resources Control Board.

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August 24, 2018

Patrick Tumamait
Barbareno/ Ventureno Band of Mission Indians
992 El Camino Corto
Ojai, California 93023

Subject: Cultural Resources Technical Study for the Sativa Los Angeles County Water District Well 5 Project, Los Angeles County, California

Dear Mr. Tumamait,

Rincon Consultants, Inc. (Rincon) was retained by KEH & Associates to conduct a cultural resources study for the Sativa Los Angeles County Water District (Sativa) Well 5 Project (project). Sativa supplies domestic water services to a portion of the Willowbrook area, an unincorporated census-designated place within Los Angeles County, and to a small area within the City of Compton. The Sativa water supply consists entirely of groundwater, specifically from two active wells: Well 3 and Well 5. In March 2016, Sativa applied for the Water Replenishment District of Southern California's Safe Drinking Water Disadvantage Community Program to obtain funding from the Safe Drinking Water State Revolving Fund. In addition to the wellhead treatment, the funding request included a storage tank and booster pump. This funding was awarded in early 2018 to Sativa by the State Water Resources Control Board.

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Archaeologist

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August 24, 2018

Robert Robinson
Kern Valley Indian Community
P.O. Box 1010
Lake Isabella, California 93283

Subject: Cultural Resources Technical Study for the Sativa Los Angeles County Water District Well 5 Project, Los Angeles County, California

Dear Mr. Robinson,

Rincon Consultants, Inc. (Rincon) was retained by KEH & Associates to conduct a cultural resources study for the Sativa Los Angeles County Water District (Sativa) Well 5 Project (project). Sativa supplies domestic water services to a portion of the Willowbrook area, an unincorporated census-designated place within Los Angeles County, and to a small area within the City of Compton. The Sativa water supply consists entirely of groundwater, specifically from two active wells: Well 3 and Well 5. In March 2016, Sativa applied for the Water Replenishment District of Southern California's Safe Drinking Water Disadvantage Community Program to obtain funding from the Safe Drinking Water State Revolving Fund. In addition to the wellhead treatment, the funding request included a storage tank and booster pump. This funding was awarded in early 2018 to Sativa by the State Water Resources Control Board.

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Archaeologist

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August 24, 2018

Delia Dominguez
Kitanemuk & Yowlumne Tejon Indians
115 Radio Street
Bakersfield, California 93305

Subject: Cultural Resources Technical Study for the Sativa Los Angeles County Water District Well 5 Project, Los Angeles County, California

Dear Ms. Dominguez,

Rincon Consultants, Inc. (Rincon) was retained by KEH & Associates to conduct a cultural resources study for the Sativa Los Angeles County Water District (Sativa) Well 5 Project (project). Sativa supplies domestic water services to a portion of the Willowbrook area, an unincorporated census-designated place within Los Angeles County, and to a small area within the City of Compton. The Sativa water supply consists entirely of groundwater, specifically from two active wells: Well 3 and Well 5. In March 2016, Sativa applied for the Water Replenishment District of Southern California's Safe Drinking Water Disadvantage Community Program to obtain funding from the Safe Drinking Water State Revolving Fund. In addition to the wellhead treatment, the funding request included a storage tank and booster pump. This funding was awarded in early 2018 to Sativa by the State Water Resources Control Board.

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Archaeologist

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August 24, 2018

Joseph Ontiveros
Soboba Band of Luiseno Indians
P.O. Box 487
San Jacinto, California 92581

Subject: Cultural Resources Technical Study for the Sativa Los Angeles County Water District Well 5 Project, Los Angeles County, California

Dear Mr. Ontiveros,

Rincon Consultants, Inc. (Rincon) was retained by KEH & Associates to conduct a cultural resources study for the Sativa Los Angeles County Water District (Sativa) Well 5 Project (project). Sativa supplies domestic water services to a portion of the Willowbrook area, an unincorporated census-designated place within Los Angeles County, and to a small area within the City of Compton. The Sativa water supply consists entirely of groundwater, specifically from two active wells: Well 3 and Well 5. In March 2016, Sativa applied for the Water Replenishment District of Southern California's Safe Drinking Water Disadvantage Community Program to obtain funding from the Safe Drinking Water State Revolving Fund. In addition to the wellhead treatment, the funding request included a storage tank and booster pump. This funding was awarded in early 2018 to Sativa by the State Water Resources Control Board.

As part of the process of identifying cultural resources issues for the project, Rincon contacted the Native American Heritage Commission to request a Sacred Lands File (SLF) search of the project area and a list of Native American tribal organizations and individuals who may have knowledge of cultural resources within or near the project area. The SLF search results were negative for the project.

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Archaeologist

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August 24, 2018

Lynn Valbuena
San Manuel Band of Mission Indians
26569 Community Center Drive
Highland, California 92346

Subject: Cultural Resources Technical Study for the Sativa Los Angeles County Water District Well 5 Project, Los Angeles County, California

Dear Ms. Valbuena,

Rincon Consultants, Inc. (Rincon) was retained by KEH & Associates to conduct a cultural resources study for the Sativa Los Angeles County Water District (Sativa) Well 5 Project (project). Sativa supplies domestic water services to a portion of the Willowbrook area, an unincorporated census-designated place within Los Angeles County, and to a small area within the City of Compton. The Sativa water supply consists entirely of groundwater, specifically from two active wells: Well 3 and Well 5. In March 2016, Sativa applied for the Water Replenishment District of Southern California's Safe Drinking Water Disadvantage Community Program to obtain funding from the Safe Drinking Water State Revolving Fund. In addition to the wellhead treatment, the funding request included a storage tank and booster pump. This funding was awarded in early 2018 to Sativa by the State Water Resources Control Board.

As part of the process of identifying cultural resources issues for the project, Rincon contacted the Native American Heritage Commission to request a Sacred Lands File (SLF) search of the project area and a list of Native American tribal organizations and individuals who may have knowledge of cultural resources within or near the project area. The SLF search results were negative for the project.

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August 24, 2018

Eleanor Arrellanes
Barbareno/ Ventureno Band of Mission Indians
P.O. Box 5687
Ventura, California 93005

Subject: Cultural Resources Technical Study for the Sativa Los Angeles County Water District Well 5 Project, Los Angeles County, California

Dear Ms. Arellanes,

Rincon Consultants, Inc. (Rincon) was retained by KEH & Associates to conduct a cultural resources study for the Sativa Los Angeles County Water District (Sativa) Well 5 Project (project). Sativa supplies domestic water services to a portion of the Willowbrook area, an unincorporated census-designated place within Los Angeles County, and to a small area within the City of Compton. The Sativa water supply consists entirely of groundwater, specifically from two active wells: Well 3 and Well 5. In March 2016, Sativa applied for the Water Replenishment District of Southern California's Safe Drinking Water Disadvantage Community Program to obtain funding from the Safe Drinking Water State Revolving Fund. In addition to the wellhead treatment, the funding request included a storage tank and booster pump. This funding was awarded in early 2018 to Sativa by the State Water Resources Control Board.

As part of the process of identifying cultural resources issues for the project, Rincon contacted the Native American Heritage Commission to request a Sacred Lands File (SLF) search of the project area and a list of Native American tribal organizations and individuals who may have knowledge of cultural resources within or near the project area. The SLF search results were negative for the project.

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Breana Campbell-King, MA, RPA
Archaeologist

Enclosure: Project Location Map



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Native American Contact Table
Sativa Los Angeles County Water District – Well 5 Project

Native American Contact	Tribal Affiliation	Mailing Address	Email Address	Phone Number	Contact Attempt	Follow Up Attempt	Second Follow Up Attempt	Results
Andrew Salas, Chairperson	Gabrieleno Band of Mission Indians – Kizh Nation	PO Box 393 Covina, California 91723	gabrielenoindians@yahoo.com	(626)926-4131	Anticipatory letter sent August 10, 2018	N/A	N/A	On August 16, 2018, Brandy Salas responded stating that if there were to be any ground disturbance for the project, the Kizh Nation tribal government would like to consult.
Anthony Morales, Chairperson	Gabrieleno/Tongva San Gabriel Band of Mission Indians	PO Box 693 San Gabriel, California 91778	GTribalCouncil@aol.com	(626)483-3564	Anticipatory letter sent August 10, 2018	Called on September 4, 2018	N/A	Mr. Morales stated that he has concerns for the project due to the sensitivity of the area including its proximity and potential interaction with nearby waterways. If discoveries are made during subsurface development, he has requested additional consultation and potential monitoring/spot checking.
Sandonne Goad, Chairperson	Gabrielino/Tongva Nation	106 ½ Judge John Aiso Street, #231 Los Angeles, California 90012	sgoad@gabrielino-tongva.com	(951)807-0479	Anticipatory letter sent August 10, 2018	Called on September 4, 2018	Called on September 18, 2018	Left a voice message. Left a second voice message. No response received.



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Native American Contact	Tribal Affiliation	Mailing Address	Email Address	Phone Number	Contact Attempt	Follow Up Attempt	Second Follow Up Attempt	Results
Robert Dorame, Chairperson	Gabrielino Tongva Indians of California Tribal Council	PO Box 490 Bellflower, California 90707	gtongva@gmail.com	(562)761-6417	Anticipatory letter sent August 10, 2018	Called on September 4, 2018	Called on September 18, 2018	Left a voice message. Mr. Dorame stated that he would like to be contacted in the event of any discoveries made during the project. Additionally, if human remains are discovered, he would like to be contacted (if he is not named the MLD).
Charles Alvarez	Gabrielino-Tongva Tribe	23454 Vanowen Street West Hills, California 91307	roadkingcharles@aol.com	(310)403-6048	Anticipatory letter sent August 10, 2018	Called on September 4, 2018	Called on September 18, 2018	Left a voice message. Left a second voice message. No response received.
Kenneth Kahn	Santa Ynez Band of Chumash Indians	P.O. Box 517 Snta Ynez, California 93460	kkahn@santaynezchumash.org	(805)688-7997	Letter mailed August 24, 2018	Called on September 4, 2018	Called on September 18, 2018	Left a voice message. Rincon spoke to Mr. Kahn's assistant who stated that the project details were forwarded to the tribe's cultural resources team, and because they did not respond, they have no comments on the project.
Rudy Ortega, Jr.	Fernandeno Tatviam Band of Mission Indians	1019 Second Street, Suite 1 San Fernando, CA 91340	rortega@tatviamnsn.us	(818)837-0794	Letter mailed August 24, 2018	Called on September 4, 2018	N/A	Jairo Avilla stated that the project was outside of the Fernandeno Tataviam tribal territory and that the tribe would defer to the Gabrieleno for the project.
Julie Lynn Tumamait-Stenslie	Barbareno/Ventureno Band of Mission Indians	365 North Poli Avenue Ojai, California 93023	jtumamait@hotmail.com	(805)646-6214	Letter mailed August 24, 2018	Called on September 4, 2018	Called on September 18, 2018	Left a voice message. Ms. Tumamait-Stenslie stated that she would defer to local tribes.



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Native American Contact	Tribal Affiliation	Mailing Address	Email Address	Phone Number	Contact Attempt	Follow Up Attempt	Second Follow Up Attempt	Results
Lee Clauss	San Manuel Band of Mission Indians	26569 Community Center Drive Highland, California 92346	lclauss@sanmanuel-nsn.gov	(909) 864-8933	Letter mailed August 24, 2018	Called on September 4, 2018	N/A	Left a voice message. On September 5, 2018, Cultural Resources Analyst Jessica Mauck responded stating that she did not receive correspondence of the project, and asked to be sent a project location map to confirm that the APE was outside of San Manuel's territory. Rincon sent her the map on the same day, and Ms. Mauck responded confirming that the project was well outside of the tribe's territory.
Patrick Tumamait	Barbareno/Ventureno Band of Mission Indians	992 El Camino Corto Ojai, California 93023	N/A	(805)216-1253	Letter mailed August 24, 2018	Called on September 4, 2018	N/A	Mr. Tumamait stated that he did not have any concerns for the project as it is outside of his area, and asked that we notify local Native American groups of the project.
Robert Robinson	Kern Valley Indian Community	P.O. Box 1010 Lake Isabella, California 93283	brobinson@iwvisp.com	(760)378-2915	Letter mailed August 24, 2018	Called on September 4, 2018	N/A	Mr. Robinson stated that the project was outside of his tribal territory.
Delia Dominguez	Kitanemuk & Yowlumne Tejon Indians	115 Radio Street Bakersfield, California 93305	deedominiguez@junco.com	(626)339-6785	Letter mailed August 24, 2018	Called on September 4, 2018	Called on September 18, 2018	Left a voice message. Left a second voice message. No response was received.



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Native American Contact	Tribal Affiliation	Mailing Address	Email Address	Phone Number	Contact Attempt	Follow Up Attempt	Second Follow Up Attempt	Results
Linda Candelaria	Gabrielino-Tongva Tribe	N/A	N/A	N/A	N/A	N/A	N/A	No contact information was provided by the NAHC, and no reliable contact info is on file at Rincon.
Joseph Ontiveros	Soboba Band of Luiseno Indians	P.O. Box 487 San Jacinto, California 92581	iontiveros@soboba-nasn.gov	(951) 663- 5279	Letter mailed August 24, 2018	Called on September 4, 2018	N/A	Mr. Ontiveros stated that the project was outside of the tribe's territory and they would defer to the San Gabriel Band of Mission Indians.
Lynn Valbuena	San Manuel Band of Mission Indians	26569 Community Center Drive Highland, California 92346	N/A	(909)864 -8933	Letter mailed August 24, 2018	Called on September 4, 2018	N/A	Left a voice message. On September 5, 2018, Cultural Resources Analyst Jessica Mauck responded stating that she did not receive correspondence of the project, and asked to be sent a project location map to confirm that the APE was outside of San Manuel's territory. Rincon sent her the map on the same day, and Ms. Mauck responded confirming that the project was well outside of the tribe's territory.
Eleanor Arrellanes	Barbareno/Ventureno Band of Mission Indians	P.O. Box 5687 Ventura, California 93005	N/A	(805)701 -3246	Letter mailed August 24, 2018	Called on September 4, 2018	N/A	Left a voice message. Ms. Arrellanes responded on September 5, 2018 stating that the project is outside of her tribal territory.

Source: Native American Heritage Commission (NAHC)*

**Anticipatory list from the Maywood Mutual No. 2 Water System Construction Project

Appendix D

Local Historic Group Consultation



Rincon Consultants, Inc.

1530 Monterey Street, Suite D
San Luis Obispo, California 93401

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August 10, 2018
Project No. 18-05729

Hawthorne Historical Society
Tom Quintana, Executive Director
3901 El Segundo Boulevard,
Hawthorne, CA 90250

Subject: Cultural Resources Technical Study for the Sativa Los Angeles County Water District Well 5 Project, Los Angeles County, California

Dear Mr. Quintana:

Rincon Consultants, Inc. (Rincon) was retained by KEH & Associates to conduct a cultural resources technical study for the Sativa Los Angeles County Water District (Sativa) Well 5 Project (project). Sativa supplies domestic water services to a portion of the Willowbrook area, an unincorporated census-designated place within Los Angeles County, and to a small area within the City of Compton. The Sativa water supply consists entirely of groundwater, specifically from two active wells: Well 3 and Well 5. In March 2016, Sativa applied for the Water Replenishment District of Southern California's Safe Drinking Water Disadvantage Community Program to obtain funding from the Safe Drinking Water State Revolving Fund to design a wellhead treatment system for Well 5 which is currently contaminated with manganese. In addition to the wellhead treatment, the funding request included a storage tank and booster pump. This funding was awarded to Sativa by the State Water Resources Control Board in early 2018.

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Sincerely,
Rincon Consultants, Inc.

A handwritten signature in blue ink that reads "Rachel Perzel". The signature is fluid and cursive, with a horizontal line underneath the name.

Rachel Perzel
Architectural Historian

Enclosure: Project Location Map



Rincon Consultants, Inc.

1530 Monterey Street, Suite D
San Luis Obispo, California 93401

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www.rinconconsultants.com

August 10, 2018
Project No. 18-05729

Los Angeles Conservancy
Adrian Scott Fine, Director of Advocacy
523 West Sixth Street, Suite 826
Los Angeles, CA 90014

Subject: Cultural Resources Technical Study for the Sativa Los Angeles County Water District Well 5 Project, Los Angeles County, California

Dear Mr. Fine:

Rincon Consultants, Inc. (Rincon) was retained by KEH & Associates to conduct a cultural resources technical study for the Sativa Los Angeles County Water District (Sativa) Well 5 Project (project). Sativa supplies domestic water services to a portion of the Willowbrook area, an unincorporated census-designated place within Los Angeles County, and to a small area within the City of Compton. The Sativa water supply consists entirely of groundwater, specifically from two active wells: Well 3 and Well 5. In March 2016, Sativa applied for the Water Replenishment District of Southern California's Safe Drinking Water Disadvantage Community Program to obtain funding from the Safe Drinking Water State Revolving Fund to design a wellhead treatment system for Well 5 which is currently contaminated with manganese. In addition to the wellhead treatment, the funding request included a storage tank and booster pump. This funding was awarded to Sativa by the State Water Resources Control Board in early 2018.

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Architectural Historian

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August 10, 2018
Project No. 18-05729

Los Angeles County Department of Regional Planning,
Dean Edwards, Los Angeles County Historic Preservation Program
320 West Temple Street
Los Angeles, CA 90012

Subject: Cultural Resources Technical Study for the Sativa Los Angeles County Water District Well 5 Project, Los Angeles County, California

Dear Mr. Edwards:

Rincon Consultants, Inc. (Rincon) was retained by KEH & Associates to conduct a cultural resources technical study for the Sativa Los Angeles County Water District (Sativa) Well 5 Project (project). Sativa supplies domestic water services to a portion of the Willowbrook area, an unincorporated census-designated place within Los Angeles County, and to a small area within the City of Compton. The Sativa water supply consists entirely of groundwater, specifically from two active wells: Well 3 and Well 5. In March 2016, Sativa applied for the Water Replenishment District of Southern California's Safe Drinking Water Disadvantage Community Program to obtain funding from the Safe Drinking Water State Revolving Fund to design a wellhead treatment system for Well 5 which is currently contaminated with manganese. In addition to the wellhead treatment, the funding request included a storage tank and booster pump. This funding was awarded to Sativa by the State Water Resources Control Board in early 2018.

This project is subject to the California Environmental Quality Act and may involve federal funding; thus, a cultural resources study is also being prepared in conformance with the National Environmental Policy Act and Section 106 of the National Historic Preservation Act (NHPA). Rincon is currently working in the study area to identify any cultural resource issues for the proposed project. We are writing to provide you with an opportunity to be involved in the Section 106 process as a consulting party. If you or your organization has any knowledge or specific concerns regarding cultural resources in the project area, please respond by telephone at 805-644-4455 ext. 138 or by email to rperzel@rinconconsultants.com. Thank you for your assistance.

Sincerely,
Rincon Consultants, Inc.

A handwritten signature in blue ink that reads "Rachel Perzel". The signature is fluid and cursive, with a horizontal line underneath.

Rachel Perzel
Architectural Historian

Enclosure: Project Location Map

**Interested Parties and Historical Group Outreach
18-05729-Sativa-Los Angeles County Water District**

**Table 1
Historic Groups Consulted**

Local Group/ Government Contact	Rincon Coordination Efforts	Response to Coordination Efforts
<p>Los Angeles County Department of Regional Planning, Dean Edwards 320 West Temple Street Los Angeles, CA 90012 213-974-6435 dedwards@planning.lacounty.gov</p>	<p>August 10 2018: Letter sent via U.S. Mail</p> <p>August 23, 2018: Follow-up call; left message at 213-974-6435 for Dean Edwards. Mr. Edwards responded via telephone and requested additional information, which was provided via email.</p>	<p>Mr. Edwards responded via email on August 23, 2018; he reported no cultural resources related concerns.</p>
<p>Adrian Scott Fine, Director of Advocacy Los Angeles Conservancy 523 West Sixth Street, Suite 826 Los Angeles, CA 90014 213-623-2489 afine@laconservancy.com</p>	<p>August 10 2018: Letter sent via U.S. Mail</p> <p>August 23, 2018: Follow-up call: left message for Mr. Fine at 213-623-2489.</p> <p>August 23, 2018: Sent follow up email to afine@laconservancy.com; stated that a response was not necessary if there were no concerns.</p> <p>September 19, 2018: Follow-up call (2): left message for Mr. Fine at 213-623-2489.</p>	<p>No Response.</p>
<p>Hawthorne Historical Society Tom Quintana, Executive Director 3901 El Segundo Boulevard, Hawthorne, CA 90250</p>	<p>August 10 2018: Letter sent via U.S. Mail</p> <p>August 23, 2018: No phone number listed on website; sent message via website.</p> <p>September 19, 2018: Sent additional message via website.</p>	<p>No Response.</p>

Appendix D

Paleontological Resources



Rincon Consultants, Inc.

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Los Angeles, California 90012

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September 20, 2018
Rincon Project No: 17-05729

Mr. Ryan Gallagher, PE
Managing Engineer
KEH & Associates
Via email: rgallagher@KEHGROUP.COM

Subject: Paleontological Resource Assessment for the Sativa Well 5 Project, Los Angeles County, California

Dear Mr. Gallagher:

Rincon Consultants, Inc. (Rincon) was retained by KEH & Associates, on behalf of the Sativa Los Angeles County Water District Water System (Sativa) and the Water Replenishment District of Southern California (WRD), to perform a paleontological resources technical study for the Sativa Well 5 Project (project) in unincorporated Los Angeles County, California. The goal of the assessment is to identify the geologic units that may be impacted by development of the project, determine the paleontological sensitivity of geologic units within the project site assess potential for impacts to paleontological resources from development of the project, and recommend mitigation measures to avoid or mitigate impacts to scientifically significant paleontological resources, as necessary.

This paleontological resource assessment consisted of a fossil locality record search at the Natural History Museum of Los Angeles County (LACM) and review of existing geologic maps and scientific literature regarding fossiliferous geologic units within the project site and vicinity. Following the literature review and records search, this report assessed the paleontological sensitivity of the geologic units underlying the project site, determined the potential for impacts to significant paleontological resources, and proposed mitigation measures to reduce impacts to less than significant. Figures are included in Attachment A.

This paleontological resource assessment has been prepared to support environmental review under the California Environmental Quality Act (CEQA). The WRD is the CEQA Lead Agency for the project.

Project Location and Description

The project is located at the northwest corner of South Aranbe Avenue and East Stockwell Street, approximately 1 mile south of Interstate (I) 105 and 3 miles east of I-110, in the community of Willowbrook within unincorporated Los Angeles County. Specifically, the project is depicted in Section 15, Township 3 South, Range 13 West on the United States Geological Survey (USGS) South Gate, CA 7.5-minute quadrangle (Attachment A, Figure 1).



Sativa was incorporated on December 30, 1938 and supplies domestic water services to a portion of the city of Compton and the Willowbrook area of unincorporated Los Angeles County. Sativa's service area is approximately one-half square mile with a population of 6,837 and 1,642 service connections. The Sativa water supply consists entirely of groundwater, specifically from two active wells: Well 3 and Well 5.

In early 2018, Sativa was awarded funding by the State Water Resources Control Board (SWRCB) to design a wellhead treatment system for Well 5, which is currently contaminated with manganese. In addition to the wellhead treatment, the project will include a storage tank and booster pump. The depth of disturbance is not expected to exceed 10 feet below ground surface (bgs), based on the maximum depth necessary to install the subsurface utilities.

Regulatory Setting

Fossils are remains of ancient, commonly extinct organisms, and as such are nonrenewable resources. The fossil record is a document of the evolutionary history of life on earth, and fossils can be used to understand evolutionary pattern and process, rates of evolutionary change, past environmental conditions, and the relationships among modern species (i.e., systematics). The fossil record is a valuable scientific and educational resource, and individual fossils are afforded protection under state and federal environmental laws.

This study has been completed in compliance with both state and federal regulations in the case that a federal nexus is established during the course of project execution. A federal nexus may be established with the requirement of federal funding and/or permitting. Compliance with both regulatory frameworks allows the lead agency to apply the results of this technical study to both levels of regulation should a nexus be established at a later time. Federal, state and local regulations applicable to potential paleontological resources in the project site are summarized below.

Federal Regulations

A variety of federal statutes specifically address paleontological resources. They are applicable to all projects occurring on federal lands and may be applicable to specific projects if the project involves a federal agency license, permit, approval, or funding.

The National Environmental Policy Act (United States Code, section 4321 et seq.; 40 Code of Federal Regulations, section 1502.25), as amended, directs federal agencies to "preserve important historic, cultural, and natural aspects of our national heritage (Section 101(b) (4))." The current interpretation of this language has included scientifically important paleontological resources among those resources that may require preservation.

The Paleontological Resources Preservation Act (PRPA) is part of the Omnibus Public Land Management Act of 2009 (Public Law 111-011 Subtitle D). The PRPA directs the Secretary of the Interior or the Secretary of Agriculture to manage and protect paleontological resources on federal land, and develop plans for inventorying, monitoring, and deriving the scientific and educational use of such resources. The PRPA prohibits the removal of paleontological resources from federal land without a permit, establishes penalties for violations, and establishes a program to increase public awareness about such resources. While specific to activity that occurs on federal lands, some federal agencies may require adherence to the directives outlined in the PRPA for projects on non-federal lands if federal funding is involved, or the project includes federal oversight.



State

California Environmental Quality Act

Paleontological resources are protected under CEQA, which states, in part, that a project will “normally” have a significant effect on the environment if it, among other things, will disrupt or adversely affect a paleontological site except as part of a scientific study. Specifically, in Section V(c) of Appendix G of the State CEQA Guidelines, the Environmental Checklist Form, the question is posed, “Will the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature”. To determine the uniqueness of a given paleontological resource, it must first be identified or recovered (i.e., salvaged). Therefore, mitigation of adverse impacts, to the extent practicable, to paleontological resources is mandated by CEQA.

CEQA does not define “a unique paleontological resource or site.” However, the Society of Vertebrate Paleontology (SVP) has defined a “significant paleontological resource” in the context of environmental review. The SVP defines a Significant Paleontological Resources as:

...fossils and fossiliferous deposits, here defined as consisting of identifiable vertebrate fossils, large or small, uncommon invertebrate, plant, and trace fossils, and other data that provide taphonomic, taxonomic, phylogenetic, paleoecologic, stratigraphic, and/or biochronologic information. Paleontological resources are typically to be older than recorded human history and/or older than middle Holocene (i.e., older than about 5,000 radiocarbon years).

The loss of paleontological resources that meet the criteria outlined above (i.e., a significant paleontological resource) would be a significant impact under CEQA, and the CEQA lead agency is responsible for ensuring that impacts to paleontological resources are mitigated, where practicable, in compliance with CEQA and other applicable statutes.

California Public Resources Code

Section 5097.5 of the Public Resources Code (PRC) states:

No person shall knowingly and willfully excavate upon, or remove, destroy, injure or deface any historic or prehistoric ruins, burial grounds, archaeological or vertebrate paleontological site, including fossilized footprints, inscriptions made by human agency, or any other archaeological, paleontological or historical feature, situated on public lands, except with the express permission of the public agency having jurisdiction over such lands. Violation of this section is a misdemeanor.

As used in this PRC section, “public lands” means lands owned by, or under the jurisdiction of, the state or any city, county, district, authority, or public corporation, or any agency thereof. Consequently, public agencies are required to comply with PRC 5097.5 for their own activities, including construction and maintenance, as well as for permit actions (e.g., encroachment permits) undertaken by others.

Methods

Rincon evaluated the paleontological sensitivity of the geologic units that underlie the project site using the results of the paleontological locality search and review of existing information in the scientific literature concerning known fossils within those geologic units. Rincon submitted a request to the LACM for a list of known fossil localities from the project site and immediate vicinity (i.e., localities recorded on



the USGS South Gate, CA 7.5-minute topographic quadrangle), and reviewed geologic maps and relevant literature.

Rincon assigned a paleontological sensitivity to the geologic units within the project site. The potential for impacts to significant paleontological resources is based on the potential for ground disturbance to directly impact paleontologically sensitive geologic units. The SVP (2010) has defined paleontological sensitivity and developed a system for assessing paleontological sensitivity, as discussed below.

Paleontological Resource Potential

Significant paleontological resources are determined to be fossils or assemblages of fossils that are unique, unusual, rare, diagnostically important, or are common but have the potential to provide valuable scientific information for evaluating evolutionary patterns and processes, or which could improve our understanding of paleochronology, paleoecology, paleophylogeography, or depositional histories. New or unique specimens can provide new insights into evolutionary history; however, additional specimens of even well represented lineages can be equally important for studying evolutionary pattern and process, evolutionary rates, and paleophylogeography. Even unidentifiable material can provide useful data for dating geologic units if radiocarbon dating is possible. As such, common fossils (especially vertebrates) may be scientifically important, and therefore considered highly significant.

The SVP (2010) describes sedimentary rock units as having high, low, undetermined, or no potential for containing significant nonrenewable paleontological resources. This criterion is based on rock units within which vertebrate or significant invertebrate fossils have been determined by previous studies to be present or likely to be present. While these standards were specifically written to protect vertebrate paleontological resources, all fields of paleontology have adopted these guidelines, which are given here verbatim:

- I. **High Potential (sensitivity).** Rock units from which significant vertebrate or significant invertebrate fossils or significant suites of plant fossils have been recovered have a high potential for containing significant non-renewable fossiliferous resources. These units include but are not limited to, sedimentary formations and some volcanic formations which contain significant nonrenewable paleontological resources anywhere within their geographical extent, and sedimentary rock units temporally or lithologically suitable for the preservation of fossils. Sensitivity comprises both (a) the potential for yielding abundant or significant vertebrate fossils or for yielding a few significant fossils, large or small, vertebrate, invertebrate, or botanical and (b) the importance of recovered evidence for new and significant taxonomic, phylogenetic, ecologic, or stratigraphic data. Areas which contain potentially datable organic remains older than Recent, including deposits associated with nests or middens, and areas which may contain new vertebrate deposits, traces, or trackways are also classified as significant.
- II. **Low Potential (sensitivity).** Sedimentary rock units that are potentially fossiliferous but have not yielded fossils in the past or contain common and/or widespread invertebrate fossils of well documented and understood taphonomic, phylogenetic species and habitat ecology. Reports in the paleontological literature or field surveys by a qualified vertebrate paleontologist may allow determination that some areas or units have low potentials for yielding significant fossils prior to the start of construction. Generally, these units will be poorly represented by specimens in institutional collections and will not require protection or salvage operations. However, as excavation for construction gets underway it is possible that significant and unanticipated paleontological



resources might be encountered and require a change of classification from Low to High Potential and, thus, require monitoring and mitigation if the resources are found to be significant.

- III. **Undetermined Potential (sensitivity).** Specific areas underlain by sedimentary rock units for which little information is available have undetermined fossiliferous potentials. Field surveys by a qualified vertebrate paleontologist to specifically determine the potentials of the rock units are required before programs of impact mitigation for such areas may be developed.
- IV. **No Potential.** Rock units of metamorphic or igneous origin are commonly classified as having no potential for containing significant paleontological resources.

Existing Conditions

Regional Geologic Setting

The project site is in the “petroliferous” Los Angeles Basin, a northwest-trending lowland plain at the northern end of the Peninsular Ranges Province, one of eleven major geomorphic provinces in California (California Geological Survey 2002; Yerkes and Campbell 2005). A geomorphic province is a region of unique topography and geology that is readily distinguished from other regions based on its landforms and diastrophic history (Norris and Webb 1990). The Los Angeles Basin is approximately 60 miles long and 35 miles wide and is defined by Yerkes et al. (1965) as the region bounded by the northern foothills of the Santa Monica Mountains to the north, the San Jose Hills and the Chino fault on the east, and the Santa Ana Mountains and San Joaquin Hills in the southeast. The Los Angeles Basin is underlain by a structural depression that was the site of extensive accumulation of interstratified fluvial, alluvial, floodplain, shallow marine and deep shelf deposits on underlying Mesozoic metamorphic and granitic plutonic basement rocks. Sediment accumulation and subsidence has occurred there since the Late Cretaceous and has reached a maximum thickness of more than 20,000 feet (McCulloh and Beyer 2004; Norris and Webb 1990; Yerkes et al. 1965). During that time, rise and fall of relative sea level, tectonic uplift and subsidence, and Pleistocene glaciation resulted in marine and terrestrial sedimentary deposition throughout the Los Angeles Basin (Beyer 1995; McCulloh and Beyer 2004). The Los Angeles Basin contains several major fault zones, including the Newport-Inglewood fault zone and the Los Alamitos fault in the vicinity of the project site (Saucedo et al. 2016; Yerkes et al. 1965).

Geologic Units in the Project Site

The geology of the project site is mapped by Saucedo et al. (2016) and is entirely underlain by Quaternary young alluvium, unit 2 (Qya₂). The Quaternary young alluvium was deposited during the Holocene to latest Pleistocene and is composed of slightly to poorly consolidated and poorly sorted floodplain deposits composed of clay, silt, and sand (Attachment A, Figure 2). A review of recent aerial photographs indicates the project site has been developed and paved and the original surficial alluvial deposits have been completely disturbed or removed. Any intact Holocene alluvial deposits in the project site would be too young to preserve paleontological resources; however, at depth the Holocene sediments may grade into older deposits of late Pleistocene age that may preserve fossil remains. The depth at which the Pleistocene strata underlies the surficial alluvium in the project site is unknown but may be as shallow as 15 feet bgs, based on depth of recovery for nearby vertebrate fossil localities from older Pleistocene deposits (McLeod 2018).

Pleistocene alluvial sediments have a well-documented record of abundant and diverse vertebrate fauna throughout California, especially within the Los Angeles Basin. Fossil specimens of whale, sea lion, horse, ground sloth, bison, camel, mammoth, dog, pocket gopher, turtle, ray, bony fish, shark, and bird have



been reported (Agenbroad 2003; Bell et al. 2004; Jefferson 1985, 1989, 1991; Maguire and Holroyd 2016; Merriam 1911; Reynolds et al. 1991; Savage 1951; Savage et al. 1954; Scott and Cox 2008; Springer et al. 2009; Tomiya et al. 2011; Wilkerson et al. 2011; Winters 1954; University of California Berkeley Museum of Paleontology 2018).

Museum Fossil Locality Records

According to McLeod (2018), LACM paleontological collection records contain no previously recorded fossil localities within the project site; however, several vertebrate localities have been recorded nearby within Pleistocene alluvial deposits (which may underlie the project site at moderate depth below the younger Holocene surficial deposits).

Locality LACM 4685 yielded a fossil specimen of undetermined elephantoid (Proboscidea) at an unspecified depth about two miles west of the project site near Avalon Boulevard. Further northwest, near the I-110 and I-105 Interchange, five additional vertebrate localities were previously identified within Pleistocene sedimentary deposits. Localities LACM 1344, 3266 and 3365 yielded fossil specimens of mammoth (*Mammuthus*), squirrel (Sciuridae), horse (*Equus*), and pronghorn antelope (*Breameryx*), at depths between 15 and 20 feet below the surface. LACM 1295 and 4206 produced several Pleistocene fossil specimens, including vertebrate taxa of pond turtle (*Clemmys*), puffin (*Mancalla*), turkey (*Parapavo*), ground sloth (*Paramylodon*), mammoth, dire wolf (*Canis dirus*), rabbit (*Sylvilagus*), squirrel, deer mouse (*Microtus*), pocket gopher (*Thomomys*), horse, deer (*Cervus*), pronghorn antelope (*Capromeryx*), and bison (*Bison*), at unspecified depth. Approximately two miles south of the project site near the intersection of Wilmington Boulevard and Artesia Boulevard, LACM 3382 yielded a fossil specimen of mammoth from a shallow depth within Pleistocene deposits mapped at the ground surface.

Results

Paleontological Resource Potential of the Project Site

The Holocene alluvial deposits mapped at the surface of the project site are typically too young to contain fossilized remains and have been assigned a low paleontological sensitivity, in accordance with the SVP (2010) guidelines. The Holocene sediments may be underlain by older Pleistocene deposits at a moderate depth of approximately 15 feet bgs, based on depth of recovery for nearby Pleistocene vertebrate fossil localities (McLeod 2018). Similar Pleistocene sedimentary deposits have yielded a well-documented record of scientifically significant vertebrate fossils near the project site and have a high potential for buried paleontological resources.

Impact Analysis

Maximum depth for project excavation will be approximately 10 feet bgs; therefore, the sensitive Pleistocene alluvial deposits that may be present at moderate depth (approximately 15 feet bgs) below surficial Holocene deposits are unlikely to be impacted by project development. As a result, the potential for encountering fossil resources during project-related ground disturbance is low and impacts to paleontological resources are not anticipated. Further paleontological resource management is not recommended. In the event an unanticipated fossil discovery is made during project development, then in accordance with SVP guidelines (2010), a qualified Professional Paleontologist should be retained to examine the find and determine if further paleontological resources mitigation is warranted.



If you have any questions regarding this Paleontological Resource Assessment, please contact us.

Sincerely,

Rincon Consultants, Inc.

Heather Clifford, M.S.
Associate Paleontologist

Jessica DeBusk, B.S., M.B.A.
Principal Investigator/Program Manager

Jennifer Haddow, Ph.D.
Principal Environmental Scientist

Attachments

Attachment A: Figures



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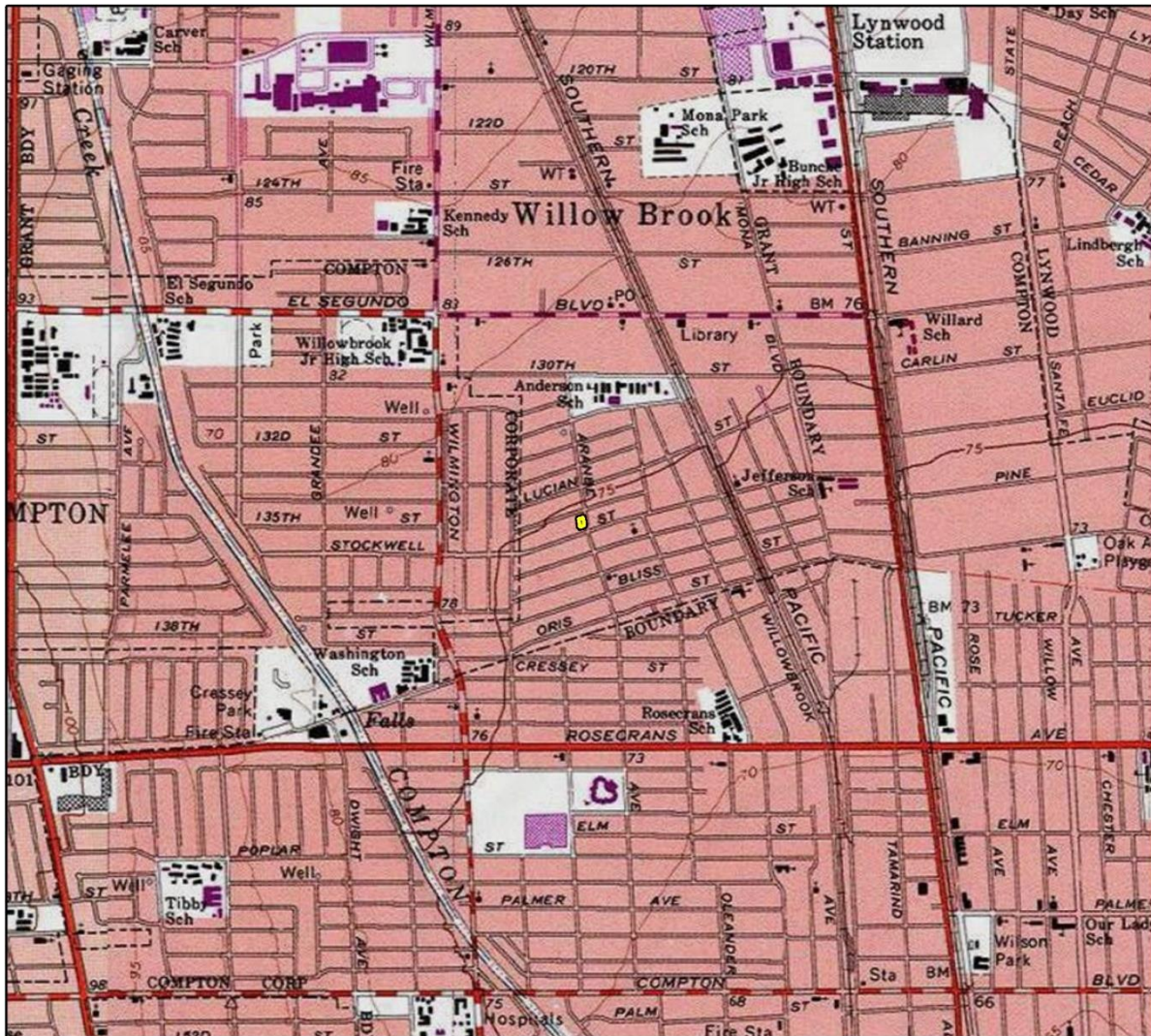


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Attachment A

Figures

Figure 1 Project Vicinity Map



Imagery provided by National Geographic Society, Esri and its licensors © 2018. South Gate Quadrangle. T03S R13W S15. The topographic representation depicted in this map may not portray all of the features currently found in the vicinity today and/or features depicted in this map may have changed since the original topographic map was assembled.

 Project Location

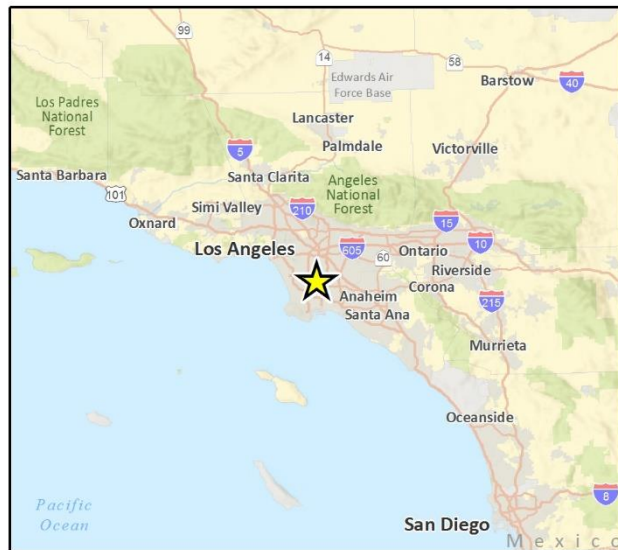
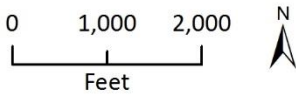
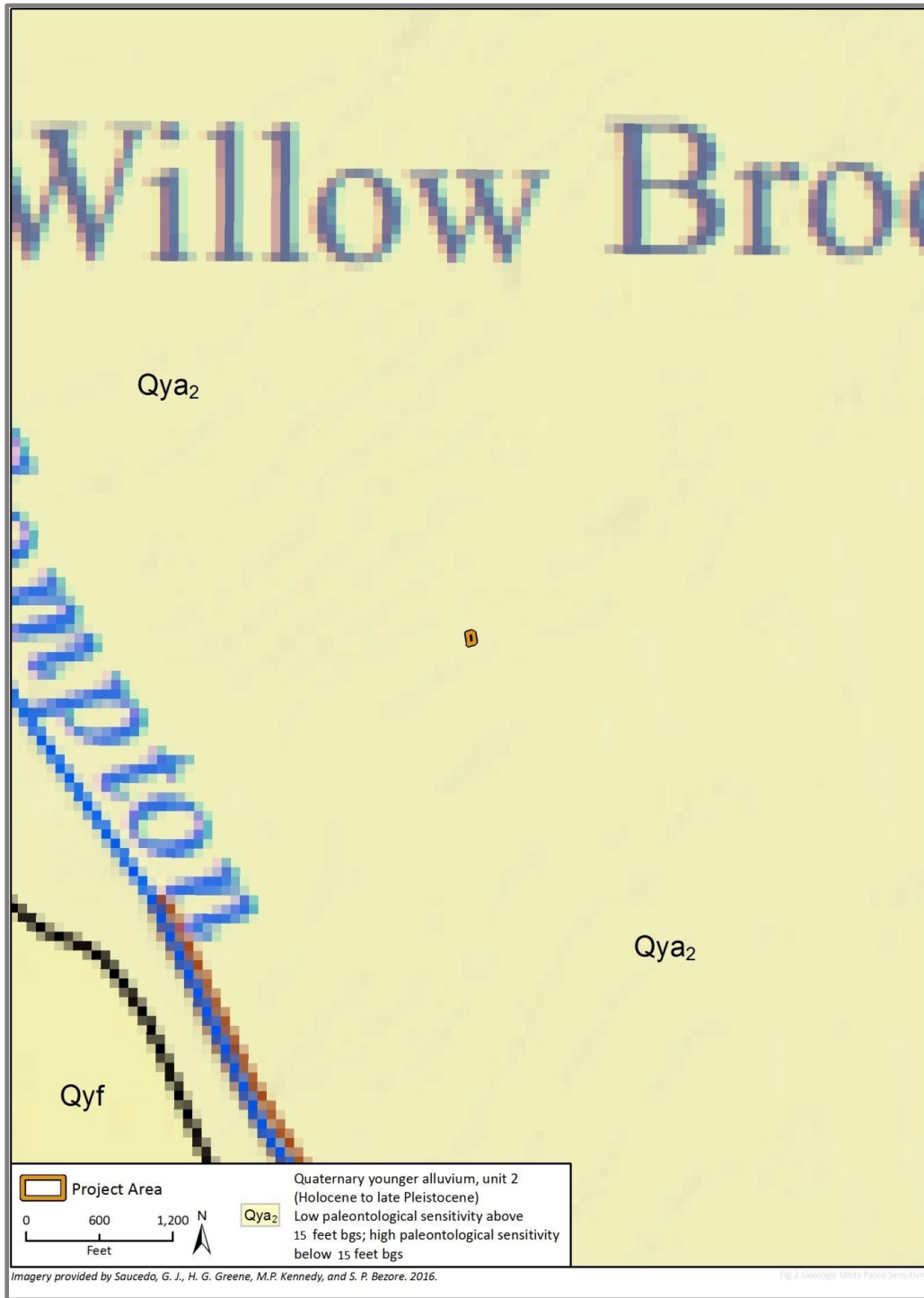


Figure 2 Geology and Paleontological Sensitivity of the Project Site



Appendix E

Noise Monitoring Data

Freq Weight : A
Time Weight : FAST
Level Range : 40-100
Max dB : 82.9 - 2018/08/15 08:36:02
Level Range : 40-100
SEL : 90.7
Leq : 61.2

No. s	Date Time	(dB)
1	2018/08/15 08:32:06	42.1
2	2018/08/15 08:32:07	45.1
3	2018/08/15 08:32:08	47.7
4	2018/08/15 08:32:09	46.9
5	2018/08/15 08:32:10	47.7
6	2018/08/15 08:32:11	47.2
7	2018/08/15 08:32:12	50.2
8	2018/08/15 08:32:13	47.9
9	2018/08/15 08:32:14	44.9
10	2018/08/15 08:32:15	46.5
11	2018/08/15 08:32:16	44.7
12	2018/08/15 08:32:17	47.9
13	2018/08/15 08:32:18	43.9
14	2018/08/15 08:32:19	43.7
15	2018/08/15 08:32:20	45.7
16	2018/08/15 08:32:21	43.8
17	2018/08/15 08:32:22	44.7
18	2018/08/15 08:32:23	44.6
19	2018/08/15 08:32:24	42.3
20	2018/08/15 08:32:25	43.8
21	2018/08/15 08:32:26	44.3
22	2018/08/15 08:32:27	46.0
23	2018/08/15 08:32:28	43.8
24	2018/08/15 08:32:29	44.2
25	2018/08/15 08:32:30	45.2
26	2018/08/15 08:32:31	45.1
27	2018/08/15 08:32:32	44.0
28	2018/08/15 08:32:33	45.2
29	2018/08/15 08:32:34	44.1
30	2018/08/15 08:32:35	43.6
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465	2018/08/15	08:39:50	46.9
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469	2018/08/15	08:39:54	43.0
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890	2018/08/15	08:46:55	47.4
891	2018/08/15	08:46:56	45.5
892	2018/08/15	08:46:57	44.0
893	2018/08/15	08:46:58	43.5
894	2018/08/15	08:46:59	44.3
895	2018/08/15	08:47:00	47.5
896	2018/08/15	08:47:01	53.8
897	2018/08/15	08:47:02	51.6
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899	2018/08/15	08:47:04	50.0
900	2018/08/15	08:47:05	50.0

Freq Weight : A
Time Weight : FAST
Level Range : 40-100
Max dB : 80.8 - 2018/08/15 08:56:39
Level Range : 40-100
SEL : 90.1
Leq : 60.6

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419	2018/08/15	08:58:58	46.4
420	2018/08/15	08:58:59	46.8
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423	2018/08/15	08:59:02	47.9
424	2018/08/15	08:59:03	47.5
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436	2018/08/15	08:59:15	62.9
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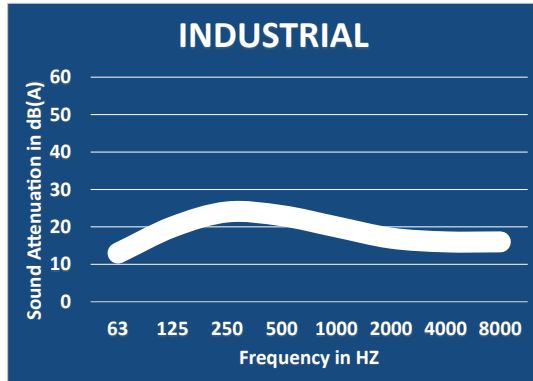
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836	2018/08/15	09:05:55	53.3
837	2018/08/15	09:05:56	53.0
838	2018/08/15	09:05:57	47.8
839	2018/08/15	09:05:58	46.0
840	2018/08/15	09:05:59	49.4
841	2018/08/15	09:06:00	51.2
842	2018/08/15	09:06:01	54.4
843	2018/08/15	09:06:02	60.1
844	2018/08/15	09:06:03	63.7
845	2018/08/15	09:06:04	67.5
846	2018/08/15	09:06:05	64.2
847	2018/08/15	09:06:06	62.3
848	2018/08/15	09:06:07	61.5
849	2018/08/15	09:06:08	63.8
850	2018/08/15	09:06:09	64.6
851	2018/08/15	09:06:10	62.4
852	2018/08/15	09:06:11	60.4
853	2018/08/15	09:06:12	62.4
854	2018/08/15	09:06:13	64.6
855	2018/08/15	09:06:14	63.4
856	2018/08/15	09:06:15	59.4
857	2018/08/15	09:06:16	55.2
858	2018/08/15	09:06:17	54.1
859	2018/08/15	09:06:18	55.7
860	2018/08/15	09:06:19	59.8
861	2018/08/15	09:06:20	62.5
862	2018/08/15	09:06:21	65.6
863	2018/08/15	09:06:22	66.1
864	2018/08/15	09:06:23	65.1
865	2018/08/15	09:06:24	59.1
866	2018/08/15	09:06:25	53.6
867	2018/08/15	09:06:26	53.1
868	2018/08/15	09:06:27	55.9
869	2018/08/15	09:06:28	62.9
870	2018/08/15	09:06:29	66.4
871	2018/08/15	09:06:30	66.8
872	2018/08/15	09:06:31	64.9
873	2018/08/15	09:06:32	62.2
874	2018/08/15	09:06:33	58.7
875	2018/08/15	09:06:34	56.1
876	2018/08/15	09:06:35	56.0
877	2018/08/15	09:06:36	53.6

878	2018/08/15	09:06:37	53.6
879	2018/08/15	09:06:38	51.7
880	2018/08/15	09:06:39	49.5
881	2018/08/15	09:06:40	49.4
882	2018/08/15	09:06:41	48.3
883	2018/08/15	09:06:42	48.4
884	2018/08/15	09:06:43	48.6
885	2018/08/15	09:06:44	48.3
886	2018/08/15	09:06:45	48.6
887	2018/08/15	09:06:46	50.0
888	2018/08/15	09:06:47	50.3
889	2018/08/15	09:06:48	50.9
890	2018/08/15	09:06:49	49.3
891	2018/08/15	09:06:50	46.3
892	2018/08/15	09:06:51	45.1
893	2018/08/15	09:06:52	45.9
894	2018/08/15	09:06:53	51.7
895	2018/08/15	09:06:54	56.1
896	2018/08/15	09:06:55	63.6
897	2018/08/15	09:06:56	66.3
898	2018/08/15	09:06:57	69.7
899	2018/08/15	09:06:58	65.8
900	2018/08/15	09:06:59	61.7

Industrial Grade Silencers

Model NTIN-C (Cylindrical), 15-20 dBA

TYPICAL ATTENUATION CURVE



Nett Technologies' Industrial Grade Silencers are designed to achieve maximum performance with the least amount of backpressure.

The silencers are Reactive Silencers and are typically used for reciprocating or positive displacement engines where noise level regulations are low.

FEATURES & BENEFITS

- Over 25 years of excellence in manufacturing noise and emission control solutions
- Compact modular designs providing ease of installations, less weight and less foot-print
- Responsive lead time for both standard and custom designs to meet your needs
- Customized engineered systems solutions to meet challenging integration and engine requirements

Contact Nett Technologies with your projects design requirements and specifications for optimized noise control solutions.

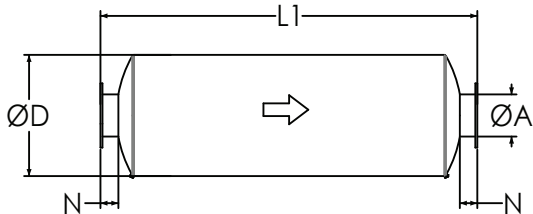
OPTIONS

- Versatile connections including ANSI pattern flanges, NPT, slip-on, engine flange, schedule 40 and others
- Aluminized Steel, Stainless Steel 304 or 316 construction
- Horizontal or vertical mounting brackets and lifting lugs

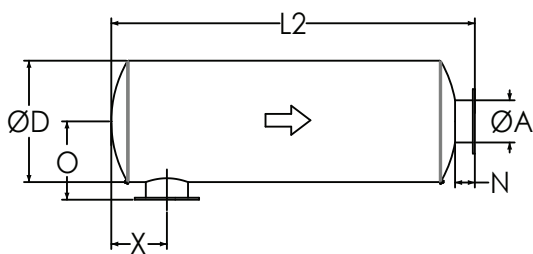
ACCESSORIES

- Hardware Kits
- Flexible connectors and expansion joints
- Elbows
- Thimbles
- Raincaps
- Thermal insulation: integrated or with thermal insulation blankets
- Please see our accessories catalog for a complete listing

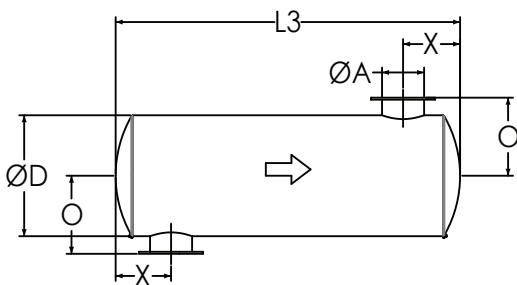
TYPICAL CONFIGURATIONS



END IN END OUT (EI-EO)



SIDE IN END OUT (SI-EO)



SIDE IN SIDE OUT (SI-SO)

PRODUCT DIMENSIONS (in)

Model*	A	D	L1	L2	L3	X**	X	N	O
	Outlet	Dia	EI-EO	SI-EO	SI-SO	Min	Max	Nipple	O
NTIN-C1	1	4	20	18	16	3	7	2	4
NTIN-C1.5	1.5	6	22	20	18	3	8	2	5
NTIN-C2	2	6	22	19	16	3	8	3	6
NTIN-C2.5	2.5	6	24	21	18	4	9	3	6
NTIN-C3	3	8	26	23	20	5	10	3	7
NTIN-C3.5	3.5	9	28	25	22	5	11	3	8
NTIN-C4	4	10	32	29	26	5	12	3	8
NTIN-C5	5	12	36	33	30	6	14	3	9
NTIN-C6	6	14	40	36	32	7	16	4	11
NTIN-C8	8	16	50	46	42	8	21	4	12
NTIN-C10	10	20	52	48	44	11	21	4	14
NTIN-C12	12	24	62	58	54	12	26	4	16
NTIN-C14	14	30	74	69	64	15	31	5	20
NTIN-C16	16	36	82	77	72	18	35	5	23
NTIN-C18	18	40	94	89	84	18	42	5	25
NTIN-C20	20	40	110	105	100	19	52	5	25
NTIN-C22	22	48	118	113	108	22	56	5	29
NTIN-C24	24	48	130	125	120	24	62	5	29

* Other models and custom designs are available upon request. Dimensions subject to change without notice. All silencers are equipped with drain ports on inlet side. The silencer is all welded construction and coated with high heat black paint for maximum durability.

** Standard inlet/outlet position.



Acoustical Surfaces, Inc.

SOUNDPROOFING, ACOUSTICS, NOISE & VIBRATION CONTROL SPECIALISTS

123 Columbia Court North • Suite 201 • Chaska, MN 55318

(952) 448-5300 • Fax (952) 448-2613 • (800) 448-0121

Email: sales@acousticalsurfaces.com

Visit our Website: www.acousticalsurfaces.com

We Identify and **S.T.O.P.** Your Noise Problems



Echo Barrier™

The Industry's First Reusable, Indoor/
Outdoor Noise Barrier/Absorber

- Superior acoustic performance
- Industrial durability
- Simple and quick installation system
- Lightweight for easy handling
- Unique roll-up design for compact storage and transportation
- Double or triple up for noise 'hot spots'
- Ability to add branding or messages
- Range of accessories available
- Weatherproof – absorbs sound but not water
- Fire retardant
- 1 person can do the job of 2 or 3 people



Why is it all too often we see construction sites with fencing but no regard for sound issues created from the construction that is taking place? This is due to the fact that there has not been an efficient means of treating this type of noise that was cost effective **until now.**

Echo Barrier temporary fencing is a reusable, outdoor noise barrier. Designed to fit on all types of temporary fencing. Echo Barrier absorbs sound while remaining quick to install, light to carry and tough to last.

BENEFITS: Echo Barrier can help reduce noise complaints, enhance your company reputation, extend site operating hours, reduce project timescales & costs, and improve working conditions.

APPLICATIONS: Echo Barrier works great for construction & demolition sites; rail maintenance & replacement; music, sports and other public events; road construction; utility/maintenance sites; loading and unloading areas; outdoor gun ranges.

DIMENSIONS: 6.56' × 4.49'.

WEIGHT: 13 lbs.

ACOUSTIC PERFORMANCE: 10-20dB noise reduction (greater if barrier is doubled up).

INSTALLATION: The Echo Barrier is easily installed using our quick hook system and specially designed elastic ties.

Echo Barrier Transmission Loss Field Data							
	125Hz	250Hz	500Hz	1KHz	2KHz	4KHz	8KHz
Single Layer	6	12	16	23	28	30	30
Double Layer	7	19	24	28	32	31	32

- Soundproofing Products • Sonex™ Ceiling & Wall Panels • Sound Control Curtains • Equipment Enclosures • Acoustical Baffles & Banners • Solid Wood & Veneer Acoustical Ceiling & Wall Systems
- Professional Audio Acoustics • Vibration & Damping Control • Fire Retardant Acoustics • Hearing Protection • Moisture & Impact Resistant Products • Floor Impact Noise Reduction
- Sound Absorbers • Noise Barriers • Fabric Wrapped Wall Panels • Acoustical Foam (Egg Crate) • Acoustical Sealants & Adhesives • Outdoor Noise Control • Assistive Listening Devices
- OSHA, FDA, ADA Compliance • On-Site Acoustical Analysis • Acoustical Design & Consulting • Large Inventory • Fast Shipment • No Project too Large or Small • Major Credit Cards Accepted

Appendix F

Assembly 52 Consultation



DIRECTORS
JOHN D. S. ALLEN, PRESIDENT
SERGIO CALDERON, VICE PRESIDENT
WILLARD H. MURRAY, JR., SECRETARY
ROB KATHERMAN, TREASURER
ELVIRA ROBLES DEWITT, DIRECTOR

ROBB WHITAKER, P.E., GENERAL MANAGER

September 7, 2018

Gabrieleno/ Tongva San Gabriel Band of Mission Indians
Anthony Morales, Chairperson
P.O. Box 693
San Gabriel, CA 91778

RE: Assembly Bill 52 Consultation for the Sativa Well 5 Project, Los Angeles County, California

Dear Chairperson Morales:

The Water Replenishment District of Southern California is preparing a cultural resources technical study for the Sativa Los Angeles County Water District (Sativa) Well 5 Project (project). Sativa supplies domestic water services to a portion of the Willowbrook area, an unincorporated census-designated place within Los Angeles County, and to a small area within the City of Compton. The Sativa water supply consists entirely of groundwater, specifically from two active wells: Well 3 and Well 5. In March 2016, Sativa applied for the Water Replenishment District of Southern California's Safe Drinking Water Disadvantage Community Program to obtain funding from the Safe Drinking Water State Revolving Fund to design a wellhead treatment system for Well 5 which is currently contaminated with manganese. In addition to the wellhead treatment, the funding request included a storage tank and booster pump. This funding was awarded to Sativa by the State Water Resources Control Board in early 2018. The proposed project is subject to the California Environmental Quality Act (CEQA).

The proposed project must comply with California Public Resources Code § 21080.3.1 (Assembly Bill [AB] 52 of 2014), which requires local governments to conduct meaningful consultation with California Native American tribes that have requested to be notified about projects in the geographic area with which the tribe is traditionally and culturally affiliated.

The input of the Gabrieleno/ Tongva San Gabriel Band of Mission Indians is important to the Water Replenishment District of Southern California's planning process. Under AB 52, you have 30 days from receipt of this letter to respond in writing if you wish you consult on the proposed project. If you require any additional information or have any questions, please contact me at cking@wrd.org Thank you for your assistance.

Sincerely,

A handwritten signature in black ink, appearing to read "Charlene King", is written over a light blue horizontal line.

Charlene King
Associate Engineer

Attached: Project Location Map



DIRECTORS
JOHN D. S. ALLEN, PRESIDENT
SERGIO CALDERON, VICE PRESIDENT
WILLARD H. MURRAY, JR., SECRETARY
ROB KATHERMAN, TREASURER
ELVIRA ROBLES DEWITT, DIRECTOR

ROBB WHITAKER, P.E., GENERAL MANAGER

September 7, 2018

Kern Valley Indian Community
Robert Robinson, Chairperson
P.O. Box 1010
Lake Isabella, CA 93283

RE: Assembly Bill 52 Consultation for the Sativa Well 5 Project, Los Angeles County, California

Dear Chairperson Robinson:

The Water Replenishment District of Southern California is preparing a cultural resources technical study for the Sativa Los Angeles County Water District (Sativa) Well 5 Project (project). Sativa supplies domestic water services to a portion of the Willowbrook area, an unincorporated census-designated place within Los Angeles County, and to a small area within the City of Compton. The Sativa water supply consists entirely of groundwater, specifically from two active wells: Well 3 and Well 5. In March 2016, Sativa applied for the Water Replenishment District of Southern California's Safe Drinking Water Disadvantage Community Program to obtain funding from the Safe Drinking Water State Revolving Fund to design a wellhead treatment system for Well 5 which is currently contaminated with manganese. In addition to the wellhead treatment, the funding request included a storage tank and booster pump. This funding was awarded to Sativa by the State Water Resources Control Board in early 2018. The proposed project is subject to the California Environmental Quality Act (CEQA).

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The input of the Kern Valley Indian Community is important to the Water Replenishment District of Southern California's planning process. Under AB 52, you have 30 days from receipt of this letter to respond in writing if you wish you consult on the proposed project. If you require any additional information or have any questions, please contact me at cking@wrd.org. Thank you for your assistance.

Sincerely,

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Charlene King
Associate Engineer

Attached: Project Location Map



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ROB KATHERMAN, TREASURER
ELVIRA ROBLES DEWITT, DIRECTOR

ROBB WHITAKER, P.E., GENERAL MANAGER

September 7, 2018

Gabrieleno Band of Mission Indians
Andrew Salas, Chairperson
P.O. Box 393
Covina, CA 91723

RE: Assembly Bill 52 Consultation for the Sativa Well 5 Project, Los Angeles County, California

Dear Chairperson Salas:

The Water Replenishment District of Southern California is preparing a cultural resources technical study for the Sativa Los Angeles County Water District (Sativa) Well 5 Project (project). Sativa supplies domestic water services to a portion of the Willowbrook area, an unincorporated census-designated place within Los Angeles County, and to a small area within the City of Compton. The Sativa water supply consists entirely of groundwater, specifically from two active wells: Well 3 and Well 5. In March 2016, Sativa applied for the Water Replenishment District of Southern California's Safe Drinking Water Disadvantage Community Program to obtain funding from the Safe Drinking Water State Revolving Fund to design a wellhead treatment system for Well 5 which is currently contaminated with manganese. In addition to the wellhead treatment, the funding request included a storage tank and booster pump. This funding was awarded to Sativa by the State Water Resources Control Board in early 2018. The proposed project is subject to the California Environmental Quality Act (CEQA).

The proposed project must comply with California Public Resources Code § 21080.3.1 (Assembly Bill [AB] 52 of 2014), which requires local governments to conduct meaningful consultation with California Native American tribes that have requested to be notified about projects in the geographic area with which the tribe is traditionally and culturally affiliated.

The input of the Gabrieleno Band of Mission Indians is important to the Water Replenishment District of Southern California's planning process. Under AB 52, you have 30 days from receipt of this letter to respond in writing if you wish you consult on the proposed project. If you require any additional information or have any questions, please contact me at cking@wrd.org Thank you for your assistance.

Sincerely,

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Charlene King
Associate Engineer

Attached: Project Location Map



DIRECTORS
JOHN D. S. ALLEN, PRESIDENT
SERGIO CALDERON, VICE PRESIDENT
WILLARD H. MURRAY, JR., SECRETARY
ROB KATHERMAN, TREASURER
ELVIRA ROBLES DEWITT, DIRECTOR

ROBB WHITAKER, P.E., GENERAL MANAGER

September 7, 2018

Fernandeno Tataviam Band of Mission Indians
Rudy Ortega Jr., Chairperson
1019 Second Street, Suite 1
San Fernando, CA 91340

RE: Assembly Bill 52 Consultation for the Sativa Well 5 Project, Los Angeles County, California

Dear Chairperson Ortega:

The Water Replenishment District of Southern California is preparing a cultural resources technical study for the Sativa Los Angeles County Water District (Sativa) Well 5 Project (project). Sativa supplies domestic water services to a portion of the Willowbrook area, an unincorporated census-designated place within Los Angeles County, and to a small area within the City of Compton. The Sativa water supply consists entirely of groundwater, specifically from two active wells: Well 3 and Well 5. In March 2016, Sativa applied for the Water Replenishment District of Southern California's Safe Drinking Water Disadvantage Community Program to obtain funding from the Safe Drinking Water State Revolving Fund to design a wellhead treatment system for Well 5 which is currently contaminated with manganese. In addition to the wellhead treatment, the funding request included a storage tank and booster pump. This funding was awarded to Sativa by the State Water Resources Control Board in early 2018. The proposed project is subject to the California Environmental Quality Act (CEQA).

The proposed project must comply with California Public Resources Code § 21080.3.1 (Assembly Bill [AB] 52 of 2014), which requires local governments to conduct meaningful consultation with California Native American tribes that have requested to be notified about projects in the geographic area with which the tribe is traditionally and culturally affiliated.

The input of the Fernandeno Tataviam Band of Mission Indians is important to the Water Replenishment District of Southern California's planning process. Under AB 52, you have 30 days from receipt of this letter to respond in writing if you wish you consult on the proposed project. If you require any additional information or have any questions, please contact me at cking@ wrd.org Thank you for your assistance.

Sincerely,

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Charlene King
Associate Engineer

Attached: Project Location Map



DIRECTORS
JOHN D. S. ALLEN, PRESIDENT
SERGIO CALDERON, VICE PRESIDENT
WILLARD H. MURRAY, JR., SECRETARY
ROB KATHERMAN, TREASURER
ELVIRA ROBLES DEWITT, DIRECTOR

ROBB WHITAKER, P.E., GENERAL MANAGER

September 7, 2018

Kitanemuk & Yowlumne Tejon Indians
Delia Dominguez, Chairperson
115 Radio Street
Bakersfield, CA 93305

RE: Assembly Bill 52 Consultation for the Sativa Well 5 Project, Los Angeles County, California

Dear Chairperson Dominguez:

The Water Replenishment District of Southern California is preparing a cultural resources technical study for the Sativa Los Angeles County Water District (Sativa) Well 5 Project (project). Sativa supplies domestic water services to a portion of the Willowbrook area, an unincorporated census-designated place within Los Angeles County, and to a small area within the City of Compton. The Sativa water supply consists entirely of groundwater, specifically from two active wells: Well 3 and Well 5. In March 2016, Sativa applied for the Water Replenishment District of Southern California's Safe Drinking Water Disadvantage Community Program to obtain funding from the Safe Drinking Water State Revolving Fund to design a wellhead treatment system for Well 5 which is currently contaminated with manganese. In addition to the wellhead treatment, the funding request included a storage tank and booster pump. This funding was awarded to Sativa by the State Water Resources Control Board in early 2018. The proposed project is subject to the California Environmental Quality Act (CEQA).

The proposed project must comply with California Public Resources Code § 21080.3.1 (Assembly Bill [AB] 52 of 2014), which requires local governments to conduct meaningful consultation with California Native American tribes that have requested to be notified about projects in the geographic area with which the tribe is traditionally and culturally affiliated.

The input of the Kitanemuk & Yowlumne Tejon Indians is important to the Water Replenishment District of Southern California's planning process. Under AB 52, you have 30 days from receipt of this letter to respond in writing if you wish you consult on the proposed project. If you require any additional information or have any questions, please contact me at cking@wrd.org. Thank you for your assistance.

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Charlene King
Associate Engineer

Attached: Project Location Map



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WILLARD H. MURRAY, JR., SECRETARY
ROB KATHERMAN, TREASURER
ELVIRA ROBLES DEWITT, DIRECTOR

ROBB WHITAKER, P.E., GENERAL MANAGER

September 7, 2018

Gabrielino/ Tongva Nation
Sandonne Goad, Chairperson
106 ½ Judge John Aiso Street #231
Los Angeles, CA 90012

RE: Assembly Bill 52 Consultation for the Sativa Well 5 Project, Los Angeles County, California

Dear Chairperson Goad:

The Water Replenishment District of Southern California is preparing a cultural resources technical study for the Sativa Los Angeles County Water District (Sativa) Well 5 Project (project). Sativa supplies domestic water services to a portion of the Willowbrook area, an unincorporated census-designated place within Los Angeles County, and to a small area within the City of Compton. The Sativa water supply consists entirely of groundwater, specifically from two active wells: Well 3 and Well 5. In March 2016, Sativa applied for the Water Replenishment District of Southern California's Safe Drinking Water Disadvantage Community Program to obtain funding from the Safe Drinking Water State Revolving Fund to design a wellhead treatment system for Well 5 which is currently contaminated with manganese. In addition to the wellhead treatment, the funding request included a storage tank and booster pump. This funding was awarded to Sativa by the State Water Resources Control Board in early 2018. The proposed project is subject to the California Environmental Quality Act (CEQA).

The proposed project must comply with California Public Resources Code § 21080.3.1 (Assembly Bill [AB] 52 of 2014), which requires local governments to conduct meaningful consultation with California Native American tribes that have requested to be notified about projects in the geographic area with which the tribe is traditionally and culturally affiliated.

The input of the Gabrielino/ Tongva Nation is important to the Water Replenishment District of Southern California's planning process. Under AB 52, you have 30 days from receipt of this letter to respond in writing if you wish you consult on the proposed project. If you require any additional information or have any questions, please contact me at cking@ wrd.org. Thank you for your assistance.

Sincerely,

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Charlene King
Associate Engineer

Attached: Project Location Map



DIRECTORS
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WILLARD H. MURRAY, JR., SECRETARY
ROB KATHERMAN, TREASURER
ELVIRA ROBLES DEWITT, DIRECTOR

ROBB WHITAKER, P.E., GENERAL MANAGER

September 7, 2018

Santa Ynez Band of Chumash Indians
Kenneth Kahn, Chairperson
P.O. Box 517
Santa Ynez, CA 93460

RE: Assembly Bill 52 Consultation for the Sativa Well 5 Project, Los Angeles County, California

Dear Chairperson Kahn:

The Water Replenishment District of Southern California is preparing a cultural resources technical study for the Sativa Los Angeles County Water District (Sativa) Well 5 Project (project). Sativa supplies domestic water services to a portion of the Willowbrook area, an unincorporated census-designated place within Los Angeles County, and to a small area within the City of Compton. The Sativa water supply consists entirely of groundwater, specifically from two active wells: Well 3 and Well 5. In March 2016, Sativa applied for the Water Replenishment District of Southern California's Safe Drinking Water Disadvantage Community Program to obtain funding from the Safe Drinking Water State Revolving Fund to design a wellhead treatment system for Well 5 which is currently contaminated with manganese. In addition to the wellhead treatment, the funding request included a storage tank and booster pump. This funding was awarded to Sativa by the State Water Resources Control Board in early 2018. The proposed project is subject to the California Environmental Quality Act (CEQA).

The proposed project must comply with California Public Resources Code § 21080.3.1 (Assembly Bill [AB] 52 of 2014), which requires local governments to conduct meaningful consultation with California Native American tribes that have requested to be notified about projects in the geographic area with which the tribe is traditionally and culturally affiliated.

The input of the Santa Ynez Band of Chumash Indians is important to the Water Replenishment District of Southern California's planning process. Under AB 52, you have 30 days from receipt of this letter to respond in writing if you wish you consult on the proposed project. If you require any additional information or have any questions, please contact me at cking@wrd.org. Thank you for your assistance.

Sincerely,

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Charlene King
Associate Engineer

Attached: Project Location Map



DIRECTORS
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SERGIO CALDERON, VICE PRESIDENT
WILLARD H. MURRAY, JR., SECRETARY
ROB KATHERMAN, TREASURER
ELVIRA ROBLES DEWITT, DIRECTOR

ROBB WHITAKER, P.E., GENERAL MANAGER

September 7, 2018
Barbareno/ Venturoeno Band of Mission Indians
Julie Lynn Tumamait-Stenslie, Chairperson
365 North Poli Avenue
Ojai, CA 93023

RE: Assembly Bill 52 Consultation for the Sativa Well 5 Project, Los Angeles County, California

Dear Chairperson Tumamait-Stenslie:

The Water Replenishment District of Southern California is preparing a cultural resources technical study for the Sativa Los Angeles County Water District (Sativa) Well 5 Project (project). Sativa supplies domestic water services to a portion of the Willowbrook area, an unincorporated census-designated place within Los Angeles County, and to a small area within the City of Compton. The Sativa water supply consists entirely of groundwater, specifically from two active wells: Well 3 and Well 5. In March 2016, Sativa applied for the Water Replenishment District of Southern California's Safe Drinking Water Disadvantage Community Program to obtain funding from the Safe Drinking Water State Revolving Fund to design a wellhead treatment system for Well 5 which is currently contaminated with manganese. In addition to the wellhead treatment, the funding request included a storage tank and booster pump. This funding was awarded to Sativa by the State Water Resources Control Board in early 2018. The proposed project is subject to the California Environmental Quality Act (CEQA).

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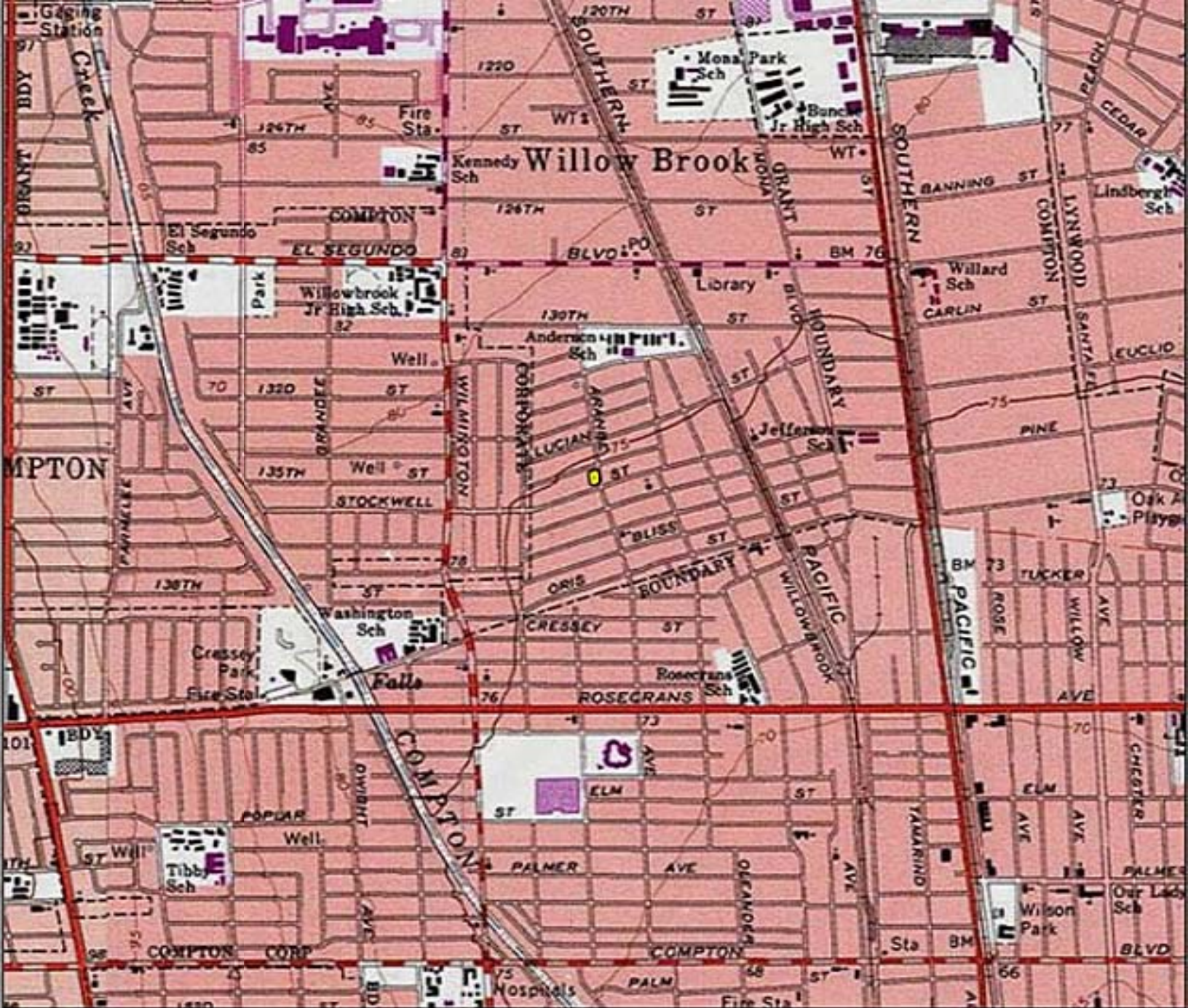
The input of the Barbareno/ Venturoeno Band of Mission Indians is important to the Water Replenishment District of Southern California's planning process. Under AB 52, you have 30 days from receipt of this letter to respond in writing if you wish you consult on the proposed project. If you require any additional information or have any questions, please contact me at cking@wrd.org. Thank you for your assistance.

Sincerely,

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Charlene King
Associate Engineer

Attached: Project Location Map



Imagery provided by National Geographic Society, Esri and its licensors © 2018. South Gate Quadrangle. T03S R13W S15. The topographic representation depicted in this map may not portray all of the features currently found in the vicinity today and/or features depicted in this map may have changed since the original topographic map was assembled.

 Project Location

0 1,000 2,000
Feet





GABRIELEÑO BAND OF MISSION INDIANS - KIZH NATION

Historically known as The San Gabriel Band of Mission Indians / Gabrielino Tribal Council
recognized by the State of California as the aboriginal tribe of the Los Angeles basin

City of Lakewood
Water Replenishment District of Southern California
4040 Paramount Blvd
Lakewood, CA 90712

November 14, 2018

Re: AB52 Consultation request for Sativa Well 5 Project

Dear Charlene King,

Please find this letter as a written request for consultation regarding the above-mentioned project pursuant to Public Resources Code § 21080.3.1, subd. (d). Your project lies within our ancestral tribal territory, meaning belonging to or inherited from, which is a higher degree of kinship than traditional or cultural affiliation. Your project is located within a sensitive area and may cause a substantial adverse change in the significance of our tribal cultural resources. Most often, a records search for our tribal cultural resources will result in a "no records found" for the project area. The Native American Heritage Commission (NAHC), ethnographers, historians, and professional archaeologists can only provide limited information that has been previously documented about California Native Tribes. For this reason, the NAHC will always refer the lead agency to the respective Native American Tribe of the area. The NAHC is only aware of general information and are not the experts on each California Tribe. Our Elder Committee & tribal historians are the experts for our Tribe and can provide a more complete history (both written and oral) regarding the location of historic villages, trade routes, cemeteries and sacred/religious sites in the project area.

Additionally, CEQA now defines Tribal Cultural Resources (TCRs) as their own independent element separate from archaeological resources. Environmental documents shall now address a separate Tribal Cultural Resource section which includes a thorough analysis of the impacts to only Tribal Cultural Resources (TCRs) and includes independent mitigation measures created with Tribal input during AB-52 consultations. As a result, all mitigation measures, conditions of approval and agreements regarding TCRs (i.e. prehistoric resources) shall be handled solely with the Tribal Government and not through an Environmental/Archaeological firm.

In effort to avoid adverse effects to our tribal cultural resources, we would like to consult with you and your staff to provide you with a more complete understanding of the prehistoric use(s) of the project area and the potential risks for causing a substantial adverse change to the significance of our tribal cultural resources.

Consultation appointments are available on Wednesdays and Thursdays at our offices at 910 N. Citrus Ave. Covina, CA 91722 or over the phone. Please call toll free 1-844-390-0787 or email admin@gabrielenoindians.org to schedule an appointment.

*** Prior to the first consultation with our Tribe, we ask all those individuals participating in the consultation to view a video produced and provided by CalEPA and the NAHC for sensitivity and understanding of AB52. You can view their videos at: <http://calepa.ca.gov/Tribal/Training/> or <http://nahc.ca.gov/2015/12/ab-52-tribal-training/>*

With Respect,

Andrew Salas, Chairman

Andrew Salas, Chairman

Albert Perez, treasurer |

PO Box 393, Covina, CA 91723

Nadine Salas, Vice-Chairman

Martha Gonzalez Lemos, treasurer ||

www.gabrielenoindians.org

Christina Swindall Martinez, secretary

Richard Gradias, Chairman of the Council of Elders

gabrielenoindians@yahoo.com



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November 1, 2018

Gabrieleno Band of Mission Indians
Andrew Salas, Chairperson
P.O. Box 393
Covina, CA 91723

RE: Termination of Assembly Bill 52 Consultation for the Sativa Well 5 Project, Los Angeles County, California

Dear Chairperson Salas:

The Water Replenishment District of Southern California (District) mailed a letter to your office under Assembly Bill (AB) 52 on September 7, 2018 regarding the Sativa Los Angeles County Water District (Sativa) Well #5 Project (project). The letter was intended to notify you of the project so that you may request to consult on the project under AB 52 should you choose to do so. The District received a request from your office for consultation under AB 52 for the project dated September 12, 2018.

Under AB 52, the District has 30 days to schedule a meeting with a tribe upon receipt of a written request for consultation. The District has reached out to your office during this 30-day period to schedule a consultation meeting with your organization. The District has received no response from your office regarding these attempts to schedule a consultation meeting. The 30-day scheduling period ended on October 8, 2018. The District has demonstrated a good faith effort to open consultation with your organization through our attempts to reach you during the 30-day scheduling period. The District now considers our consultation obligations under AB 52 to have been met and no further attempts to schedule a consultation meeting with the Gabrieleno Band of Mission Indians Tribe will be made.

This letter is intended to formally notify you that the District has terminated AB 52 consultation with the Gabrieleno Band of Mission Indians Tribe regarding the Sativa Well 5 Project. We look forward to consulting with you on future projects.

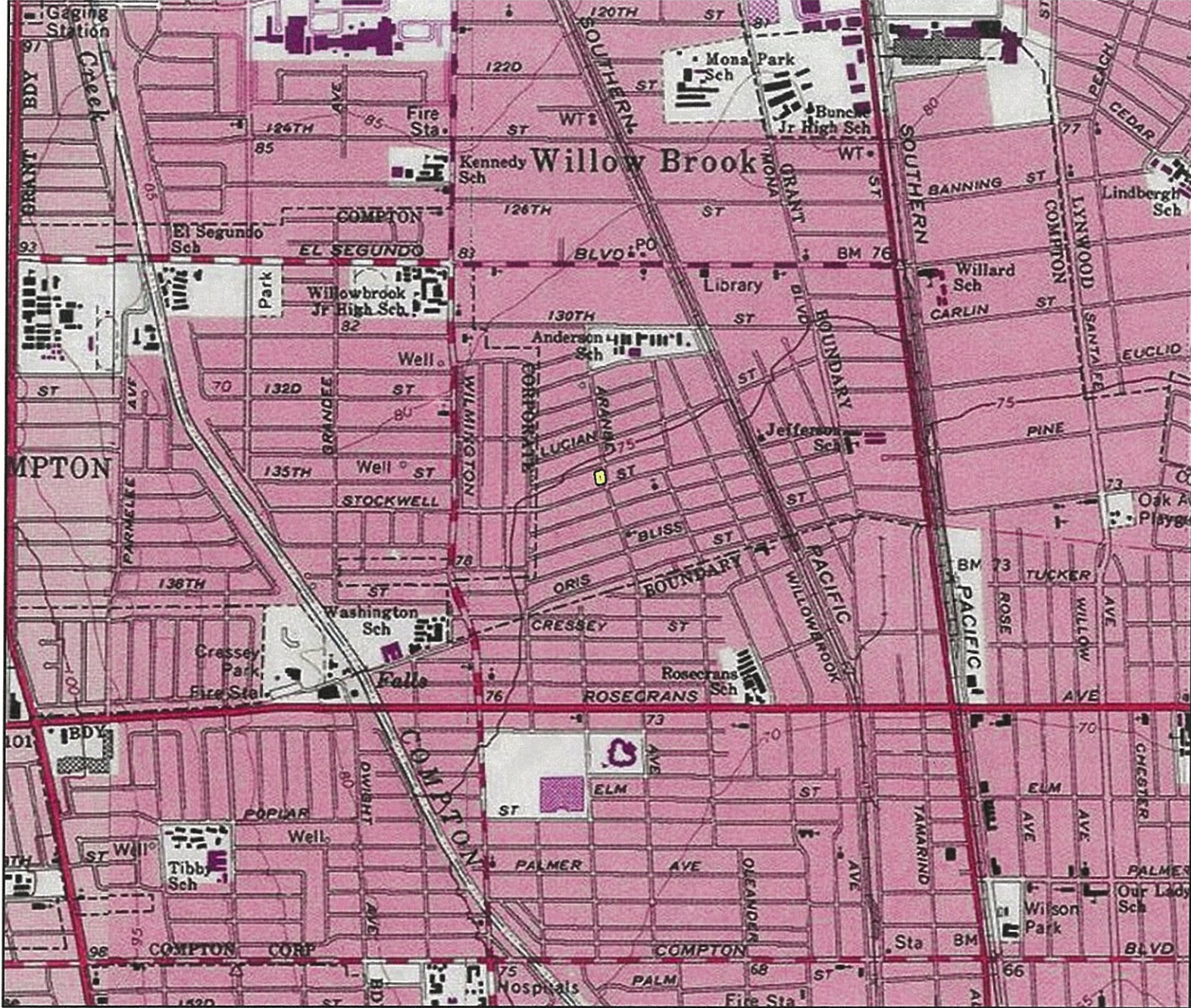
Please contact me at cking@wrd.org if you have questions regarding this letter or the consultation process.

Sincerely,

A handwritten signature in blue ink, appearing to read "Charlene King".

Charlene King
Associate Engineer

Attached: Project Location Map



Imagery provided by National Geographic Society, Esri and its licensors © 2018. South Gate Quadrangle. T03S R13W S15. The topographic representation depicted in this map may not portray all of the features currently found in the vicinity today and/or features depicted in this map may have changed since the original topographic map was assembled.

