INITIAL STUDY & MITIGATED NEGATIVE DECLARATION

OU2 GROUNDWATER CONTAINMENT PROJECT

10051 SANTA FE SPRINGS ROAD
SANTA FE SPRINGS, CALIFORNIA

LEAD AGENCY:

CITY OF SANTA FE SPRINGS
PLANNING AND DEVELOPMENT DEPARTMENT
11710 TELEGRAPH ROAD
SANTA FE SPRINGS, CALIFORNIA 90670

REPORT PREPARED BY:

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JULY 13, 2022
SFSP 076

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MITIGATED NEGATIVE DECLARATION

PROJECT NAME: OU2 Groundwater Containment Facility.

APPLICANT: Omega OU2 LLC, 1322 Scott Street, San Diego, California, 92106.

SITE ADDRESS: 10051 Santa Fe Springs Road, Santa Fe Springs, California. 90670.

CITY/COUNTY: Santa Fe Springs, Los Angeles County.

DESCRIPTION: The City of Santa Fe Springs, in its capacity as the Lead Agency, is considering for the construction of a groundwater treatment project located at 10051 Santa Fe Springs Road within the City of Santa Fe Springs. The project is a Superfund response action and is needed to address contaminated groundwater as part of Operable Unit 2 of the Omega Chemical Superfund Site. The U.S. Environmental Protection Agency (EPA) will oversee the work. It is EPA policy to assure that all activities conducted under Superfund response actions are protective of human health and the environment. There was a Mitigated Negative Declaration (MND) that was prepared for a larger warehouse distribution project that was approved by the City though the original project was never implemented. This former approved project referred to above, included the subdivision of the larger 44.67 acre parcel into 5 parcels, and the development of a 17.90-acre portion (parcels 1 through 4) of the larger 44.67-acre site.The current groundwater treatment project would be located within one of the five parcels (Parcel No. 4) which is located within the northeast corner of the larger site. Parcel 4 has a total land area of 3.23 acres (140,791 square feet) and under the previous development scenario was approved for a new 60,117 square-foot warehouse.

The groundwater treatment project site is located at the corner of McCann Drive and Santa Fe Springs Road and would occupy the aforementioned Parcel 4. The site's legal address is 10051 Santa Fe Springs Road with a corresponding Assessor Parcel Number (APN) of 8005-015-050. The site is surrounded on all sides by industrial development. The total building area for the proposed groundwater treatment plant would equal 48,515 square feet. The proposed project site has a land use and zoning designation of M-2 Heavy Manufacturing and would require a Conditional Use Permit (CUP) for Water Pumping and Treatment Plants. None of the nine remaining oil wells are located within the Parcel 4 boundary, nor would they affect the redevelopment of Parcel 4 for the use as a groundwater treatment facility. In other words, the development of the proposed groundwater treatment facility would not interfere with any ongoing oil extraction activities within the adjacent parcels.

The project also includes the construction and operation of up to seven groundwater extraction wells at four well sites to pump groundwater to the treatment plant via below-grade conveyance pipelines. The groundwater pipelines (untreated) would be double contained and constructed of HDPE to pump groundwater to the treatment plant via below-grade conveyance pipelines. Finally, the project will require construction of a new outfall where the treated groundwater would be conveyed to the San Gabriel River.

FINDINGS: The environmental analysis provided in the attached Initial Study indicates that the proposed project will not result in any significant adverse impacts with the implementation of the appropriate mitigation measures. For this reason, the City of Santa Fe Springs determined that a *Mitigated Negative Declaration* is the appropriate CEQA document for the proposed project. The following findings may be made based on the analysis contained in the attached Initial Study:

- The proposed project *will not* have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of an endangered, rare or threatened species or eliminate important examples of the major periods of California history or prehistory.
- The proposed project *will not* have impacts that are individually limited, but cumulatively considerable.
- The proposed project *will not* have environmental effects which will cause substantially adverse effects on human beings, either directly or indirectly.

The environmental analysis is provided in the attached Initial Study prepared for the proposed project. The project is also described in greater detail in the attached Initial Study.

Signature _____ Date _____

City of Santa Fe Springs Planning Department

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SECTION 1 - INTRODUCTION

1.1 PURPOSE OF THE INITIAL STUDY

This Initial Study evaluates the environmental impacts associated with the construction and subsequent operation of a new groundwater treatment facility within a 3.23-acre (140,791 square feet) project site. The site's legal address is 10051 Santa Fe Springs Road within the City of Santa Fe Springs with a corresponding Assessor Parcel Number (APN) of 8005-015-050. The total building floor area for the proposed groundwater treatment plant would be 48,649 square feet. The proposed project site has a land use and zoning designation for M-2, Heavy Manufacturing and will require a Conditional Use Permit (CUP) for the "Water Pumping and Treatment Plant." None of the nine remaining oil wells are located within the Parcel 4 boundary, nor would they affect the redevelopment of Parcel 4 for the use as a groundwater treatment facility. In other words, the development of the proposed groundwater treatment facility will not interfere with any ongoing oil extraction activities within the adjacent parcels. The groundwater treatment project will also include the construction of seven groundwater extraction wells, as well a greensand filtration system, an advanced oxidation process (AOP) package system, liquid phase granular activated carbon (LPGAC) adsorption vessels, a reverse osmosis treatment system, and backwash and permeate storage tank within a treatment system building. The treatment system will be fully enclosed within the new concrete tilt-up building that will be constructed within the project site.

The normal operation of the treatment system will be automated using computer-aided instrumentation and controls, which will minimize the number of routine operation and maintenance (O&M) staff. The system is anticipated to be operational 24-hours per day, between 328 and 365 days per year (i.e., assuming a 90% run-time goal allowing for process interruptions, repairs, or routine maintenance that requires a shut-down). The system is expected to operate for at least 30 years. It is anticipated that two full-time trained O&M personnel will be on site 40 hours per week, throughout the year. Quarterly maintenance and monitoring events are expected to increase the onsite personnel from two to 10 trained O&M personnel, 40 hours per week for two weeks. Annual maintenance and monitoring events are expected to increase the onsite personnel from two to six trained O&M personnel, 40 hours per week for one week.[1]The treatment system, under normal operation, will be totally enclosed within the newly constructed building. As a result, the facility's operations will not present a noise, sight, odor, light, or other environmental impact to the neighboring community.

The project also includes the construction and operation of up to seven groundwater extraction wells at four well sites to pump groundwater to the treatment plant via below-grade conveyance pipelines. The groundwater pipelines (untreated) will be double contained constructed of high density poly-ethylene (HDPE). The treated water will be conveyed via below-grade pipelines from the treatment plant to unlined portions of the San Gabriel River for infiltration back into the aquifer.

The City of Santa Fe Springs is the designated *Lead Agency* for the proposed project and will be responsible for the project's environmental review.[2] The construction and operation of the new treatment plant is considered to be a project under the California Environmental Quality Act (CEQA) and, as a result, the project is subject to the city's environmental review process.[3] The project Applicant is Omega OU2 LLC,

[1] OU2 Groundwater Containment Project Description Draft.

[2] California, State of. *California Public Resources Code. Division 13, Chapter 2.5. Definitions.* As Amended 2001. §21067.

[3] California, State of. *Title 14. California Code of Regulations. Chapter 3. Guidelines for the Implementation of the California Environmental Quality Act.* as Amended 1998. CEQA Guidelines §15060 (b).

1322 Scott Street, San Diego, California, 92106. Discretionary approvals required as part of the proposed project's implementation include the following:

- *An Industrial Wastewater Discharge Permit* to allow the discharge of Los Angeles County Sanitation District (LACSD for reverse osmosis brine.)

- *A Conditional Use Permit* for "water-pumping and treatment plants" a listed conditional use in the Heavy Manufacturing zone with approval of a Conditional Use Permit; and,

- The Approval of this Mitigated Negative Declaration (MND) and the Mitigation Monitoring and Reporting Program (MMRP).

Other permits will also be required, including permits for construction, grading, utility connections, and building occupancy. As part of the proposed project's environmental review, the city has authorized the preparation of this Initial Study.[4] The primary purpose of CEQA is to ensure that decision-makers and the public understand the environmental implications of a specific action or project. An additional purpose of this Initial Study is to ascertain whether the proposed project will have the potential for significant adverse impacts on the environment once it is implemented. Pursuant to the CEQA Guidelines, additional purposes of this Initial Study include the following:

- To provide the City of Santa Fe Springs with information to use as the basis for deciding whether to prepare an Environmental Impact Report (EIR), Mitigated Negative Declaration (MND), or Negative Declaration (ND) for a project;

- To facilitate the project's environmental assessment early in the design and development of the proposed project;

- To eliminate unnecessary EIRs; and,

- To determine the nature and extent of any impacts associated with the proposed project.

Although this IS/MND was prepared with consultant support, the analysis, conclusions, and findings made as part of its preparation fully represent the independent judgment and position of the City of Santa Fe Springs in its capacity as the Lead Agency. The City determined, as part of this IS/MND's preparation, that a MND is the appropriate environmental document for the proposed project's CEQA review. This Initial Study and the *Notice of Intent to Adopt a Mitigated Negative Declaration* will be forwarded to responsible agencies, trustee agencies, and the public for review and comment. A 30-day public review period will be provided to allow these entities and other interested parties to comment on the proposed project and the findings of this IS/MND.[5] Questions and/or comments should be submitted to the following:

Jimmy Wong, Associate Planner
City of Santa Fe Springs Planning and Development Department
11710 Telegraph Road
Santa Fe Springs, California 90670

[4] Ibid. CEQA Guidelines §15050.

[5] California, State of. *Title 14. California Code of Regulations. Chapter 3. Guidelines for the Implementation of the California Environmental Quality Act*. As Amended 1998. CEQA Guidelines. §15060 (b).

1.2 INITIAL STUDY'S ORGANIZATION

The following annotated outline summarizes the contents of this IS:

- *Section 1 - Introduction,* provides the procedural context surrounding this IS preparation and insight into its composition.

- *Section 2 - Project Description,* provides an overview of the existing environment as it relates to the project area and describes the proposed project's physical and operational characteristics.

- *Section 3 - Environmental Analysis,* includes an analysis of potential impacts associated with the construction and the subsequent operation of the proposed project.

- *Section 4 - Conclusions,* summarizes the findings of the analysis.

- *Section 5 - References,* identifies the sources used in the preparation of this IS/MND.

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SECTION 2 - PROJECT DESCRIPTION

2.1 PROJECT OVERVIEW

This Initial Study evaluates the environmental impacts associated with the construction and operation of a new groundwater treatment facility within a 3.23-acre (140,791 square feet) project site that was previously part of a larger 27-acre property that was utilized as an oil extraction operation. The total building area for the proposed groundwater treatment plant would be 48,649 square feet. The proposed project site has a land use and zoning designation for M-2 Heavy Manufacturing and will require a Conditional Use Permit (CUP) for "Water-Pumping and Treatment" uses. The groundwater treatment project will also include the construction of seven groundwater extraction wells, as well a greensand filtration system, an advanced oxidation process (AOP) package system, liquid phase granular activated carbon (LPGAC) adsorption vessels, a reverse osmosis treatment system, and backwash and permeate storage tank within a treatment system building. The project also includes the construction and operation of up to seven groundwater extraction wells at four well sites to pump groundwater to the treatment plant via below-grade conveyance pipelines. The groundwater pipelines (untreated) will be double-lined pipes constructed of HDPE. The treated water will be conveyed via below-grade pipelines from the treatment plant to unlined portions of the San Gabriel River for infiltration back into the aquifer.

2.2 PROJECT LOCATION

The project site is located in the north central portion of the City of Santa Fe Springs along the west side of Santa Fe Springs Road. Santa Fe Springs is located in southeastern Los Angeles County, approximately eight miles southeast of downtown city of Los Angeles. The City is bounded by the cities of La Mirada and Norwalk on the south, Downey on the west, an unincorporated Los Angeles County area referred to a West Whittier on the north, and the City of Whittier on the east. Major physiographic features within the surrounding area include the San Gabriel River, located approximately 1.9 miles to the west; the Montebello Hills, located approximately 6.0 miles to the north; the Puente Hills, located approximately 9.0 miles to the northeast; and, the San Gabriel Mountains, located approximately 14.5 miles to the north.[6]

Regional access to Santa Fe Springs is possible from two area freeways: the Santa Ana Freeway (Interstate 5 or I-5) and the San Gabriel River Freeway (Interstate 605/I-605). The I-5 Freeway extends along the city's western and southern portions in a northwest-southeast orientation and the I-605 Freeway extends along the city's western side in a southwest-northeast orientation. The location of Santa Fe Springs in a regional context is shown in Exhibit 2-1. A citywide map is provided in Exhibit 2-2.

The project site's legal address is 10051 Santa Fe Springs Road, Santa Fe Springs, California, 90670. The project site is located on the west side of Santa Fe Springs Road and north of Telegraph Road. Vehicular access to the project site is currently available from Santa Fe Springs Road. The Assessor Parcel Number (APN) applicable to the site is 8005-015-050. The site's latitude/longitude is 33.945440, -118.064484. A local map is provided in Exhibit 2-3.

[6] Google Maps. Website Accessed February 15,2022.

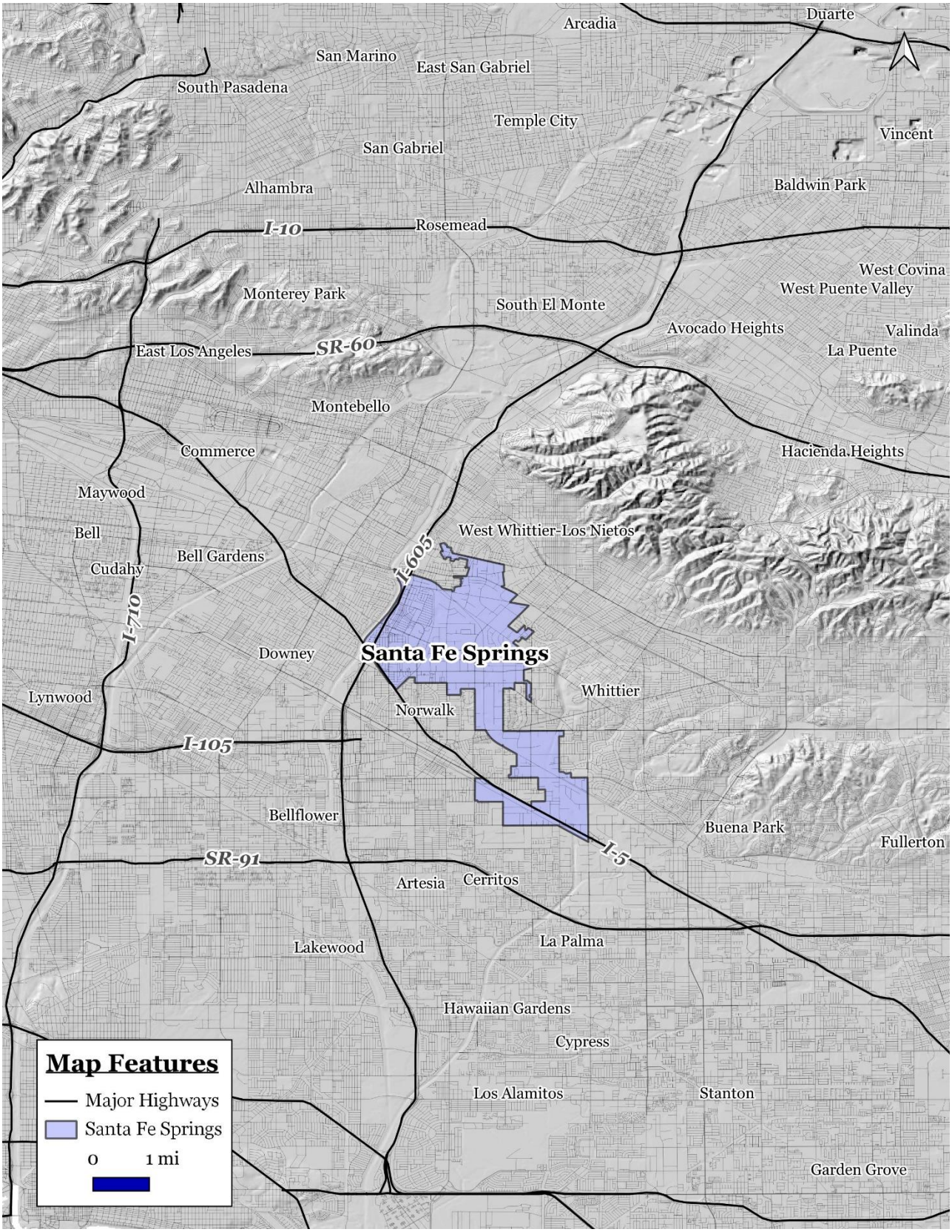

EXHIBIT 2-1
REGIONAL LOCATION
SOURCE: QUANTUM GIS

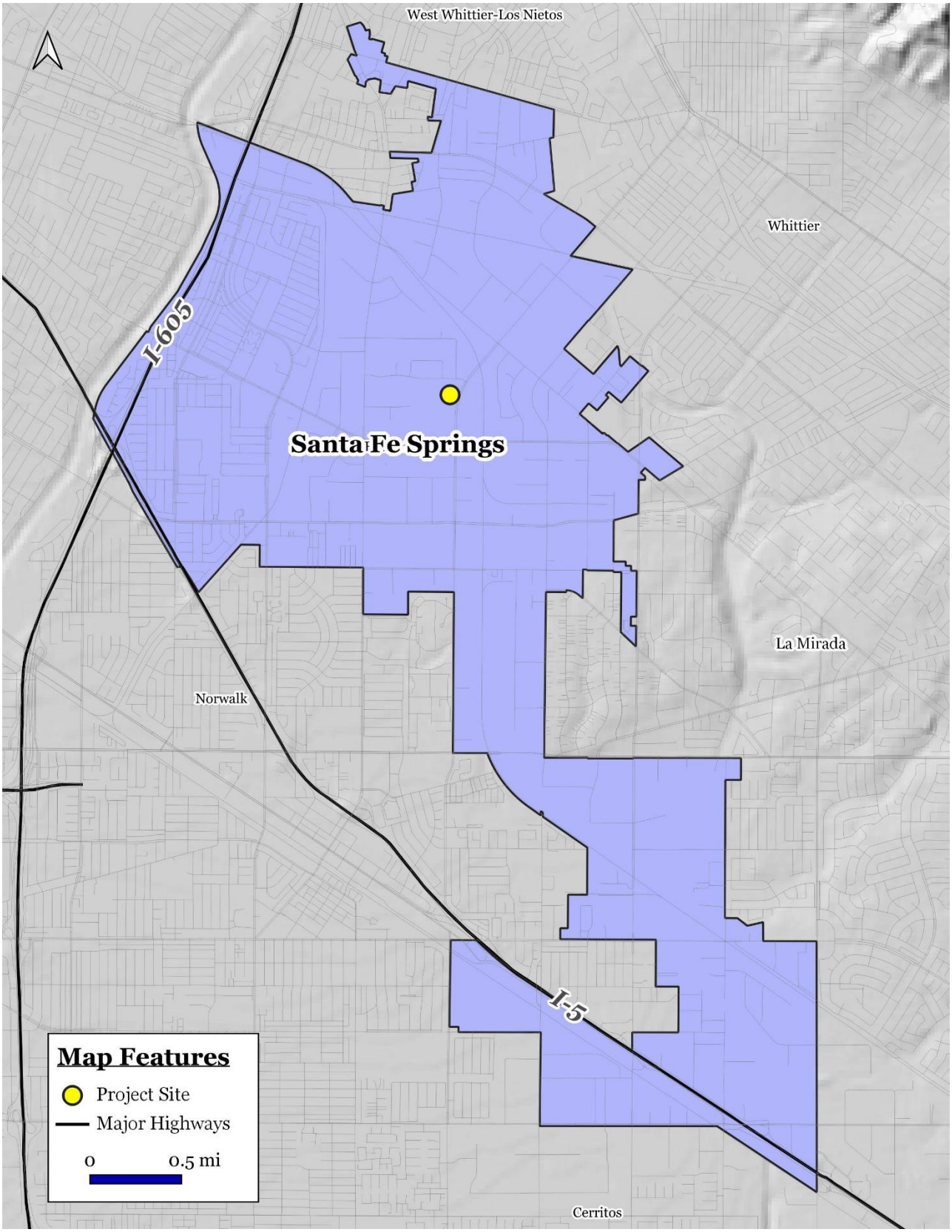

EXHIBIT 2-2
CITYWIDE MAP
SOURCE: QUANTUM GIS

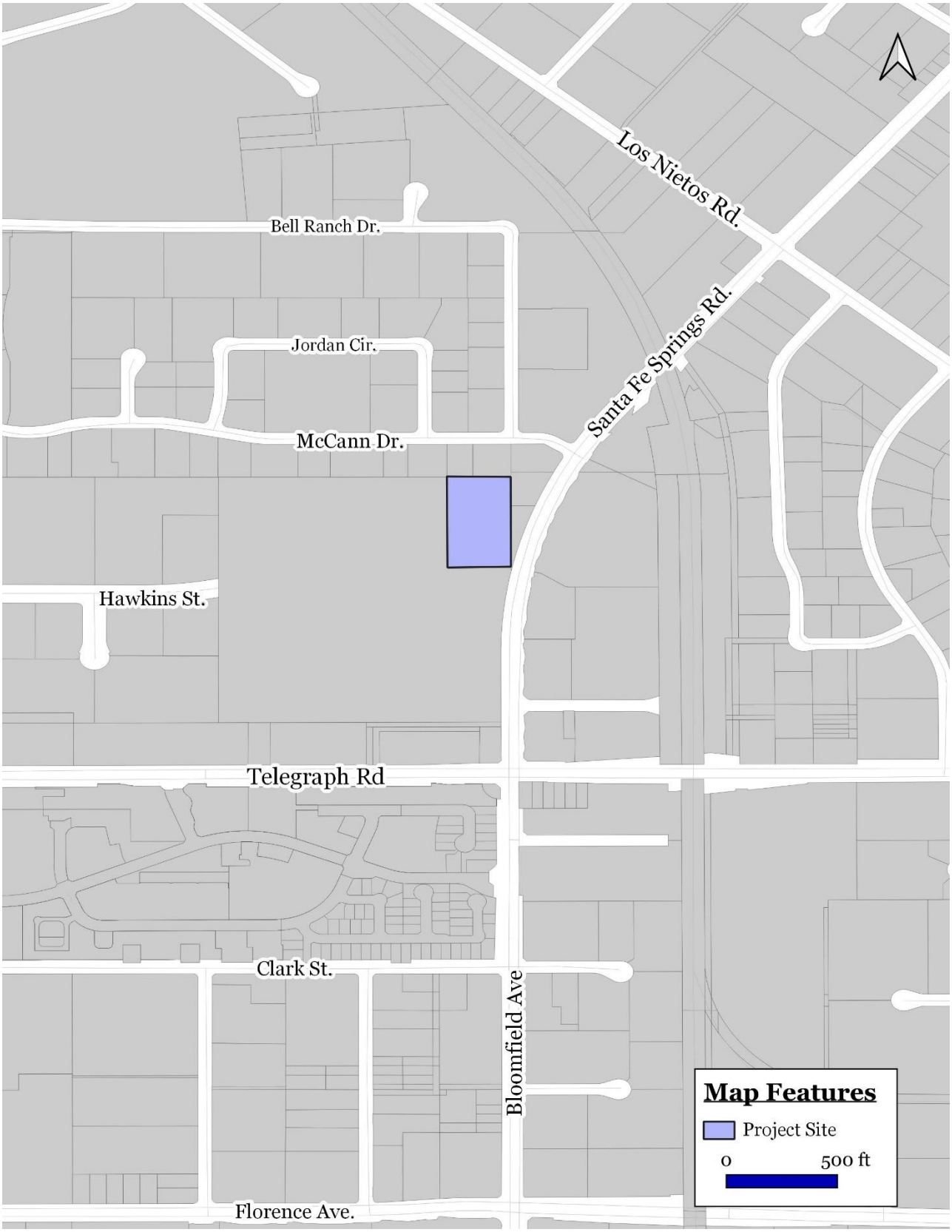

EXHIBIT 2-3
LOCAL MAP
SOURCE: QUANTUM GIS

2.3 ENVIRONMENTAL SETTING

The 3.23-acre (140,791 square feet) site is surrounded by industrial uses. Exhibit 2-4 shows an aerial photograph of the project site and the adjacent development. Surrounding land uses in the vicinity of the project site are listed below:

- *North of the Project Site*. A mix of smaller industrial uses are located north of the project site. These industrial uses have frontage on the north and south sides of McCann Drive, which is located approximately 190 feet to the north of the project site.

- *South of the Project Site*. Vacant undeveloped land extends along the project site's southerly side. Further south, approximately 1,200 feet, Telegraph Road extends in an east-west orientation. The Villages at Heritage Springs, a residential development, is located on the south side of Telegraph Road.

- *East of the Project Site*. Santa Fe Springs Road extends along the east side of the project site in a north-south orientation. Industrial uses are located along the east side of Santa Fe Springs Road.

- *West of the Project Site*. Vacant, undeveloped land abuts the project site on the west side. A mix of industrial uses abuts parcel 5 to the west. In addition, Hawkins Street extends in an east-west direction and terminates at the parcel 5 western property line.[7]

Other notable uses in the vicinity of the project site include the following: Heritage Park, located 0.81 miles to the southwest; Saint Paul High School, located 0.72 miles to the northeast; Richard L. Graves Middle School, located 0.83 miles to the east; and the Civic Center including City Hall, the City Library, and the Santa Fe Springs Fire Department Station 4, located 1.11 miles to the west of the project site. The Villages at Heritage Springs is located 1,200 feet to the south of the project. Lastly, the Norwalk/Santa Fe Springs Metrolink station is located 2.06 miles to the southeast of the project site.[8]

2.4 PROJECT DESCRIPTION

2.4.1 PHYSICAL CHARACTERISTICS OF THE PROPOSED PROJECT

The proposed project would consist of the following elements:[9]

- *Project Site*. The site area consists of 140,808 square feet (3.23 acres). Following development, the project would have a lot coverage of 30.84% and a floor area ratio (FAR) of 34.55%. The site is zones as Heavy Manufacturing (M-2).

[7] Google Maps. Website Accessed February 15,2022.

[8] Ibid.

[9] DRA Architects. Groundwater Containment Project. *Proposed Site Plan. Sheet A-1.1. December 21, 2021.*

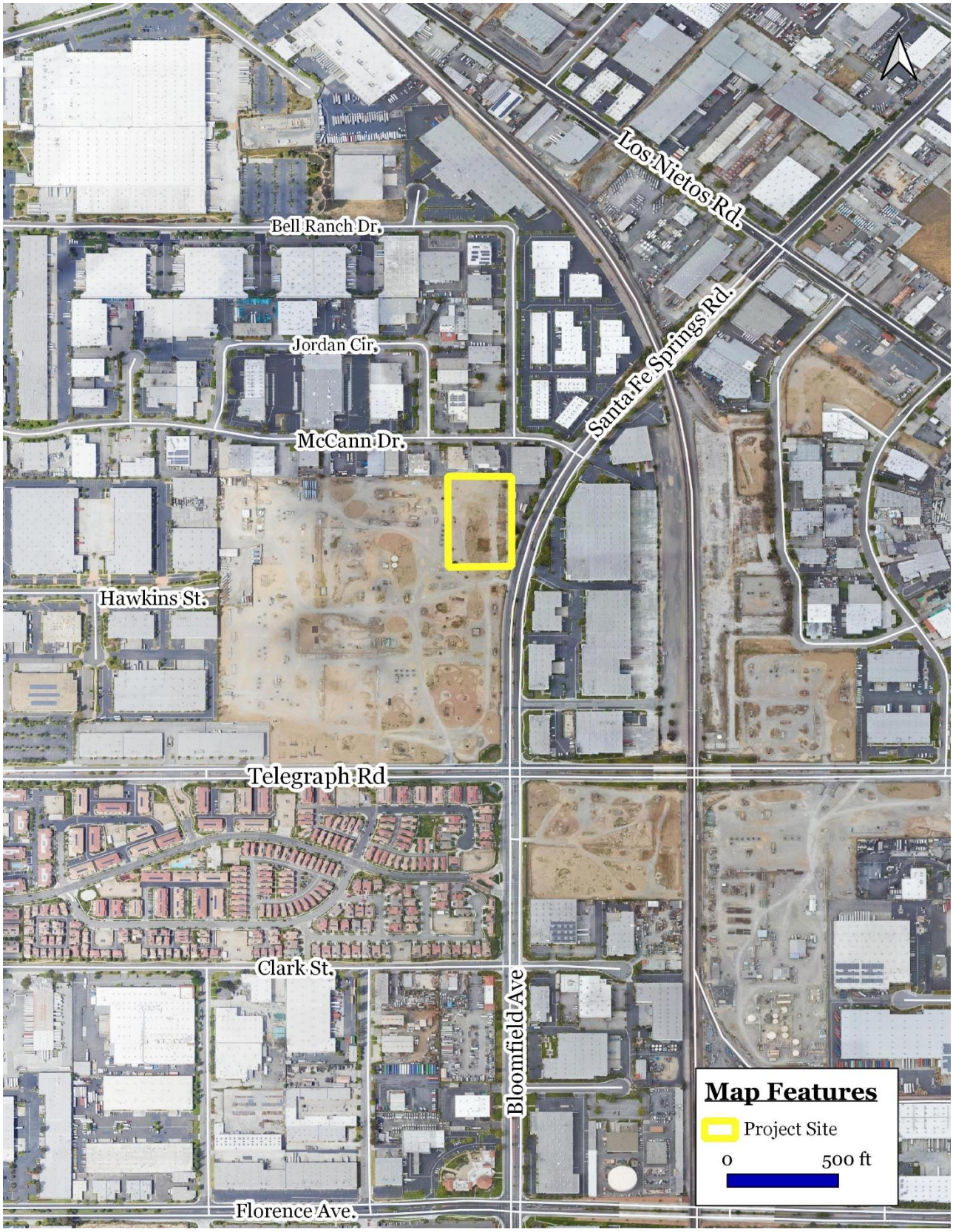

EXHIBIT 2-4
AERIAL PHOTOGRAPH
SOURCE: GOOGLE EARTH

- *Groundwater Containment Building*. The project site would be occupied by a new, two-level building that would be used for housing equipment for treating groundwater that will then be conveyed via below-grade pipelines from the treatment plant to unlined portions of the San Gabriel River for infiltration back into the aquifer. The ground level would contain a 2,693 square foot office space and have an equipment area of 40,727 square feet while the second floor will consist of a mezzanine with a 1,940 square foot office and a 3,289 square foot storage space.

- *Groundwater Extraction Wells*. The project also includes the construction and operation of seven groundwater extraction wells with four well sites to pump groundwater to the treatment plant via below-grade conveyance pipelines. The groundwater pipelines (untreated) would be double contained constructed of HDPE.

- *Treated Water Discharge*. There are two discharge locations at the river: a new to-be constructed outfall approximately located at river station 866+00 (primary discharge) and an existing storm drain located near the intersection of Whiteland Street and Bradwell Ave in Santa Fe Springs (referred to as the secondary discharge location). The primary discharge location will be the main location for discharge, however during San Gabriel River operations and maintenance there would be times when the primary location cannot be used. When the primary discharge location is unavailable, the secondary discharge location will be used.

- *Landscaping*. The site's landscaping would total 18,124 square feet. Landscaping provided along the site's frontage would total 2,103 square feet. Landscaping provided along the parking area would total 326 square feet along with an addition 10,039 square feet at the potential additional parking area. The vegetation ranges from low to moderate water use. The landscaping will consist of 11 Saratoga Laurel trees, 40 Brisbane Box trees. In addition, the upright accents consist of 226 Cassa Blue Flax Lilies and 57 Brakelights Red Yucca. The shrubs consist of 72 Little Ollie, 276 Indian Hawthorn and 70 Mundi Coast Rosemary. Finally, Carex Divulsa makes up the ornamental grass and Prostrate Rosemary will make up the groundcover.

- *Access and Parking*. Access to the project site new building would be provided by a 40-foot-wide driveway connection with the west side of Santa Fe Springs Road. Parking would consist of 5 standard stalls, two van accessible stalls, and an electric vehicle stall. Potential additional parking includes 72 stalls for a total of 80 stalls for this project site.

- *Operational Details*. The normal operation of the treatment system will be automated using computer-aided instrumentation and controls, which will minimize the number of routine operation and maintenance (O&M) staff. The system is anticipated to be operational 24-hours per day, between 328 and 365 days per year (i.e., assuming a 90% run-time goal allowing for process interruptions, repairs, or routine maintenance that requires a shut-down). The system is expected to operate for at least 30 years. It is anticipated that two full-time trained O&M personnel will be on site 40 hours per week, throughout the year. Quarterly maintenance and monitoring events are expected to increase the onsite personnel from two to 10 trained O&M personnel, 40 hours per week for two weeks. Annual maintenance and monitoring events are expected to increase the onsite personnel from two to six trained O&M personnel, 40 hours per week for one week. The treatment system, under normal operation, will be totally enclosed within the newly constructed building.

The conceptual site plan is shown in Exhibit 2-6. Conceptual elevations are provided in Exhibits 2-7.

2.4.2 CONSTRUCTION CHARACTERISTICS OF THE PROPOSED PROJECT

The proposed project will take approximately fourteen to eighteen months to complete. The proposed project's construction will consist of the following phases:

- *Grading and Site Preparation*. The project site will be prepared for the construction of a groundwater treatment facility. This phase will take approximately four weeks to complete. The site will undergo final grading during this phase as well. This phase will take approximately two to three months to complete.

- *Construction*. The new building will be constructed during this phase. This phase will take approximately ten to twelve months to complete.

- *Paving and Finishing*. This concluding phase will involve the finishing of the new groundwater treatment facility, the paving of the parking areas and hardscape, and the completion of other on-site improvements. This phase will take approximately two to three months to complete.

2.5 DISCRETIONARY ACTIONS

A *Discretionary Action* is an action taken by a government agency (for this project, the government agency is the City of Santa Fe Springs) that calls for an exercise of judgment in deciding whether to approve a project. Discretionary approvals required as part of the proposed project's implementation include the following:

- *An Industrial Wastewater Discharge Permit* to allow the discharge of Los Angeles County Sanitation District (LACSD) for reverse osmosis brine;

- *A Conditional Use Permit* for "Water-Pumping and Treatment Plants" as a listed conditional use in the Heavy Manufacturing zone with the approval of a Conditional Use Permit; and,

- The Approval of this Mitigated Negative Declaration (MND) and the Mitigation Monitoring and Reporting Program (MMRP).

Other discretionary and ministerial permits and approvals that may be deemed necessary, including but not limited to temporary street closure permits, grading permits, excavation permits, foundation permits, and building permits.

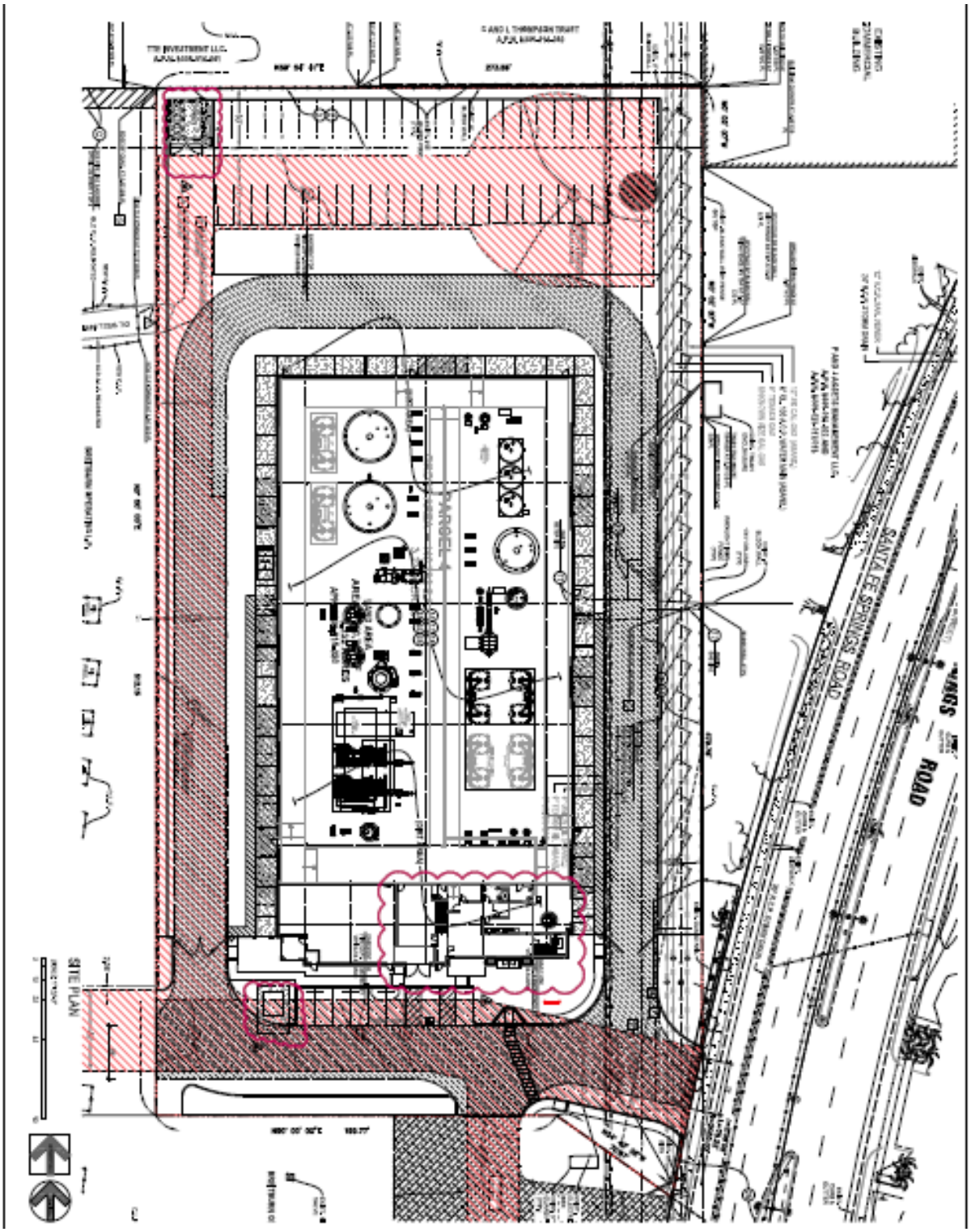

EXHIBIT 2-6
PROJECT SITE PLAN
SOURCE: DRA ARCHITECTS

EXHIBIT 2-7
BUILDING ELEVATIONS
SOURCE: DRA ARCHITECTS

SECTION 3 - ENVIRONMENTAL ANALYSIS

This section of the IS analyzes the potential environmental impacts that may result from the proposed project's implementation. The issue areas evaluated in this IS include the following:

Aesthetics (Section 3.1);
Agricultural & Forestry (Section 3.2);
Air Quality (Section 3.3);
Biological Resources (Section 3.4);
Cultural Resources (Section 3.5);
Energy (Section 3.6);
Geology & Soils (Section 3.7);
Greenhouse Gas Emissions; (Section 3.8);
Hazards & Hazardous Materials (Section 3.9);
Hydrology and Water Quality (Section 3.10);
Land Use and Planning (Section 3.11);
Mineral Resources (Section 3.12);
Noise (Section 3.13);
Population & Housing (Section 3.14);
Public Services (Section 3.15);
Recreation (Section 3.16);
Transportation (Section 3.17);
Tribal Cultural Resources (Section 3.18);
Utilities (Section 3.19);
Wildfire (Section 3.20); and,
Mandatory Findings of Significance (Section 3.21).

The environmental analysis included in this section reflects the IS Checklist format used by the City of Santa Fe Springs in its environmental review process (refer to Section 1.3 herein). Under each issue area, an analysis of impacts is provided in the form of questions and answers. The analysis then provides a response to the individual questions. For the evaluation of potential impacts, questions are stated and an answer is provided according to the analysis undertaken as part of this IS preparation. To each question, there are four possible responses:

- *No Impact*. The proposed project *will not* have any measurable environmental impact on the environment.

- *Less Than Significant Impact*. The proposed project *may have* the potential for affecting the environment, although these impacts will be below levels or thresholds that the City of Santa Fe Springs or other responsible agencies consider to be significant.

- *Less Than Significant Impact with Mitigation*. The proposed project *may have* the potential to generate impacts that will have a significant impact on the environment. However, the level of impact may be reduced to levels that are less than significant with the implementation of mitigation measures.

- *Potentially Significant Impact*. The proposed project may result in environmental impacts that are significant.

This IS will assist the city in making a determination as to whether there is a potential for significant adverse impacts on the environment associated with the implementation of the proposed project.

3.1 AESTHETICS

Environmental Issue Areas Examined	Potentially Significant Impact	Less Than Significant Impact With Mitigation	Less Than Significant Impact	No Impact
A. Except as provided in Public Resources Code Section 21099, would the project have a substantial adverse effect on a scenic vista?			✖	
B. Except as provided in Public Resources Code Section 21099, would the project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?				✖
C. Except as provided in Public Resources Code Section 21099, would the project substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?			✖	
D. Except as provided in Public Resources Code Section 21099, would the project create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?		✖		

ANALYSIS OF ENVIRONMENTAL IMPACTS

A. Except as provided in Public Resources Code Section 21099, would the project have a substantial adverse effect on a scenic vista? ● Less Than Significant Impact.

The proposed project involves the construction and operation of a new groundwater treatment facility within a 3.23-acre (140,791 square feet) project site that was previously part of a larger 27-acre property that was utilized as an oil extraction operation. The site's legal address is 10051 Santa Fe Springs Road within the City of Santa Fe Springs with a corresponding Assessor Parcel Number (APN) of 8005-015-050. The total building area for the proposed groundwater treatment plant would equal 48,649 square feet. The proposed project site has a land use and zoning designation for M-2 Heavy Manufacturing and will require a Conditional Use Permit (CUP) for Water Pumping and Treatment Plants. None of the nine remaining oil wells are within the border of parcel 4, nor would they affect the redevelopment of Parcel 4 for the use as a groundwater treatment facility. In other words, the development of the proposed groundwater treatment facility will not interfere with any ongoing oil extraction activities within the adjacent parcels. The groundwater treatment project will consist of the construction of seven groundwater extraction wells, as well as a greensand filtration system, an AOP package system, LPGAC adsorption vessels, a reverse osmosis treatment system, and backwash and permeate storage tanks within a treatment system building. The treatment system will be fully enclosed within a new concrete tilt-up building that will be constructed within the project site. [10] The City of Santa Fe Springs General Plan does not identify any protected view sheds in the City nor is the project site located within any of the City designated scenic corridors. Major physiographic features within the surrounding area include the San Gabriel River, 1.9 mile west of the project site; the Montebello Hills, located 6.0 miles to the north; the San Gabriel Mountains, located 15.6 miles to the north;

[10] DRA Architects. DRA Architects. Groundwater Containment Project. *Proposed Site Plan. Sheet A-1.1. June 30,2021.*

and the Puente Hills, located 3.8 miles to the east.[11] The Villages at Heritage Springs residential development is the closest use that would be sensitive to a loss in scenic views. This residential development is located approximately 1,400 feet south of the project site along the south side of Telegraph Road. As a result, the proposed project will have a less than significant impact on a scenic vista.[12]

B. Except as provided in Public Resources Code Section 21099, would the project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway? ● No Impact.

The surrounding undeveloped property is currently occupied by oil pumpjacks, pipes, construction materials, utility poles, and electrical equipment. The development site itself is vacant though it has been graded. There are no rock outcroppings nor historic buildings located on-site. According to the California Department of Transportation, there are no designated scenic highways and there are no State or County designated scenic highways in the vicinity of the project site.[13] The site has been disturbed to accommodate the existing on-site improvements and there are no historic rock outcroppings located within the project site. The vegetation that is present consists of species most commonly found in an urban environment. Lastly, the project site does not contain any buildings listed in the State or National registrar (refer to Section 3.5). As a result, no impacts will occur.

C. Except as provided in Public Resources Code Section 21099, would the project substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality? ● Less than Significant Impact.

Ground cover consists of dirt and gravel on-site. The site is mostly barren with the exception of the aforementioned features. Access to the site is provided by a single driveway off of Santa Fe Springs Road. The implementation of the proposed project will not result in any degradation of the site and surrounding areas. Once complete, the proposed building will feature white walls with grey colored accents, expansive clear insulated vision glass, and spandrel glass. The project will also include drought-tolerant landscaping. As a result, the impacts will be less than significant.

D. Except as provided in Public Resources Code Section 21099, would the project create a new source of substantial light or glare which would adversely affect day or nighttime views in the area? ● Less than Significant Impact with Mitigation.

Exterior lighting can be a nuisance to adjacent land uses that are sensitive to this lighting. This nuisance lighting is referred to as *light trespass* which is typically defined as the presence of unwanted light on properties located adjacent to the source of lighting. Glare is related to light trespass and is defined as visual discomfort resulting from high contrast in brightness levels. Glare-related impacts can adversely affect day or nighttime views. As with lighting trespass, glare is of most concern if it would adversely affect sensitive

[11] Google Earth. Website accessed February 15,2022.

[12] Blodgett Baylosis Environmental Planning. *Site survey*. Survey was conducted May 15, 2022

[13] California Department of Transportation. *Official Designated Scenic Highways*. https://dot.ca.gov/programs/design/lap-landscape-architecture-and-community-livability/lap-liv-i-scenic-highways

land use or driver's vision. The exterior building façade would consist of non-reflective materials, such as concrete tilt-up walls. In addition, the windows would be comprised of blue reflective glazing, which reduces glare over other transparent surfaces. As a result, no daytime glare-related impacts are anticipated. Nighttime glare and illumination have the potential to result in potentially significant impacts to sensitive receptors. Many sources of light contribute to the ambient nighttime lighting conditions. These sources of nighttime light include street lights, security lighting, wall packs, and vehicular headlights. The proposed project will not introduce nighttime lighting that could potentially impact nearby sensitive receptors. The project site is located within an industrial area, though the Villages at Heritage Springs residential development are the closest light sensitive use to the project site. These uses are located approximately 1,200 feet to the south. The predominant source of light impacts will be related to the surface parking lot and building lighting associated with the building. Because light sensitive receptors are found in the vicinity of the project site, the following mitigation is required in order to minimize the potential impacts to the greatest extent possible:

- The contractors must ensure that appropriate light shielding is provided for the lighting equipment in the parking area, buildings, and security as a means to limit glare and light trespass. An interior parking and street lighting plan and an exterior photometric plan indicating the location, size, and type of existing and proposed lighting shall also be prepared by the Applicant. The plan for the lighting must be submitted to the Planning Department, Police Services Department, and the Chief Building Official for review and approval prior to the issuance of any building permits.

The mitigation identified above would reduce the potential impacts to levels that are less than significant.

CUMULATIVE IMPACTS

The potential aesthetic impacts related to views, aesthetics, and light and glare are site-specific. The proposed project will not restrict scenic views along the local streets, damage or interfere with any scenic resources or highways, degrade the visual character of the project site and surrounding areas, or result in light and glare impacts; therefore, no cumulative impacts will occur.

MITIGATION MEASURES

Because light sensitive receptors are found in the vicinity of the project site, the following mitigation is required in order to minimize the potential impacts to the greatest extent possible:

Mitigation Measure No. 1 (Aesthetic Impacts). The contractors must ensure that appropriate light shielding is provided for the lighting equipment in the parking area, buildings, and security as a means to limit glare and light trespass. An interior parking and street lighting plan and an exterior photometric plan indicating the location, size, and type of existing and proposed lighting shall also be prepared by the Applicant. The plan for the lighting must be submitted to the Planning Department, Police Services Department, and the Chief Building Official for review and approval prior to the issuance of any building permits.

The mitigation identified above would reduce the potential impacts to levels that are less than significant.

3.2 AGRICULTURE AND FORESTRY RESOURCES

Environmental Issue Areas Examined	Potentially Significant Impact	Less Than Significant Impact With Mitigation	Less Than Significant Impact	No Impact
A. Would the project convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?				✖
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 or conversion of forest land to non-forest use?				✖

ANALYSIS OF ENVIRONMENTAL IMPACTS

A. Would the project convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use? ● No Impact.

The proposed project involves the construction and operation of a new groundwater treatment facility within a 3.23-acre (140,791 square feet) project site that was previously part of a larger 27-acre property that was utilized as an oil extraction operation. The site's legal address is 10051 Santa Fe Springs Road within the City of Santa Fe Springs with a corresponding Assessor Parcel Number (APN) of 8005-015-050. The total building area for the proposed groundwater treatment plant would equal 48,649 square feet. The proposed project site has a land use and zoning designation for M-2 Heavy Manufacturing and will require a Conditional Use Permit (CUP) for Water Pumping and Treatment Plants. None of the nine remaining oil wells are within the border of parcel 4, nor would they affect the redevelopment of Parcel 4 for the use as a groundwater treatment facility. In other words, the development of the proposed groundwater treatment facility will not interfere with any ongoing oil extraction activities within the adjacent parcels. The project also includes the construction and operation of seven groundwater extraction wells at four well sites to pump groundwater to the treatment plant via below-grade conveyance pipelines. The treated water will be conveyed via below-grade pipelines from the treatment plant to unlined portions of the San Gabriel River for infiltration back into the aquifer. [14]

[14] DRA Architects. DRA Architects. Groundwater Containment Project. *Proposed Site Plan. Sheet A-1.1. June 30,2021.*

According to the California Department of Conservation, the City of Santa Fe Springs does not contain any areas of Prime Farmland, Unique Farmland, or Farmland of Statewide Importance.[15] The entire city is urban and there are no areas within the city that are classified as "Prime Farmland." The project site is presently being used for oil extraction and no agricultural uses are located on-site. Since the implementation of the proposed project will not involve the conversion of prime farmland, unique farmland, or farmland of statewide importance to urban uses, no impacts will occur.

B. Would the project conflict with existing zoning for agricultural use, or a Williamson Act contract? ● No Impact.

The project site is currently zoned as M-2 (*Heavy Manufacturing*), which permits any principal permitted use within the M-1, M-2, and M-L zone. According to the City's zoning code, agricultural uses, excluding dairies, stockyards, slaughter of animals and manufacturers of fertilizer, are listed as a *permitted use* within the M-1 zone.[16] No loss in land zoned for/or permitting agricultural uses will occur. Furthermore, the property is being used for oil extraction and there are no agricultural uses located within the site that would be affected by the project's implementation. In addition, according to the California Department of Conservation Division of Land Resource Protection, the project site is not subject to a Williamson Act Contract.[17] As a result, no impacts on existing Williamson Act Contracts will result from the proposed project's implementation.

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))? ● No Impact.

The City of Santa Fe Springs and the project site are located in the midst of a larger urban area and no forest lands are located within the City. The City of Santa Fe Springs General Plan and the Santa Fe Springs Zoning Ordinance do not provide for any forest land preservation.[18] As a result, no impacts on forest land or timber resources will result from the proposed project's implementation.

D. Would the project result in the loss of forest land or conversion of forest land to non-forest use? ● No Impact.

No forest lands are located within or in the vicinity of the project site. As a result, no loss or conversion of forest lands to urban uses will result from the proposed project's implementation and no impacts will occur.

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 or conversion of forest land to non-forest use? ● No Impact.

[15] California Department of Conservation, Division of Land Resource Protection, Farmland Mapping, and Monitoring Program. *Important Farmland in California 2010*.

[16] City of Santa Fe Springs Municipal Code. Title XV, Land Usage. Chapter 155, Code 155.211 Principal Permitted Uses.

[17] California Department of Conservation. *State of California Williamson Act Contract Land*. ftp://ftp.consrv.ca.gov/pub/dlrp/WA/2012%20Statewide%20Map/WA_2012_8x11.pdf

[18] City of Santa Fe Springs Municipal Code. *Title XV, Land Usage*. Chapter 155, Code 155.211 Principal Permitted Uses.

The project would not involve the disruption or damage of the existing environment that would result in a loss of farmland to nonagricultural use or conversion of forest land to non-forest use because the project site is not located in close proximity to farmland or forest land. As a result, no impacts will result from the implementation of the proposed project.

CUMULATIVE IMPACTS

The potential impacts related to agriculture and forestry are site-specific. According to the City, there are four cumulative projects located within one and one-half mile from the project site. These four cumulative projects are as follows: 128 units located at 13300 Lakeland Road; a 134,552 square-foot self-storage facility located at 11212 Norwalk Boulevard; a 22,994 square-foot warehouse located at 10370 Slusher Drive; and an 86-room hotel located at the southwest corner of Norwalk Boulevard and Telegraph Road. The analysis determined that there are no agricultural or forestry resources in the project area and that the implementation of the proposed project would not result in any impacts on these resources. As a result, no cumulative impacts on agriculture or forestry resources will occur.

MITIGATION MEASURES

The analysis of agricultural and forestry resources indicated that no impacts on these resources would occur as part of the proposed project's implementation and no mitigation is required.

3.3 AIR QUALITY

Environmental Issue Areas Examined	Potentially Significant Impact	Less Than Significant Impact With Mitigation	Less Than Significant Impact	No Impact
A. Would the project conflict with or obstruct implementation of the applicable air quality plan?				✖
B. 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?			✖	
C. Would the project expose sensitive receptors to substantial pollutant concentrations?			✖	
D. Would the project result in other emissions (such as those leading to odors adversely affecting a substantial number of people?			✖	

The South Coast Air Quality Management District (SCAQMD) has established quantitative thresholds for short-term (construction) emissions and long-term (operational) emissions for the following criteria pollutants:

- *Ozone (O_3)*: a nearly colorless gas that irritates the lungs, damages materials, and vegetation. Ozone is formed by photochemical reaction (when nitrogen dioxide is broken down by sunlight).

- *Carbon monoxide (CO):* a colorless, odorless toxic gas that interferes with the transfer of oxygen to the brain. Carbon monoxide is produced by the incomplete combustion of carbon-containing fuels emitted as vehicle exhaust.

- *Nitrogen dioxide (NO_2)*: a yellowish-brown gas, which at high levels can cause breathing difficulties. Nitrogen dioxide is formed when nitric oxide (a pollutant from burning processes) combines with oxygen.

- *Sulfur dioxide* (SO_2): a colorless, pungent gas formed primarily by the combustion of sulfur-containing fossil fuels. Health effects include acute respiratory symptoms and difficulty in breathing for children.

- *PM_{10} and $PM_{2.5}$* refers to particulate matter less than ten microns and two and one-half microns in diameter, respectively. Particulates of this size cause a greater health risk than larger-sized particles because fine particles can more easily cause irritation.

Projects in the South Coast Air Basin (SCAB) generating construction-related emissions that exceed any of the following emissions thresholds are considered to be significant under CEQA:

- 75 pounds per day of reactive organic compounds;
- 100 pounds per day of nitrogen dioxide;
- 550 pounds per day of carbon monoxide;

- 150 pounds per day of PM_{10};
- 55 pounds per day of $PM_{2.5}$; or,
- 150 pounds per day of sulfur oxides.

A project would have a significant effect on air quality if any of the following operational emissions thresholds for criteria pollutants are exceeded:

- 55 pounds per day reactive organic compounds;
- 55 pounds per day of nitrogen dioxide;
- 550 pounds per day of carbon monoxide;
- 150 pounds per day of PM_{10};
- 55 pounds per day of $PM_{2.5}$; or,
- 150 pounds per day of sulfur oxides.

ANALYSIS OF ENVIRONMENTAL IMPACTS

A. Would the project conflict with, or obstruct implementation of, the applicable air quality plan? ● No Impact.

The proposed project involves the construction and operation of a new groundwater treatment facility within a 3.23-acre (140,791 square feet) project site that was previously part of a larger 27-acre property that was utilized as an oil extraction operation. The site's legal address is 10051 Santa Fe Springs Road within the City of Santa Fe Springs with a corresponding Assessor Parcel Number (APN) of 8005-015-050. The total building area for the proposed groundwater treatment plant would equal 48,649 square feet. The proposed project site has a land use and zoning designation for M-2 Heavy Manufacturing and will require a Conditional Use Permit (CUP) for the Water Pumping and Treatment Plants. None of the nine remaining oil wells are within the border of parcel 4, nor would they affect the redevelopment of Parcel 4 for the use as a groundwater treatment facility. The groundwater treatment project will consist of the construction of seven groundwater extraction wells, as well as a greensand filtration system, an AOP package system, LPGAC adsorption vessels, a reverse osmosis treatment system, and backwash and permeate storage tanks within a treatment system building. The treatment system will be fully enclosed within a new concrete tilt-up building that will be constructed within the project site. The project also includes the construction and operation of seven groundwater extraction wells at four well sites to pump groundwater to the treatment plant via below-grade conveyance pipelines.[19]

The project area is located within the South Coast Air Basin, which covers a 6,600 square-mile area within all of Orange County, the non-desert portions of Los Angeles, Riverside, and San Bernardino counties. Measures to improve regional air quality are outlined in the SCAQMD's Air Quality Management Plan (AQMP). The most recent AQMP was adopted in 2016 and was jointly prepared with the California Air Resources Board (CARB) and the Southern California Association of Governments (SCAG). [20] The AQMP will help the SCAQMD maintain focus on the air quality impacts of major projects associated with goods movement, land use, energy efficiency, and other key areas of growth. Key elements of the 2016 AQMP include enhancements to existing programs to meet the 24-hour $PM_{2.5}$ Federal health standard and a proposed plan of action to reduce ground-level Ozone. The primary criteria pollutants that remain non-

[19] DRA Architects. DRA Architects. Groundwater Containment Project. *Proposed Site Plan. Sheet A-1.1. June 30,2021.*

[20] South Coast Air Quality Management District. *Final 2016 Air Quality Management Plan*. Adopted March 2017.

attainment in the local area include $PM_{2.5}$ and Ozone. Specific criteria for determining a project's conformity with the AQMP is defined in Section 12.3 of the SCAQMD's CEQA Air Quality Handbook.[21] The Air Quality Handbook refers to the following criteria as a means to determine a project's conformity with the AQMP:[22]

- *Consistency Criteria 1* refers to a proposed project's potential for resulting in an increase in the frequency or severity of an existing air quality violation or its potential for contributing to the continuation of an existing air quality violation.

- *Consistency Criteria 2* refers to a proposed project's potential for exceeding the assumptions included in the AQMP or other regional growth projections relevant to the AQMP's implementation.

In terms of Criteria 1, the proposed project's long-term (operational) airborne emissions will be below levels that the SCAQMD considers to be a significant adverse impact (refer to the analysis included in the next section where the long-term stationary and mobile emissions for the proposed project are summarized in Tables 3-1 and 3-2). The proposed project will also conform to Consistency Criteria 2 since it will not significantly affect any regional population, housing, and employment projections prepared for the City of Santa Fe Springs. Projects that are consistent with the projections of employment and population forecasts identified in the Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) prepared by SCAG are considered consistent with the AQMP growth projections, since the RTP/SCS forms the basis of the land use and transportation control portions of the AQMP. According to the most recent adopted Growth Forecast Appendix prepared by SCAG for the 2016-2045 RTP/SCS, the City of Santa Fe Springs is projected to add a total of 1,400 new jobs through the year 2045.[23] According to the State of California Employment Development Department, the City's current unemployment rate is 3.7 percent, which means there are up to 300 residents actively seeking work.[24] The proposed project, once operational, will add between two to three persons per shift. The number of new jobs is well within SCAG's employment projections for the City of Santa Fe Springs and the proposed project will not violate Consistency Criteria 2. As a result, no impacts related to the implementation of the AQMP are anticipated.

B. 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? ● Less Than Significant Impact.

The proposed project will take approximately fourteen to eighteen months to complete. Construction activities will consist of the following phases:

- *Site Preparation and Grading*. The project site will be prepared for the construction of a groundwater treatment facility. This phase will take approximately four weeks to complete. The site will undergo final grading during this phase as well. This phase will take approximately two to three months to complete.

[21] South Coast Air Quality Management District. *Air Quality Analysis Handbook*. 1993.

[22] South Coast Air Quality Management District. *CEQA Air Quality Handbook*. April 1993.

[23] Southern California Association of Governments. *Demographics & Growth Forecast. Regional Transportation Plan 2020-2045*. September 3, 2020.

[24] State of California Employment Development Department. *Labor Force and Unemployment Rate for Cities and Census Designated Places.* Website accessed February 15,2022.

- *Construction*. The new building will be constructed during this phase. This phase will take approximately ten to twelve months to complete.

- *Paving and Finishing*. This concluding phase will involve the finishing of the new groundwater treatment facility, the paving of the parking areas and hardscape, and the completion of other on-site improvements. This phase will take approximately two to three months to complete.

The analysis of daily construction and operational emissions was prepared utilizing the California Emissions Estimator Model (CalEEMod V.2020.4.0). As shown in Table 3-1, daily construction emissions are not anticipated to exceed the SCAQMD significance thresholds.

Table 3-1
Estimated Daily Construction Emissions

Construction Phase	ROG	NO_x	CO	SO_2	PM_{10}	$PM_{2.5}$
Site Preparation (on-site)	2.66	27.52	18.24	0.04	19.45	11.11
Site Preparation (off-site)	0.06	0.04	0.63	--	0.20	0.05
Total Site Preparation	**2.72**	**27.56**	**18.87**	**0.04**	**19.65**	**11.16**
Grading (on-site)	1.71	17.93	14.75	0.03	6.85	4.03
Grading (off-site)	0.05	0.03	0.52	--	0.17	0.04
Total Grading	**1.76**	**17.96**	**15.27**	**0.03**	**7.02**	**4.07**
Building Construction (on-site)	1.57	14.38	16.24	0.03	0.70	0.66
Building Construction (off-site)	0.21	0.97	2.38	--	0.81	0.22
Total Building Construction	**1.78**	**15.35**	**18.62**	**0.03**	**1.51**	**0.88**
Paving (on-site)	0.88	8.27	12.22	0.02	0.40	0.37
Paving (off-site)	0.06	0.04	0.65	--	0.22	0.06
Total Paving	**0.94**	**8.31**	**12.87**	**0.02**	**0.62**	**0.43**
Architectural Coatings (on-site)	43.68	1.22	1.81	--	0.06	0.06
Architectural Coatings (off-site)	0.03	0.02	0.39	--	0.13	0.04
Total Architectural Coatings	**43.71**	**1.24**	**2.20**	**--**	**0.19**	**0.10**
Maximum Daily Emissions	**44.66**	**60.88**	**52.77**	**0.11**	**28.19**	**16.12**
Daily Thresholds	**75**	**100**	**550**	**150**	**150**	**55**

Source: CalEEMod V. 2020.4.0.

Long-term emissions refer to those air quality impacts that will occur once the proposed project has been constructed and is operational. The operational long-term air quality impacts associated with the proposed project include mobile emissions associated with vehicular traffic. The analysis of long-term operational impacts also used the CalEEMod V.2020.4.0 computer model. Table 3-2 depicts the operational emissions generated by the proposed project.

Table 3-2
Estimated Operational Emissions in lbs/day

Emission Source	ROG	NO_2	CO	SO_2	PM_{10}	$PM_{2.5}$
Area-wide (lbs/day)	3.15	--	0.01	0.00	--	--
Energy (lbs/day)	0.07	0.68	0.57	--	0.05	0.05
Mobile (lbs/day)	3.07	3.50	33.83	0.08	8.49	2.30
Total (lbs/day)	**6.30**	**4.18**	**34.41**	**0.08**	**8.54**	**2.35**
Daily Thresholds	**55**	**55**	**550**	**150**	**150**	**55**

Source: CalEEMod V. 2020.4.0.

As indicated in Table 3-2, the projected long-term emissions are below thresholds considered to represent a significant adverse impact. Since the project area is located in a non-attainment area for Ozone and particulate matter, the Applicant will be required to ensure that the grading and building contractors adhere to all pertinent provisions of SCAQMD Rule 403 pertaining to the generation of fugitive dust during grading and/or the use of equipment on unpaved surfaces.[25] The contractors will be responsible for being familiar with and implementing any pertinent best available control measures. Therefore, less than significant impacts will occur.

C. Would the project expose sensitive receptors to substantial pollutant concentrations? ● Less Than Significant Impact.

The potential long-term (operational) and short-term (construction) emissions associated with the proposed project are compared to the SCAQMD's daily emissions thresholds in Tables 3-1 and 3-2, respectively. As indicated in these tables, the short-term and long-term emissions will not exceed the SCAQMD's daily thresholds.

Sensitive receptors refer to land uses and/or activities that are especially sensitive to poor air quality and typically include homes, schools, playgrounds, hospitals, convalescent homes, and other facilities where children or the elderly may congregate.[26] The Villages at Heritage Springs residential development is the closest sensitive receptor. This residential development is located 1,200 feet south of the project site along the south side of Telegraph Road.[27] The locations of the aforementioned sensitive receptors are shown in Exhibit 3-3.

The SCAQMD requires that CEQA air quality analyses indicate whether a proposed project will result in an exceedance of *localized emissions thresholds* or LSTs. LSTs only apply to short-term (construction) and long-term (operational) emissions at a fixed location and do not include off-site or area-wide emissions. The approach used in the analysis of the proposed project utilized a number of screening tables that identified maximum allowable emissions (in pounds per day) at a specified distance to a receptor. The pollutants that are the focus of the LST analysis include the conversion of NO_x to NO_2; carbon monoxide (CO) emissions from construction and operations; PM_{10} emissions from construction and $PM_{2.5}$ emissions from construction. The use of the "look-up tables" is permitted since each of the construction phases will involve

[25] South Coast Air Quality Management District. *Rule 403, Fugitive Dust*. As Amended June 3, 2005.

[26] South Coast Air Quality Management District. *CEQA Air Quality Handbook, Appendix 9*. As amended 2004.

[27] Blodgett Baylosis Environmental Planning. *Site survey*. Survey was conducted on May 10, 2022.

the disturbance of less than two acres of land area. For purposes of the LST analysis, the receptor distance used was 200 meters.

Table 3-3
Local Significance Thresholds Exceedance SRA 5 for 2 Acres of Disturbance (site is 3.23 acres)

Emissions	Maximum Emissions (lbs/day)	Type	Allowable Emissions Threshold (lbs/day) and a Specified Distance from Receptor (in meters)				
			25	50	100	200	500
NO_x	**60.88**	Construction /Operation	**114**	111	121	**145**	205
CO	**52.77**	Construction /Operation	**861**	1,082	1,496	**2,625**	7,500
PM_{10}	**28.19**	Construction	**7**	21	39	**74**	182
PM_{10}	**8.54**	Operation	**2**	5	10	**18**	44
$PM_{2.5}$	**16.12**	Construction	**4**	6	10	**22**	92
$PM_{2.5}$	**2.35**	Operation	**1**	2	3	**6**	22

Source: CalEEMod Version 2020.4.0.

As indicated in Table 3-3, the project is anticipated to exceed construction LSTs for particulates. Further analysis of the CalEEMod worksheets indicated that the primary source of construction PM emissions is fugitive dust. Adherence to additional mandatory Rule 403 regulations would reduce fugitive dust emissions by approximately 50% to levels that are less than significant. Rule 403 requires that temporary dust covers be used on any piles of excavated or imported earth to reduce wind-blown dust. In addition, all clearing, earthmoving, or excavation activities must be discontinued during periods of high winds (i.e., greater than 15 mph), so as to prevent excessive amounts of fugitive dust.

Finally, the contractors must comply with other SCAQMD regulations governing equipment idling and emissions controls as well as mandatory SCAQMD regulations governing fugitive dust (Rule 403) and odors (Rule 1401). In addition, future truck drivers visiting the site during the project's construction must adhere to Title 13 - §2485 of the California Code of Regulations, which limits the idling of diesel-powered vehicles to less than five minutes. These regulations will reduce the particulate emissions by as much a 50%. As a result, the impacts will be less than significant.

D. Would the project result in other emissions (such as those leading to odors adversely affecting a substantial number of people? ● Less Than Significant Impact.

The SCAQMD has identified those land uses that are typically associated with odor complaints. These uses include activities involving livestock, rendering facilities, food processing plants, chemical plants, composting activities, refineries, landfills, and businesses involved in fiberglass molding.[28] The proposed project will involve the treatment of groundwater and its subsequent placement into unlined portions of the San Gabriel River for infiltration back into the aquifer. As designed, the proposed project will not be involved in any of the aforementioned odor-generating activities as treatment of groundwater will be performed within a treatment system building. As a result, no impacts related to odors are anticipated with the proposed project. Chemical supply deliveries are expected monthly via tanker truck, at the rate of one tanker per

[28] South Coast Air Quality Management District. *CEQA Air Quality Handbook, Appendix 9*. As amended 2017.

month. All truck drivers that may visit the site must adhere to Title 13 - §2485 of the California Code of Regulations, which limits the idling of diesel-powered vehicles to less than five minutes. Adherence to the aforementioned standard condition will minimize odor impacts from diesel trucks. Furthermore, adherence to SCAQMD Rule 402 Nuisance Odors will minimize odors generated during daily activities. Adherence to the existing SCAQMD regulations governing "nuisance odors" will reduce potential impacts to levels that are less than significant.

CUMULATIVE IMPACTS

There are four cumulative projects located within one and one-half mile from the project site. These four projects are as follows: 128 DU located at 13300 Lakeland Road; a 134,552 square-foot self-storage facility located at 11212 Norwalk Boulevard; a 22,994 square-foot warehouse located at 10370 Slusher Drive; and an 86-room hotel located at the southwest corner of Norwalk Boulevard and Telegraph Road. The combined operational emissions from the five projects (including the proposed project) will still be below the thresholds of significance established by the SCAQMD (the CalEEMod worksheets for the cumulative emissions are provided in the Appendix). Furthermore, the addition of the project trips as well as the trips from the aforementioned related projects will not result in the degradation of any intersection's level of service and no carbon "hot-spots" will be created as a result of the project's implementation and subsequent occupation.

MITIGATION MEASURES

The analysis of air quality impacts indicated that no impacts on these resources would occur as part of the proposed project's implementation. As a result, no mitigation is required.

EXHIBIT 3-3
SENSITIVE RECEPTORS MAP
SOURCE: BLODGETT BAYLOSIS ENVIRONMENTAL PLANNING

3.4 BIOLOGICAL RESOURCES

Environmental Issue Areas Examined	Potentially Significant Impact	Less Than Significant Impact With Mitigation	Less Than Significant Impact	No Impact
A. Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?				✖
B. Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or US Fish and Wildlife Service?				✖
C. Would the project have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?			✖	
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?				✖
E. Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?				✖
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?				✖

ANALYSIS OF ENVIRONMENTAL IMPACTS

A. Would the project 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? ● No Impact.

The proposed project involves the construction and operation of a new groundwater treatment facility within a 3.23-acre (140,791 square feet) project site that was previously part of a larger 27-acre property that was utilized as an oil extraction operation. The site's legal address is 10051 Santa Fe Springs Road within the City of Santa Fe Springs with a corresponding Assessor Parcel Number (APN) of 8005-015-050. The total building area for the proposed groundwater treatment plant would equal 48,649 square feet. The proposed project site has a land use and zoning designation for M-2 Heavy Manufacturing and will require a Conditional Use Permit (CUP) for the Water Pumping and Treatment Plants. None of the nine remaining oil wells are within the border of parcel 4, nor would they affect the redevelopment of Parcel 4 for the use as a groundwater treatment facility. In other words, the development of the proposed groundwater treatment facility will not interfere with any ongoing oil extraction activities within the adjacent parcels. The treated

water will be conveyed via below-grade pipelines from the treatment plant to unlined portions of the San Gabriel River for infiltration back into the aquifer.

A review of the California Department of Fish and Wildlife California Natural Biodiversity Database (CNDDB) Bios Viewer for the Whittier Quadrangle indicates that there are seven threatened or endangered species located within the Whittier Quadrangle (the City of Santa Fe Springs is listed under the Whittier Quadrangle).[29] These species include:

- The *California Gnatcatcher* which is not likely to be found on-site due to the lack of habitat suitable for the California Gnatcatcher. The absence of coastal sage scrub, the California Gnatcatcher's primary habitat, further diminishes the likelihood of encountering such birds.

- The *Least Bell's Vireo* lives in a riparian habitat, with a majority of the species living in San Diego County. As a result, it is not likely that any Least Bell's Vireos will be encountered in the project area due to the lack of riparian habitat in the surrounding area.

- The *Santa Ana Sucker* will not be found on-site because the Santa Ana Sucker is a fish and there are no bodies of water present on-site.[30] The nearest body of water is the San Gabriel River. located approximately 0.93 miles to the east of the project site.

- The *Bank Swallow* lives in a riparian habitat. The nearest body of water is the San Gabriel River, located approximately 0.93 mile to the east of the project site. This river is channelized and extends through an urban area. Additionally, the current level of development around the project site is not an ideal environment for the Bank Swallow.

- The *Western Yellow-Billed Cuckoo* is an insect-eating bird found in riparian woodland habitats. The likelihood of encountering a Western Yellow-Billed Cuckoo is slim due to the level of development present within the City of Santa Fe Springs. Furthermore, the lack of riparian habitat further diminishes the likelihood of encountering populations of Western Yellow-Billed Cuckoos.

- *California Orcutt Grass* is found near vernal pools throughout Los Angeles, Riverside, and San Diego Counties.[31] As indicated previously, the project site is located in the midst of an urban area. There are no bodies of water located on-site that would be capable of supporting populations of California Orcutt Grass nor does the site have the capacity to form vernal pools during wet seasons.

The proposed project will have no impact on the aforementioned species because the project site is located in the midst of an urban area. The southern portion of the San Gabriel River, in which the treated groundwater will be discharged into, is unlined with the surrounding areas not being conducive to the survival of the aforementioned species due to the lack of suitable habitat. As a result, no impacts on any candidate, sensitive, or special status species will result from proposed project's implementation.

California Department of Fish and Wildlife. *Bios Viewer*. https://wildlife.ca.gov/Data/BIOS

[30] Blodgett Baylosis Environmental Planning. *Site Survey*. Survey was completed on May 10, 2022

[31] County of Los Angeles Department of Public Works. *Listed Species in the County of Los Angeles*. *http://dpw.lacounty.gov/pdd/bikepath/bikeplan/docs/App_C_Bio.pdf*.

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, regulations or by the California Department of Fish and Wildlife or US Fish and Wildlife Service? ● No Impact.

The site is disturbed and graded and does not include any streams, wetland habitat, or riparian vegetation. The project site will, however, connect to unlined portions of the San Gabriel River for infiltration back into the aquifer. The U.S. Fish and Wildlife Service National Wetlands Inventory, Wetlands Mapper classifies the San Gabriel River as R4SBCx, being an artificial riverine with water flowing only part of the year, completely dewatered at low tide, has water absent at the end of the growing season in most years and was excavated and channelized by humans.[32] In addition, there are no sensitive natural communities identified near or on the project site and the proposed discharge areas.[33] As a result, no impacts on natural or riparian habitats will result from the proposed project's implementation.

C. Would the project have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means? ● Less Than Significant Impact.

As indicated in the previous subsection, the project site does not contain any natural wetland and/or riparian habitat but the proposed discharge stations will be connected to the San Gabriel River for infiltration back into the aquifer.[34] A new outfall will be constructed approximately at river station 866+00 will serve as the primary discharge and an existing storm drain located near the intersection of Whiteland Street and Bradwell in Santa Fe Springs will serve as a secondary discharge location. These discharge stations will convey treated water into the southern portion of the San Gabriel River. Interruption of hydrological flow is not expected to occur. As a result, the proposed project's impacts will be less than significant.

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? ● No Impact.

The project site is currently disturbed due to past oil extraction activities and no native vegetation or natural open space areas remain. In addition, the project site does not connect two areas of natural open space but will connect to the San Gabriel River. Although the site contains no natural hydrological features, the site's intended use will involve the project site to be connected to the San Gabriel River. The southern portion of the San Gabriel River in which the treated groundwater will be discharged is not a suitable habitat for migratory fish or wildlife species. Constant disturbance (noise and vibration) from vehicular traffic travelling along the adjacent roadways also limits the site's utility as a migration resting area. Since the site and proposed discharge stations lack suitable habitat, the site's ability to function as a migration corridor is restricted and no impacts will result from the implementation of the proposed project.

[32] United States Fish and Wildlife Service. *National Wetlands Inventory*. https://www.fws.gov/Wetlands/data/Mapper.html

[33] California Department of Fish and Wildlife. Natural Communities List. https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=153609&inline

[34] United States Fish and Wildlife Service. *National Wetlands Inventory*. https://www.fws.gov/Wetlands/data/Mapper.html

E. Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance? ● No Impact

Title 9: General Regulations; Chapter 96, Streets & Sidewalks, Street Trees; Section 96.133-serves as the city's tree preservation ordinance. According to the aforementioned code, a person is required to obtain a permit from the city's Public Works Director prior to the removal and/or alteration of trees located within the public right-of-way (also known as roadside trees). The project will also include drought-tolerant landscaping. As a result, the proposed project will not conflict with any local policies regarding tree preservation and no impacts will occur.

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? ● No Impact.

The proposed project will not impact an adopted or approved local, regional, or State habitat conservation plan because the proposed project is located in the midst of an urban area. In addition, the Puente Hills Significant Ecological Area (SEA #15) is the closest protected SEA and is located approximately 3.55 miles northeast from the project site.[35] The proposed project's implementation will not affect the Puente Hills SEA because the proposed development will be restricted to the project site. Therefore, no impacts will occur.

CUMULATIVE IMPACTS

The proposed project will not involve an incremental loss or degradation of protected habitat. The analysis determined that the proposed project will not result in any impacts on protected plant and animal species. As a result, no cumulative impacts on biological resources will be associated with the proposed project's implementation.

MITIGATION MEASURES

The analysis indicated that the proposed project would not result in any impacts on biological resources. As a result, no mitigation measures are required.

[35] County of Los Angeles Department of Regional Planning. *Significant Ecological Areas and Coastal Resource Areas Policy Map.* February 2015.

3.5 CULTURAL RESOURCES

Environmental Issue Areas Examined	Potentially Significant Impact	Less Than Significant Impact With Mitigation	Less Than Significant Impact	No Impact
A. Would the project cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?				✖
B. Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?		✖		
C. Would the project disturb any human remains, including those interred outside of formal cemeteries?			✖	

ANALYSIS OF ENVIRONMENTAL IMPACTS

A. Would the project cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5? ● No Impact.

The proposed project involves the construction and operation of a new groundwater treatment facility within a 3.23-acre (140,791 square feet) project site that was previously part of a larger 27-acre property that was utilized as an oil extraction operation. The site's legal address is 10051 Santa Fe Springs Road within the City of Santa Fe Springs with a corresponding Assessor Parcel Number (APN) of 8005-015-050. The total building area for the proposed groundwater treatment plant would equal 48,649 square feet. The proposed project site has a land use and zoning designation for M-2 Heavy Manufacturing and will require a Conditional Use Permit (CUP) for the Water Pumping and Treatment Plants. The groundwater treatment project will consist of the construction of seven groundwater extraction wells, as well as a greensand filtration system, an AOP package system, LPGAC adsorption vessels, a reverse osmosis treatment system, and backwash and permeate storage tanks within a treatment system building. The treatment system will be fully enclosed within a new concrete tilt-up building that will be constructed within the project site. The project also includes the construction and operation of up to seven groundwater extraction wells at four well sites to pump groundwater to the treatment plant via below-grade conveyance pipelines.

Historic structures and sites are defined by local, State, and Federal criteria. A site or structure may be historically significant if it is locally protected through a local general plan or historic preservation ordinance. A site or structure may be historically significant according to State or Federal criteria even if the locality does not recognize such significance. The California State Historic Preservation Office (SHPO), maintains an inventory of those sites and structures that are considered to be historically significant. Finally, the U.S. Department of Interior has established specific Federal guidelines and criteria that indicate the manner in which a site, structure, or district is to be defined as having historic significance and in the determination of its eligibility for listing on the National Register of Historic Places.[36] To be considered eligible for the National Register, a property's significance may be determined if the property is associated with events, activities, or developments that were important in the past, with the lives of people who were important in the past, or represents significant architectural, landscape, or engineering elements. State historic

[36] U.S. Department of the Interior, National Park Service. *National Register of Historic Places*. https://www.nps.gov/subjects/nationalregister/index.htm. 2010.

preservation regulations include the statutes and guidelines contained in the California Environmental Quality Act (CEQA) and the Public Resources Code (PRC). A historical resource includes, but is not limited to, any object, building, structure, site, area, place, record, or manuscript, which is historically or archaeologically significant. The State regulations that govern historic resources and structures include Public Resources Code (PRC) Section 5024.1 and CEQA Guidelines Sections 15064.5(a) and 15064.5(b). In addition, California law protects Native American burials, skeletal remains, and associated grave goods regardless of the antiquity and provides for the sensitive treatment and disposition of those remains. CEQA, as codified at PRC Sections 21000 et seq., is the principal statute governing the environmental review of projects in the State. The project site is currently unoccupied and is not included on a list of historic resources compiled by the United States Department of the Interior, National Park Service.[37] In addition, the building project site is not present on the list of historic resources identified by the State Office of Historic Preservation (SHPO).[38]

Two locations in the City are recorded on the National Register of Historic Places and the list of California Historical Resources: the Clarke Estate and the Hawkins-Nimocks Estate (also known as the Patricio Ontiveros Adobe or Ontiveros Adobe). These sites structures are not located within or adjacent to the project site. The project site is currently unoccupied Ground cover consists of dirt and gravel. The site is mostly barren. The project site is not listed on the National or State Historic Register.[39] The proposed project will be limited to the project site and the public right-of-way and will not affect any existing resources listed on the National or State Register or those identified as being eligible for listing on the National or State Register. As a result, no impacts are associated with the proposed project's implementation.

B. Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5? ● Less Than Significant Impact with Mitigation.

The greater Los Angeles Basin was previously inhabited by the Gabrieleño people, named after the San Gabriel Mission. The Gabrieleño-Kizh tribe has lived in this region for around 7,000 years.[40] Prior to Spanish contact, approximately 5,000 Gabrieleño people lived in villages throughout the Los Angeles Basin.[41] Villages were typically located near major rivers such as the San Gabriel, Rio Hondo, or Los Angeles Rivers. AB-52 requires a lead agency to begin consultation with a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the proposed project, if the tribe requested to the lead agency, in writing, to be informed by the lead agency of proposed projects in that geographic area and the tribe requests consultation. Two village sites were located in the Los Nietos area: *Naxaaw'na* and *Sehat*. The sites of *Naxaaw'na* and *Sehat* are thought to be near the adobe home of Jose Manuel Nietos that was located near the San Gabriel River.[42] The proposed project site is not near the two village sites, rather it is the former location of support facilities for an existing oilfield. The entire project site has been developed and redeveloped multiple times during that last 100 years. In the unlikely event that human remains are

[37] National Park Service. *National Register of Historic Places*. https://www.nps.gov/subjects/nationalregister/index.htm. Website accessed February 15,2022.

[38] California Department of Parks and Recreation. *California Historical Resources*. http://ohp.parks.ca.gov/ ListedResources. Website accessed on February 15,2022.

[39] U. S. Department of the Interior, National Park Service. *National Register of Historic Places*. http://focus.nps.gov/nrhp. Secondary Source: California State Parks, Office of Historic Preservation. *Listed California Historical Resources*. Website accessed December 4, 2017.

[40] Tonga People of Sunland-Tujunga. *Introduction*. http://www.lausd.k12.ca.us/Verdugo_HS/classes/multimedia/intro.html.

[41] Indigenous Mexico. *The Native Roots of Southern California*. https://indigenousmexico.org/southwest-us/california/the-native-roots-of-southern-californians/.

[42] McCawley, William. *The First Angelinos, the Gabrielino Indians of Los Angeles*. 1996.

uncovered by construction crews and/or the Native American Monitors, all excavation/grading activities shall be halted and the Santa Fe Springs Department of Police Services will be contacted (the Department will then contact the County Coroner). Title 14; Chapter 3; Article 5; Section 15064.5 of CEQA will apply in terms of the identification of significant archaeological resources and their salvage. Adherence to the abovementioned standard condition, along with the following mitigation measures, will reduce potential impacts to levels that are less than significant.

- The project Applicant will be required to obtain the services of a qualified Native American Monitor(s) during construction-related ground disturbance activities within Parcel 4. Ground disturbance is defined by the Tribal Representatives from the Gabrieleño Band of Mission Indians, Kizh Nation as activities that include, but are not limited to, pavement removal, potholing or auguring, boring, grading, excavation, and trenching, within the project area. The monitor(s) must be approved by the tribal representatives and will be present on-site during the construction phases that involve any ground-disturbing activities.

In the unlikely event that human remains are uncovered by construction crews during grading and/or excavation, the following, mitigation will be applicable:

- In the event that human remains are discovered during grading or excavation, all excavation and grading activities shall be stopped and the Santa Fe Springs Department of Police Services will be contacted (the Department will then contact the County Coroner). Title 14; Chapter 3; Article 5; Section 15064.5 of CEQA and California Health and Safety Code Section 7050.5(b) will apply in terms of the identification of significant archaeological resources and their salvage.

Adherence to the above-mentioned mitigation will reduce potential impacts to levels that are less than significant.

C. Would the project disturb any human remains, including those interred outside of formal cemeteries● Less than Significant Impact.

There are no cemeteries located in the immediate area. The nearest cemetery to the project site is Olive Grove Cemetery, located approximately 0.73 miles to the east of the project site.[43] The proposed project will not affect the aforementioned cemetery. However, the potential exists that human remains could be discovered on the site due to site construction activities and impacts could be potentially significant. In the unlikely event that human remains are uncovered by construction crews during grading and/or excavation, the following, standard condition/regulation will be applicable:

- In the event that human remains are discovered during grading or excavation, all excavation and grading activities shall be stopped and the Santa Fe Springs Department of Police Services will be contacted (the Department will then contact the County Coroner). Title 14; Chapter 3; Article 5; Section 15064.5 of CEQA and California Health and Safety Code Section 7050.5(b) will apply in terms of the identification of significant archaeological resources and their salvage.

Adherence to this regulatory compliance measure will ensure reduce potential impacts remain less than significant. As a result, the impact would be less than significant.

[43] Google Earth. Website accessed February 15,2022.

CUMULATIVE IMPACTS

The potential environmental impacts related to cultural resources are site-specific. As a result, no cumulative impacts will occur as part of the proposed project's implementation.

MITIGATION MEASURES

The following mitigation is required due to the potential for disturbance of archaeological resources:

> *Mitigation Measure No. 2 (Cultural Resources)*. The project Applicant will be required to obtain the services of a qualified Native American Monitor(s) during construction-related ground disturbance activities within the Project Site (Parcel 4). Ground disturbance is defined by the Tribal Representatives from the Gabrieleño Band of Mission Indians, Kizh Nation as activities that include, but are not limited to, pavement removal, potholing or auguring, boring, grading, excavation, and trenching, within the project area. The monitor(s) must be approved by the tribal representatives and will be present on-site during the construction phases that involve any ground-disturbing activities

3.6 ENERGY

Environmental Issue Areas Examined	Potentially Significant Impact	Less Than Significant Impact With Mitigation	Less Than Significant Impact	No Impact
A. Would the project result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?			✖	
B. Would the project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?			✖	

ANALYSIS OF ENVIRONMENTAL IMPACTS

A. Would the project result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation? ● Less than Significant Impact.

The proposed project involves the construction and operation of a new groundwater treatment facility within a 3.23-acre (140,791 square feet) project site that was previously part of a larger 27-acre property that was utilized as an oil extraction operation. The site's legal address is 10051 Santa Fe Springs Road within the City of Santa Fe Springs with a corresponding Assessor Parcel Number (APN) of 8005-015-050. The total building area for the proposed groundwater treatment plant would equal 48,649 square feet. The proposed project site has a land use and zoning designation for M-2 Heavy Manufacturing and will require a Conditional Use Permit (CUP) for Water Pumping and Treatment Plants.

The groundwater treatment project will consist of the construction of seven groundwater extraction wells, as well as a greensand filtration system, an AOP package system, LPGAC adsorption vessels, a reverse osmosis treatment system, and backwash and permeate storage tanks within a treatment system building. The treatment system will be fully enclosed within a new concrete tilt-up building that will be constructed within the project site. The project also includes the construction and operation of up to seven groundwater extraction wells at four well sites to pump groundwater to the treatment plant via below-grade conveyance pipelines. The groundwater pipelines (untreated) will be double contained constructed of HDPE. The treated water will be conveyed via below-grade pipelines from the treatment plant to unlined portions of the San Gabriel River for infiltration back into the aquifer. The treated water pipeline will also be constructed of HDPE. [44]

The project will involve 24-hour operation of groundwater treatment equipment year-round. Table 3-4 provides an estimate of electrical consumption for the proposed project. No Natural gas will be used during operations. As indicated in the table, the project is estimated to consume approximately 638.0 kilowatts (kWh) of electricity on a daily basis. Energy facilities in the area are shown in Exhibit 3-4.

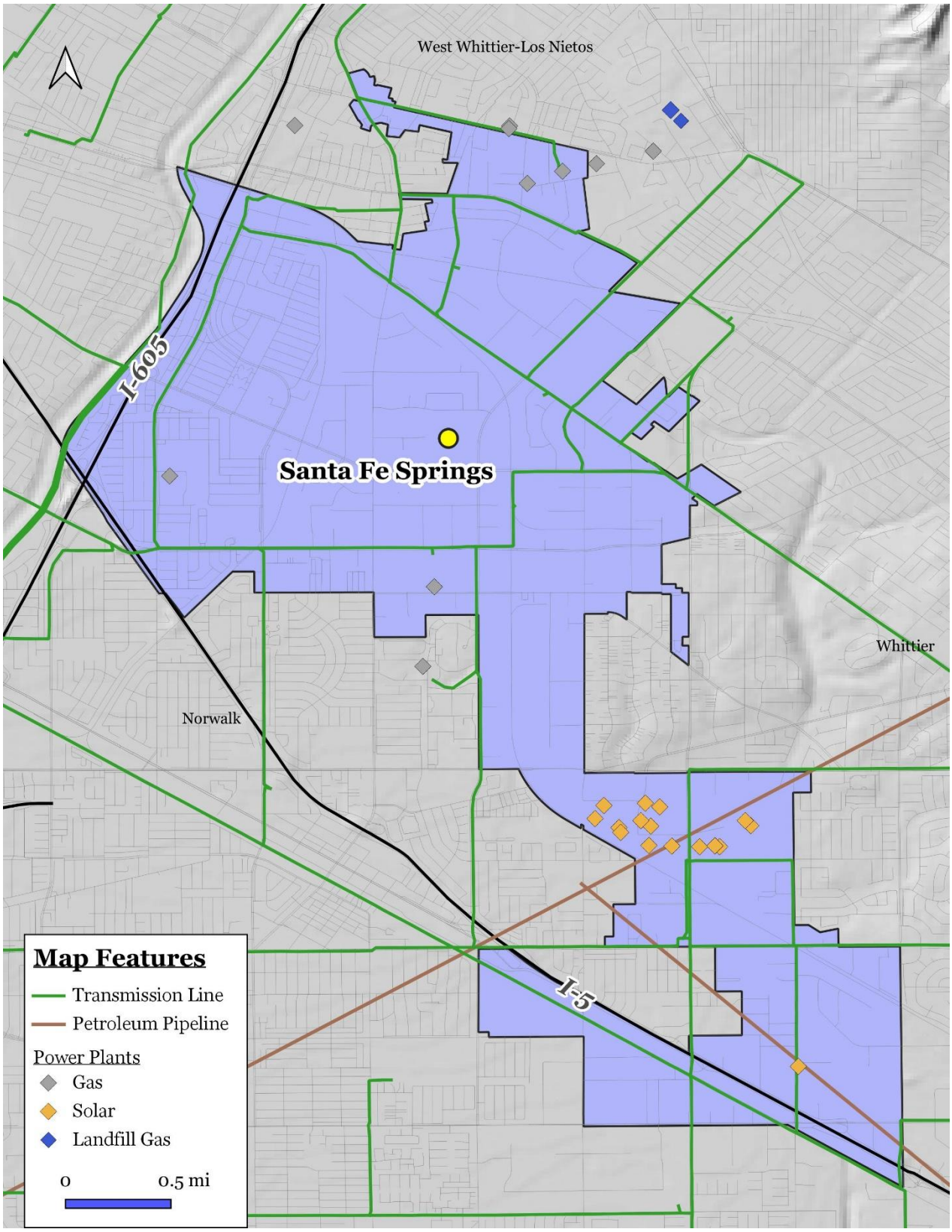

EXHIBIT 3-4
ENERGY MAP
SOURCE: CA ENERGY COMMISSION

Table 3-4
Estimated Annual Energy Consumption

Project	Consumption Rate	Total Project Consumption
Groundwater Treatment Facility (assumes 48,649 sq. ft.)		
Electrical Consumption	4.8 kWh/sq. ft./year	638.0 kWh/day

Source: Blodgett Baylosis Environmental Planning.

In order to prevent inefficient consumption of energy, all exterior security lighting must be motion sensor controlled. This project design feature will prevent the continuous use of lighting thus reducing energy consumption. The project will incorporate solar panels on the roof of the building and use of variable frequency drive units on most electric motor for conservation of energy. Adherence to the above-mentioned project design feature will further reduce potential impacts to be less than significant.

B. Would the project conflict with or obstruct a state or local plan for renewable energy or energy efficiency? ● Less than Significant Impact.

The majority of the project's energy consumption will be related to the 24-hour operation of groundwater treatment equipment. On January 12, 2010, the State Building Standards Commission adopted updates to the California Green Building Standards Code (Code) which became effective on January 1, 2020. The California Code of Regulations (CCR) Title 24, Part 11: California Green Building Standards (Title 24) became effective to aid efforts to reduce GHG emissions associated with energy consumption. Title 24 now requires that new buildings reduce water consumption, employ building commissioning to increase building system efficiencies, divert construction waste from landfills, and install low pollutant-emitting finish materials. The 2016 version of the standards became effective as of January 1, 2017.

The California Green Building Standards Code does not prevent a local jurisdiction from adopting a more stringent code as state law provides methods for local enhancements. Mitigation measures for operational air quality will include the design and incorporation of solar energy arrays on the roof; energy star heating, cooling, and lighting devices; light colored roofing materials; landscaping within the parking areas; use of reclaim water for irrigation; and providing an electrical vehicle charging station all in compliance with the California Green Building Code requirements.[45] As a result, the potential impacts are considered to be less than significant.

CUMULATIVE IMPACTS

The analysis herein determined that the proposed project would not result in any impacts on energy. As a result, no cumulative impacts will occur as part of the proposed project's implementation.

MITIGATION MEASURES

The analysis of energy impacts indicated that no impacts on these resources would occur as part of the proposed project's implementation As a result, no mitigation is required.

[45] OU2 Groundwater Containment Project Description Draft.

3.7 GEOLOGY AND SOILS

Environmental Issue Areas Examined	Potentially Significant Impact	Less Than Significant Impact With Mitigation	Less Than Significant Impact	No Impact
A. Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault (refer to Division of Mines and Geology Special Publication 42); strong seismic ground shaking; seismic-related ground failure, including liquefaction; and, landslides?			✖	
B. Would the project result in substantial soil erosion or the loss of topsoil?			✖	
C. Would the project be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?			✖	
D. Would the project be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?			✖	
E. Would the project have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?				✖
F. Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?				✖

ANALYSIS OF ENVIRONMENTAL IMPACTS

A. Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault (refer to Division of Mines and Geology Special Publication 42); strong seismic ground shaking; seismic-related ground failure, including liquefaction; and, landslides? ● Less Than Significant Impact.

The proposed project involves the construction and operation of a new groundwater treatment facility within a 3.23-acre (140,791 square feet) project site that was previously part of a larger 27-acre property that was utilized as an oil extraction operation. The site's legal address is 10051 Santa Fe Springs Road within the City of Santa Fe Springs with a corresponding Assessor Parcel Number (APN) of 8005-015-050. The total building area for the proposed groundwater treatment plant would equal 48,649 square feet. The proposed project site has a land use and zoning designation for M-2 Heavy Manufacturing and will require a Conditional Use Permit (CUP) for Water Pumping and Treatment Plants. None of the nine remaining oil wells are located on Parcel 4, nor would they affect the redevelopment of Parcel 4 for the use as a groundwater treatment facility. In other words, the development of the proposed groundwater treatment facility will not interfere with any ongoing oil extraction activities within the adjacent parcels.

The groundwater treatment project will consist of the construction of seven groundwater extraction wells, as well as a greensand filtration system, an AOP package system, LPGAC adsorption vessels, a reverse osmosis treatment system, and backwash and permeate storage tanks within a treatment system building. The treatment system will be fully enclosed within a new concrete tilt-up building that will be constructed within the project site. The project also includes the construction and operation of up to seven groundwater extraction wells at four well sites to pump groundwater to the treatment plant via below-grade conveyance pipelines. The groundwater pipelines (untreated) will be double contained constructed of HDPE. The treated water will be conveyed via below-grade pipelines from the treatment plant to unlined portions of the San Gabriel River for infiltration back into the aquifer.

The City of Santa Fe Springs is located in a seismically active region of Southern California. Many major and minor local faults traverse the entire Southern California region, posing a threat to millions of residents, including those who reside in the City of Santa Fe Springs. Earthquakes from several active and potentially active faults in the Southern California region could affect the proposed project site. In 1972, the Alquist-Priolo Earthquake Zoning Act was passed in response to the damage sustained in the 1971 San Fernando Earthquake.[46] The Alquist-Priolo Earthquake Fault Zoning Act's main purpose is to prevent the construction of buildings used for human occupancy on the surface trace of active faults.[47] A map displaying the cities and counties subject to the Alquist-Priolo Earthquake Fault Zones is available on the State's Department of Conservation website. No Alquist-Priolo Earthquake Fault Zones cross the City of Santa Fe Springs.[48] Even though the city is not on the list, there are a number of known faults within close proximity to the city. The nearest known fault is the Lower Elysian Park Thrust Fault located approximately one mile southwest of the project site. The potential impacts from fault movement and ground-shaking are considered no greater for the project site than for the surrounding areas. Surface ruptures are visible instances of horizontal or vertical displacement, or a combination of the two.

According to the United States Geological Survey, liquefaction is the process by which water-saturated sediment temporarily loses strength and acts as a fluid. As a result, the ground soil loses strength due to an increase in water pressure following seismic activity. The project site is not located in an area that is subject to liquefaction but a large portion of the city is (refer to Exhibit 3-5).[49] Lastly, the project site is not subject to the risk of landslides (refer to Exhibit 3-5) because there are no hills or mountains within the vicinity of the project site. As a result, the potential impacts in regard to ground shaking, liquefaction, and landslides are less than significant since the risk is no greater in and around the project site than for the rest of the area.

[46] California Department of Conservation. *Alquist-Priolo Earthquake Fault Zones.*

[47] Ibid.

[48] California Department of Conservation. *Table 4, Cities and Counties Affected by Alquist Priolo Earthquake Fault Zones as of January 2010.* https://maps.conservation.ca.gov/cgs/EQZApp/app/

[49] United States Geological Survey. *U.S. Quaternary Faults Map.*

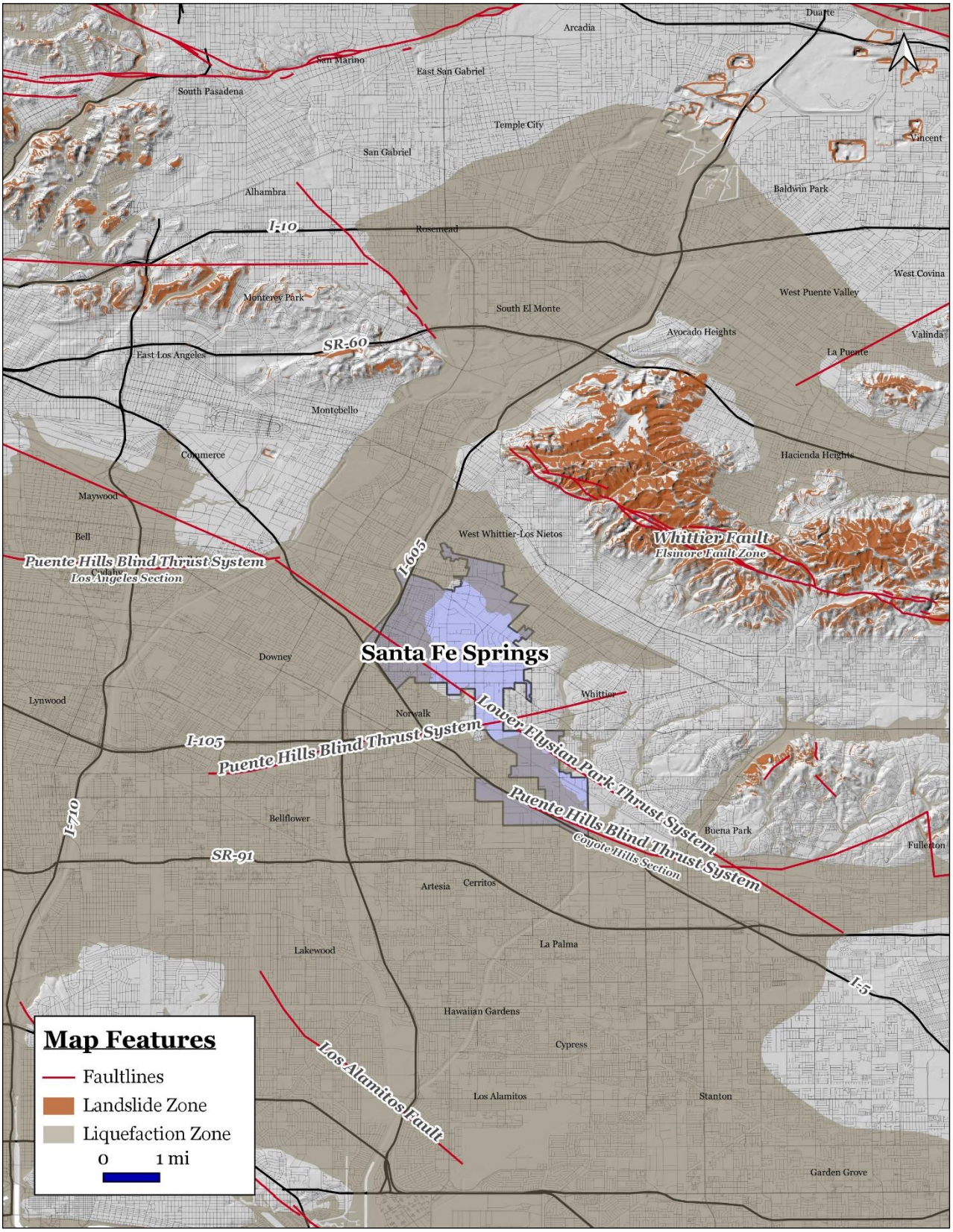

EXHIBIT 3-5
GEOLOGY MAP
SOURCE: UNITED STATES GEOLOGICAL SURVEY

B. Would the project result in substantial soil erosion or the loss of topsoil? ● Less than Significant Impact.

The United States Department of Agriculture's (USDA) Web Soil Survey was consulted to determine the nature of the soils that underlie the project site. According to the USDA Web Soil Survey, the site is underlain by 45% Urban Land, 25% Thums, and 15% Pierview.[50] Urban Land – Thums-Pierview complex soils have a slight risk for erosion; however, construction activities and the placement of "permanent vegetative cover" will reduce the soil's erosion risk. The site will continue to be level and no slope failure or landslide impacts are anticipated to occur.

The project Applicant will be required to prepare a Stormwater Pollution Prevention Program (SWPPP) pursuant to Federal NPDES regulations since the project would connect to the city's MS4. The SWPPP will contain construction best management practices (BMPs) that will restrict the discharge of sediment into the streets and local storm drains. In addition, the Applicant will be required to obtain a grading permit and the approval of a final grading plan and erosion control plan which will further reduce the potential for adverse erosion impacts. As a result, the impacts will be less than significant.

C. Would the project be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse? ● Less Than Significant Impact.

Based on information obtained from the United States Department of Agriculture (USDA) Natural Resources Conservation Service Web Soil Survey online database, the subject property is mapped as majorly Urban land. Shrinking and swelling is influenced by the amount of clay present in the underlying soils. The project site is underlain by soils of various soil associations, which have various levels of clay. Slopes range from 0 to 5 percent. Soils of this association are at a moderate risk for erosion; however, the project site was previously developed and the underlying soils have been disturbed in order to facilitate previous construction activities. In addition, these soils are described as being used almost exclusively for residential and industrial development, as evident by the current level of urbanization present within the surrounding areas.[51] As previously mentioned, the project site is not located in an area that is subject to liquefaction (refer to Exhibit 3-5).[52] The soils that underlie the project site pose no threat to development; in addition, the project site will remain level once the project is complete. Therefore, the proposed project will not expose any person or structure to risks associated with soil collapse, landslides, or soil expansion. As a result, the potential impacts are less than significant.

D. Would the project be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (2020), creating substantial direct or indirect risks to life or property? ● Less Than Significant Impact.

The surrounding area is level and is at no risk for landslides (refer to Exhibit 3-5). Lateral spreading is a phenomenon that is characterized by the horizontal, or lateral, movement of the ground. Lateral spreading could be liquefaction induced or can be the result of excess moisture within the underlying soils. The proposed project is located within an area that is subject to liquefaction though the site is level with no hillside areas present. Therefore, lateral spreading caused by liquefaction will not affect the project site. The

[50] United States Department of Agriculture. *Web Soil Survey*. https://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx

[51] United States Department of Agriculture, Soil Conservation Service. *Report and General Soil Map, Los Angeles County, California*. Revised 1969.

[52] California Department of Conservation. *Regulatory Maps*. http://maps.conservation.ca.gov/cgs/informationwarehouse/index.html?map=regulatorymaps.

proposed project will not expose future employees and patrons to subsidence. All of the proposed project's structural elements must be in compliance with Title 24 of the California Code of Regulations, which identifies building standards for seismic-related construction requirements that have been promulgated by the State of California. The standard development and design measures will be effective in minimizing potential risks stemming from liquefaction. As a result, the potential impacts are considered to be less than significant and no addition mitigation is required.

E. Would the project have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water? ● No Impact.

The proposed project will not utilize septic tanks or other alternative wastewater disposal systems. As a result, no impacts associated with the use of septic tanks will occur as a result of the proposed project's implementation.

F. Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature? ● No Impact.

According to the State of California Geological Survey, the site's geology is classified as "Alluvium" (Qal). Alluvial deposits are typically quaternary in age (from two million years ago to the present day) and span the two most recent geologic epochs, the Pleistocene and the Holocene.[53] Alluvium soil deposits that are present in a natural and undisturbed condition may contain paleontological resources, though these resources are more typically found in marine terraces and shales. The on-site soils have undergone disturbance due to the previous development and other on-site activities. In addition, the on-site soils that underlie the property are Holocene-aged deposits that have a low potential for the discovery of paleontological resources. These soils are recent deposits that do not contain fossil deposits. Therefore, the proposed project is not anticipated to disturb any paleontological resources and no impacts will occur.

CUMULATIVE IMPACTS

The analysis herein determined that the proposed project would not result in significant adverse impacts related to ground shaking, liquefaction, landslides, soil erosion, lateral spreading, or subsidence. In addition, such cumulative impacts are generally site specific. As a result, no cumulative impacts will occur.

MITIGATION MEASURES

The analysis indicated that the proposed project would not result in any geological impacts. As a result, no mitigation measures are required.

[53] United States Geological Survey. *What is the Quaternary?* http://geomaps.wr.usgs.gov/sfgeo/quaternary/stories/what_is.html

3.8 GREENHOUSE GAS EMISSIONS

Environmental Issue Areas Examined	Potentially Significant Impact	Less Than Significant Impact With Mitigation	Less Than Significant Impact	No Impact
A. Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?			✖	
B. Would the project conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?			✖	

ANALYSIS OF ENVIRONMENTAL IMPACTS

A. Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment? ● Less Than Significant Impact.

The proposed project involves the construction and operation of a new groundwater treatment facility within a 3.23-acre (140,791 square feet) project site that was previously part of a larger 27-acre property that was utilized as an oil extraction operation. The site's legal address is 10051 Santa Fe Springs Road within the City of Santa Fe Springs with a corresponding Assessor Parcel Number (APN) of 8005-015-050. The total building area for the proposed groundwater treatment plant would equal 48,649 square feet. The proposed project site has a land use and zoning designation for M-2 Heavy Manufacturing and will require a Conditional Use Permit (CUP) for Water Pumping and Treatment Plants. None of the nine remaining oil wells are located on parcel 4, nor would they affect the redevelopment of Parcel 4 for the use as a groundwater treatment facility. In other words, the development of the proposed groundwater treatment facility will not interfere with any ongoing oil extraction activities within the adjacent parcels.

The groundwater treatment project will consist of the construction of seven groundwater extraction wells, as well as a greensand filtration system, an AOP package system, LPGAC adsorption vessels, a reverse osmosis treatment system, and backwash and permeate storage tanks within a treatment system building. The treatment system will be fully enclosed within a new concrete tilt-up building that will be constructed within the project site. The project also includes the construction and operation of up to seven groundwater extraction wells at four well sites to pump groundwater to the treatment plant via below-grade conveyance pipelines. The groundwater pipelines (untreated) will be double contained constructed of HDPE. The treated water will be conveyed via below-grade pipelines from the treatment plant to unlined portions of the San Gabriel River for infiltration back into the aquifer.

The State of California requires CEQA documents to include an evaluation of greenhouse gas (GHG) emissions or gases that trap heat in the atmosphere. Examples of GHG that are produced both by natural and industrial processes include carbon dioxide (CO_2), methane (CH_4), and nitrous oxide (N_2O). The accumulation of GHG in the atmosphere regulates the earth's temperature. Without these natural GHG, the Earth's surface would be about 61°F cooler.[54] However, emissions from fossil fuel combustion have elevated

[54] California, State of. OPR Technical Advisory – CEQA and Climate Change: Addressing Climate Change through the California Environmental Quality Act (CEQA) Review. June 19, 2008.

the concentrations of GHG in the atmosphere to above natural levels. These man-made GHG will have the effect of warming atmospheric temperatures with the attendant impacts of changes in the global climate, increased sea levels, and changes to the worldwide biome. The major GHG that influence global warming are described below.

- *Water Vapor*. Water vapor is the most abundant GHG present in the atmosphere. While water vapor is not considered a pollutant, it remains in the atmosphere where it maintains a climate necessary for life. Changes in the atmospheric concentration of water vapor is directly related to the warming of the atmosphere rather than a direct result of industrialization. As the temperature of the atmosphere rises, more water is evaporated from ground storage (rivers, oceans, reservoirs, soil). Because the air is warmer, the relative humidity can be higher (in essence, the air is able to "hold" more water when it is warmer), leading to more water vapor in the atmosphere. As a GHG, the higher concentration of water vapor is then able to absorb more thermal indirect energy radiated from the Earth, thus further warming the atmosphere. When water vapor increases in the atmosphere, more of it will eventually also condense into clouds, which are more able to reflect incoming solar radiation. This will allow less energy to reach the Earth's surface thereby affecting surface temperatures.

- *Carbon Dioxide (CO_2)*. The natural production and absorption of CO_2 is achieved through the terrestrial biosphere and the ocean. Manmade sources of CO_2 include the burning coal, oil, natural gas, and wood. Since the industrial revolution began in the mid-1700's, these activities have increased the atmospheric concentrations of CO_2. Prior to the industrial revolution, concentrations were fairly stable at 280 parts per million (ppm). The International Panel on Climate Change (IPCC Fifth Assessment Report, 2014) Emissions of CO_2 from fossil fuel combustion and industrial processes contributed about 78% of the total GHG emissions increase from 1970 to 2010, with a similar percentage contribution for the increase during the period 2000 to 2010. [55]

- *Methane (CH_4)*. CH_4 is an extremely effective absorber of radiation, although its atmospheric concentration is less than that of CO_2. Methane's lifetime in the atmosphere is brief (10 to 12 years), compared to some other GHGs (such as CO_2, N_2O, and Chlorofluorocarbons (CFCs). CH_4 has both natural and anthropogenic sources. It is released as part of the biological processes in low oxygen environments, such as in swamplands or in rice production (at the roots of the plants). Over the last 50 years, human activities such as growing rice, raising cattle, using natural gas, and mining coal have added to the atmospheric concentration of methane. Other human-related sources of methane production include fossil-fuel combustion and biomass burning.

- *Nitrous Oxide (N_2O)*. Concentrations of N_2O also began to increase at the beginning of the industrial revolution. In 1998, the global concentration of this GHG was documented at 314 parts per billion (ppb). N_2O is produced by microbial processes in soil and water, including those reactions which occur in fertilizer containing nitrogen. In addition to agricultural sources, some industrial processes (fossil fuel-fired power plants, nylon production, nitric acid production, and vehicle emissions) also contribute to its atmospheric load. It is also commonly used as an aerosol spray propellant.

- *Chlorofluorocarbons (CFC)*. CFCs are gases formed synthetically by replacing all hydrogen atoms in methane or ethane (C_2H_6) with chlorine and/or fluorine atoms. CFCs are nontoxic, nonflammable, insoluble, and chemically unreactive in the troposphere (the level of air at the Earth's surface). CFCs have no natural source but were first synthesized in 1928. It was used for

[55] International Panel on Climate Change. *Climate Change 2014 Synthesis Report Summary for Policymakers*.

refrigerants, aerosol propellants, and cleaning solvents. Due to the discovery that they are able to destroy stratospheric ozone, a global effort to halt their production was undertaken and in 1989 the European Community agreed to ban CFCs by 2000 and subsequent treaties banned CFCs worldwide by 2010. This effort was extremely successful, and the levels of the major CFCs are now remaining level or declining. However, their long atmospheric lifetimes mean that some of the CFCs will remain in the atmosphere for over 100 years.

- *Hydrofluorocarbons (HFC)*. HFCs are synthetic man-made chemicals that are used as a substitute for CFCs. Out of all the GHGs, they are one of three groups with the highest global warming potential. The HFCs with the largest measured atmospheric abundances are (in order), HFC-23 (CHF_3), HFC-134a (CF_3CH_2F), and HFC-152a (CH_3CHF_2). Prior to 1990, the only significant emissions were HFC-23. HFC-134a use is increasing due to its use as a refrigerant. Concentrations of HFC-23 and HFC-134a in the atmosphere are now about 10 parts per trillion (ppt) each. Concentrations of HFC-152a are about 1 ppt. HFCs are manmade and used for applications such as automobile air conditioners and refrigerants.

- *Perfluorocarbons (PFC)*. PFCs have stable molecular structures and do not break down through the chemical processes in the lower atmosphere. High-energy ultraviolet rays about 60 kilometers above Earth's surface are able to destroy the compounds. Because of this, PFCs have very long lifetimes, between 10,000 and 50,000 years. Two common PFCs are tetrafluoromethane (CF_4) and hexafluoroethane (C_2F_6). Concentrations of CF_4 in the atmosphere are over 70 ppt. The two main sources of PFCs are primary aluminum production and semiconductor manufacturing.

- *Sulfur Hexafluoride (SF_6)*. SF_6 is an inorganic, odorless, colorless, nontoxic, nonflammable gas. SF_6 has the highest global warming potential of any gas evaluated; 23,900 times that of CO_2. Concentrations in the 1990s where about 4 ppt. Sulfur hexafluoride is used for insulation in electric power transmission and distribution equipment, in the magnesium industry, in semiconductor manufacturing, and as a tracer gas for leak detection.

GHG are emitted by both natural processes and human activities. Examples of GHG that are produced both by natural and industrial processes include carbon dioxide (CO_2), methane (CH_4), and nitrous oxide (N_2O). The SCAQMD has adopted interim GHG thresholds for development projects within the South Coast Air Basin. According to the SCAQMD, the interim thresholds for industrial projects are 10,000 $MTCO_2E$ per year.[56] Table 3-3 summarizes annual greenhouse gas (CO_2E) emissions from build-out of the proposed project. Carbon dioxide equivalent, or CO_2E, is a term that is used for describing different greenhouse gases in a common and collective unit. As indicated in Table 3-3, the CO_2E total for the project is 1,526 pounds per day or 278.1 $MTCO_2E$ per year which is below the aforementioned threshold for industrial projects.

[56] SCAQMD. *Interim CEQA GHG Significance Threshold for Stationary Sources, Rules and Plans. Agenda No. 31.* December 5, 2008. https://www.aqmd.gov/docs/default-source/ceqa/handbook/greenhouse-gases-(ghg)-ceqa-significance-thresholds/ghgboardsynopsis.pdf

Table 3-5
Greenhouse Gas Emissions Inventory

Source	GHG Emissions (tons/year)			
	CO_2	CH_4	N_2O	CO_2E
Long-Term – Area Emissions	--	--	0.00	--
Long-Term - Energy Emissions	406.1	0.02	--	408.3
Long-Term - Mobile Emissions	898	0.05	0.03	910.67
Long-Term – Waste Emissions	35.44	2.09	0.00	87.8
Long-Term – Water Emissions	85.51	1.07	0.02	119.89
Long-Term - Total Emissions	**1,425.05**	**3.23**	**0.05**	**1,526.66**
Total Construction Emissions	**377.17**	**0.08**	**--**	**380.96**
Construction Emissions Amortized Over 30 Years				**50.9 $MTCO_2E$**
Total Operational Emissions				**1,526.66 $MTCO_2E$**
Significant Impact?				**No**

It is important to note that the project is an "infill" development, which is seen as an important strategy in combating the release of GHG emissions. As a result, the potential impacts are considered to be less than significant.

B. Would the project conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases? ● Less than Significant Impact.

The City of Santa Fe Springs does not presently have an adopted Climate Action Plan. However, the City's General Plan includes a Conservation Element that has an air quality focus. In this section, the following policies related to air quality are identified:

- *Policy 2.1:* Continue to research alternatives and pollution control measures that influence air quality, including trip reductions, carpooling, and local transit services.
- *Policy 2.2:* Encourage urban infill and land uses and densities that result in reduced trips and reduced trip lengths, and that support non-motorized modes of travel.
- *Policy 2.3:* Initiate capital improvement programs that allow for bus turnouts, traffic synchronization, and intersection channelization.
- *Policy 2.4:* Continue to participate and support cooperative programs between cities which will reduce trips and vehicle miles traveled.

AB 32 requires the reduction of GHG emissions to 1990 levels, which would require a minimum 28 percent reduction in "business as usual" GHG emissions for the entire State. Additionally, Governor Edmund G. Brown signed into law Executive Order (E.O.) B-30-15 on April 29, 2015, the Country's most ambitious policy for reducing Greenhouse Gas Emissions. E.O. B-30-15 calls for a 40 percent reduction in greenhouse gas emissions below 1990 levels by 2030.[57] The proposed project will not involve or require any variance from

[57] Office of Governor Edmund G. Brown Jr. *New California Goal Aims to Reduce Emissions 40 Percent Below 1990 Levels by 2030.* http://gov.ca.gov/news.php?id=18938

the aforementioned policies. Furthermore, the proposed project will not involve or require any other variance from the adopted plan, policy, or regulation governing GHG emissions. There will also be a regional benefit in terms of a reduction in vehicle miles traveled (VMT) because it is an infill project that is consistent with the regional and State sustainable growth objectives identified in the State's Strategic Growth Council (SGC).As a result, the impacts will be less than significant.

CUMULATIVE IMPACTS

According to the City, there are four cumulative projects located within one and one-half mile from the project site. These four cumulative projects are as follows: 128 DU located at 13300 Lakeland Road; a 134,552 square-foot self-storage facility located at 11212 Norwalk Boulevard; a 22,994 square-foot warehouse located at 10370 Slusher Drive; and an 86-room hotel located at the southwest corner of Norwalk Boulevard and Telegraph Road. The cumulative GHG emissions from the five projects (including the proposed project) will still be below the thresholds of significance established by the SCAQMD (the CalEEMod worksheets for the cumulative emissions are provided in the Appendix). As indicated in the worksheets, the total combined Operational GHG emissions from the project will be 1,526.66 MTCO2E per year which is below the single established draft threshold of 10,000 $MTCO_2E$ for new development.

MITIGATION MEASURES

The analysis determined that the impacts from the proposed project's implementation would be less than significant. As a result, no mitigation measures are required.

3.9 HAZARDS AND HAZARDOUS MATERIALS

Environmental Issue Areas Examined	Potentially Significant Impact	Less Than Significant Impact With Mitigation	Less Than Significant Impact	No Impact
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?			✖	
C. Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?			✖	
D. Would the project be located on a site which is included on a list of hazardous materials sites compiled pursuant to Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?				✖
E. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?				✖
F. Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?				✖
G. Would the project expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?				✖

ANALYSIS OF ENVIRONMENTAL IMPACTS

A. *Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials? ● Less than Significant Impact.*

The proposed project involves the construction and operation of a new groundwater treatment facility within a 3.23-acre (140,791 square feet) project site that was previously part of a larger property that was utilized as an oil extraction operation. The site's legal address is 10051 Santa Fe Springs Road within the City of Santa Fe Springs with a corresponding Assessor Parcel Number (APN) of 8005-015-050. The total building area for the proposed groundwater treatment plant would equal 48,649 square feet. The proposed project site has a land use and zoning designation for M-2 Heavy Manufacturing and will require a Conditional Use Permit (CUP) for Water Pumping and Treatment Plants. None of the nine remaining oil wells are within the border of parcel 4, nor would they affect the redevelopment of Parcel 4 for the use as a groundwater treatment facility. In other words, the development of the proposed groundwater treatment facility will not interfere with any ongoing oil extraction activities within the adjacent parcels.

The groundwater treatment project will consist of the construction of seven groundwater extraction wells, as well as a greensand filtration system, an AOP package system, LPGAC adsorption vessels, a reverse

osmosis treatment system, and backwash and permeate storage tanks within a treatment system building. The treatment system will be fully enclosed within a new concrete tilt-up building that will be constructed within the project site. The project also includes the construction and operation of up to seven groundwater extraction wells at four well sites to pump groundwater to the treatment plant via below-grade conveyance pipelines. The groundwater pipelines (untreated) will be double contained constructed of HDPE. The treated water will be conveyed via below-grade pipelines from the treatment plant to unlined portions of the San Gabriel River for infiltration back into the aquifer. The treated water pipeline will also be constructed of HDPE.

Within the treatment system building, the extracted groundwater is initially treated by greensand filtration to reduce the concentration of naturally occurring Total Suspended Solids (TSS) and dissolved iron in the influent groundwater to the treatment plant. The greensand effluent is collected in an AOP feed tank. During operation, the greensand vessels require periodic backwashing to remove accumulated solids. The backwash water is collected in a backwash storage tank and treated using a plate separator to reduce the amount of wastewater discharged to the sewer by approximately 90%. The plate separator process consists of pretreating backwash water from the backwash water storage using a rapid mix tank and coagulant to assist in the removal of TSS. The overflow is pumped to the treatment system influent stream and the underflow is pumped to the sewer regulated under an Industrial Wastewater Discharge permit. As a result, the impacts will be less than significant

B. *Would the project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment? ● Less Than Significant Impact.*

The project site is currently on vacant ground, cover consists of dirt and gravel. The project area totals 3.23 acres. Oil extraction will continue on adjacent property located to the west and south of the property. The project will extract groundwater (via pumping) that contains contamination from past industrial practices in the region for treatment. The extracted groundwater will be treated to meet NPDES standards, then infiltrated into unlined portions of the San Gabriel River, which will recharge back into the basin. The associated pipelines will be buried in trenches, and will not interfere with public rights of way, nor will they be visible. Also, none of the oil well heads examined on the larger adjacent property showed stained soil or oil at the surface. Therefore, current operations by other nearby are not known or observed to have caused a potential for vapor encroachment. Since the project site is located in the midst of a methane risk zone, the project Applicant must adhere to the regulations outlined in Chapter 117 – Oil and Gas, Section 117.131 of the City's Municipal Code. Adherence to the standards identified in the aforementioned section will ensure impacts remain at levels that are less than significant.

C. *Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school? ● Less than Significant Impact.*

The closest school is St. Paul High School, located approximately 0.70 miles northeast of the project site. The proposed use of the project site will be enclosed within a concrete tilt-up building and will not present a noise, sight, odor, light, or other environmental impact to any existing or proposed schools. General access to the building will be provided on the southeastern corner of the building. Operational access to the building will be provided by roll-up doors for access to equipment on the west, north, and east sides of the building. Loading doors and potential trucking activities will also be screened by the orientation of the building and

the neighboring lot between the subject parcel and Santa Fe Springs Road. With the proposed use being enclosed with limited access to the building, the impacts will be less than significant.

D. *Would the project be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment? ● No Impact.*

The project would not be located on a site included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5. A *Recognized Environmental Condition* refers to the "presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: due to release to the environment; under conditions indicative of a release to the environment; or under conditions that pose a material threat of a future release to the environment." The project site is not located on the DTSC Cortese Site list however, the groundwater treatment facility will treat the groundwater contaminated by the Omega Chemical Company. The Omega Chemical Company operated an offsite hazardous waste treatment and storage facility from 1976 to 1991. During its operation, Omega accepted organic solvents and chemicals; and aqueous waste with organic waste constituents. DTSC conducted several inspections from 1984 through 1991 and found Omega out of compliance with hazardous waste laws and regulations. In 1991, the Superior Court for the county of Los Angeles ordered Omega to cease operation, remove all hazardous waste and close the facility. In July of 1994, Omega ceased all operations at the site. There were over 3,113 drum stored on site. Many flammable and heat sensitive materials are stored in these drums which are in varying degrees of deterioration, and ignitable waste is stored within 50 feet from the property line. Sensitive receptors (hospital and skating rink) are within one mile of the site. Soil and groundwater sampling has revealed contamination. Based on the condition of the site, Omega was referred to U.S. EPA for appropriate response action.[58] The proposed project is designed to remove contamination from the groundwater basin. As a result, no impacts will result.

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 private use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area? ● No Impact.*

The project site is not located within two miles of a public airport or public use airport. Fullerton Airport is located approximately 6.79 miles southeast of the project site, the Long Beach Airport is located approximately 9.81 miles to the southwest, and the Joint Forces Training Base in Los Alamitos is located ten miles south of the site.[59] The proposed project is not located within the Runway Protection Zones (RPZ) of any of the aforementioned airports. In addition, the proposed project will not penetrate the designated slopes for any of the aforementioned airports. Essentially, the proposed project will not introduce a building that will interfere with the approach and take-off of airplanes utilizing any of the aforementioned airports and will not risk the safety of the people working in the project area. As a result, no impacts will occur.

[58] Department of Toxic Substances Control. *Envirostor*. https://www.envirostor.dtsc.ca.gov/public/profile_report?global_id=19280436

[59] Toll-Free Airline. *Los Angeles County Public and Private Airports, California*. http://www.tollfreeairline.com/california/losangeles.htm.

F. *Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan? ● No Impact.*

At no time will Santa Fe Springs Road or Telegraph Road be completely closed to traffic during construction. The construction plan must identify specific provisions for the regulation of construction vehicle ingress and egress to the site during construction as a means to provide continued through-access. All construction staging must occur on-site in accordance with City requirements. As a result, no impacts are associated with the proposed project's implementation.

G. *Would the project expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires? ● No Impact.*

The project site is currently vacant and ground cover consists of dirt and gravel. There are no areas of native vegetation found within the project site or in the surrounding properties that could provide a fuel source for a wildfire. The project will also include drought-tolerant landscaping. As a result, there are no impacts associated with potential wildfires from off-site locations.

CUMULATIVE IMPACTS

The potential impacts related to hazards and hazardous materials are site-specific. According to the City, there are four cumulative projects located within one and one-half mile from the project site. These four cumulative projects are as follows: 128 units located at 13300 Lakeland Road; a 134,552 square-foot self-storage facility located at 11212 Norwalk Boulevard; a 22,994 square-foot warehouse located at 10370 Slusher Drive; and an 86-room hotel located at the southwest corner of Norwalk Boulevard and Telegraph Road. The analysis herein determined that the implementation of the proposed project would not result in any significant adverse impacts related to hazards and/or hazardous materials. As a result, no cumulative impacts related to hazards or hazardous materials will result from the proposed project's implementation.

MITIGATION MEASURES

The analysis of potential impacts related to hazards and hazardous materials indicated that no significant adverse impacts would result from the proposed project's approval and subsequent implementation. As a result, no mitigation measures are required.

3.10 HYDROLOGY AND WATER QUALITY

Environmental Issue Areas Examined	Potentially Significant Impact	Less Than Significant Impact with Mitigation	Less Than Significant Impact	No Impact
A. Would the project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?			✖	
B. Would the project substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?			✖	
C. Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would result in substantial erosion or siltation on- or off-site; substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite; create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or, impede or redirect flood flows?			✖	
D. In flood hazard, tsunami, or seiche zones, would the project risk release of pollutants due to project inundation?				✖
E. Would the project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?			✖	

ANALYSIS OF ENVIRONMENTAL IMPACTS

A. *Would the project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality? ● Less Than Significant Impact.*

The proposed project involves the construction and operation of a new groundwater treatment facility within a 3.23-acre (140,791 square feet) project site that was previously part of a larger 27-acre property that was utilized as an oil extraction operation. The site's legal address is 10051 Santa Fe Springs Road within the City of Santa Fe Springs with a corresponding Assessor Parcel Number (APN) of 8005-015-050. The total building area for the proposed groundwater treatment plant would equal 48,649 square feet. The proposed project site has a land use and zoning designation for M-2 Heavy Manufacturing and will require a Conditional Use Permit (CUP) for industrial Water Pumping and Treatment Plants. None of the nine remaining oil wells located within the larger 27-acre property would affect the redevelopment of Parcel 4 for the use as a groundwater treatment facility. In other words, the development of the proposed groundwater treatment facility will not interfere with any ongoing oil extraction activities within the adjacent parcels.

The groundwater treatment project will consist of the construction of seven groundwater extraction wells, as well as a greensand filtration system, an AOP package system, LPGAC adsorption vessels, a reverse osmosis treatment system, and backwash and permeate storage tanks within a treatment system building. The treatment system will be fully enclosed within a new concrete tilt-up building that will be constructed within the project site. The project also includes the construction and operation of up to seven groundwater

extraction wells at four well sites to pump groundwater to the treatment plant via below-grade conveyance pipelines. The groundwater pipelines (untreated) will be double contained constructed of HDPE. The treated water will be conveyed via below-grade pipelines from the treatment plant to unlined portions of the San Gabriel River for infiltration back into the aquifer. The treated water pipeline will also be constructed of HDPE. [60]

The proposed project would be required to implement stormwater pollution control measures pursuant to the National Pollutant Discharge Elimination System (NPDES) requirements. The Applicant would also be required to prepare a Water Quality Management Plan (WQMP) utilizing Best Management Practices (BMPs) to control or reduce the discharge of pollutants to the maximum extent practicable. The WQMP will also identify post-construction BMPs that will be the responsibility of the Applicant to implement over the life of the project. The Applicant will also be required to prepare and implement a Storm Water Pollution Prevention Plan (SWPPP). The SWPPP is required by the city and will be submitted to the Chief Building Official and City Engineer prior to the issuance of a grading permit. The Applicant shall register their SWPPP with the State of California. By complying with this required regulation, potential impacts would remain less than significant.

B. *Would the project substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin? ● Less Than Significant Impact*

Groundwater underlying Santa Fe Springs and other adjacent cities is impacted with chemicals from past business practices such as the Omega Chemical Corporation located in Whittier. The proposed project involves the construction and operation of up to seven groundwater extraction wells at four well sites to pump groundwater to the treatment plant via below-grade conveyance pipelines. The groundwater containment facility will extract groundwater (via pumping) that contains contamination from past industrial practices in the region for treatment. The extracted groundwater will be treated to meet NPDES standards, then infiltrated into unlined portions of the San Gabriel River, which will recharge back into the basin. The associated pipelines will be buried in trenches, and will not interfere with public rights of way, nor will they be visible. As a result, the impacts will be less than significant.

C. *Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would result in substantial erosion or siltation on- or off-site; substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite; create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or, impede or redirect flood flows? ● Less Than Significant.*

The project site is currently vacant. Although there are no streams, rivers, or other bodies of water located within, or adjacent to the project site, the intended use involves the treatment of contaminated groundwater that will be conveyed to unlined portions of the San Gabriel River for infiltration back into the aquifer through two discharge locations.[61] In addition, an outfall will be constructed located at river station 866+00

[61] Google Earth. Website accessed October 14, 2021.

(primary discharge) and an existing storm drain located near the intersection of Whiteland Street and Pioneer Boulevard in Santa Fe Springs (referred to as the secondary discharge location). With these new additions leading to the San Gabriel River, the construction of these additions will not alter the existing drainage pattern of the area. As indicated in the previous section, although the proposed project will not be restricted to the project site, it will not alter the course of any designated "Waters of the U.S.". As a result, impacts will be less than significant.

D. *In flood hazard, tsunami, or seiche zones, would the project risk release of pollutants due to project inundation? ● No Impact.*

According to the City of Santa Fe Springs Natural Hazards Mitigation Plan, "The 100-year flooding event is a flood having a one percent chance of being equaled or exceeded in magnitude in any given year. Contrary to popular belief, it is not a flood occurring once every 100 years. The 100-year floodplain is the area adjoining a river, stream, or watercourse covered by water in the event of a 100-year flood." According to the Los Angeles County Department of Public Works, the project site is not located within a designated 100-year flood hazard area, as defined by the Federal Emergency Management Agency (FEMA).[62] According to the FEMA flood insurance map obtained from the Los Angeles County Department of Public Works, the proposed project site is located in Zone X.[63] This flood zone has an annual probability of flooding of less than 0.2% and represents areas outside the 500-year flood plain. Thus, properties located in Zone X are not located within a 100-year flood plain. As a result, the proposed project will not involve the placement of any structures that would impede or redirect potential floodwater flows through since the site is not located within a flood hazard area. Therefore, no flood-related impacts are anticipated with the proposed project's implementation. The Santa Fe Springs General Plan and the city's Natural Hazards Mitigation Plan indicates the greatest potential for dam failure and the attendant inundation comes from the Whittier Narrows Dam located approximately five miles northwest of the project site. The City of Santa Fe Springs Multi-Hazard Functional Plan states there is a low risk that the city will experience flooding due to dam failure. The proposed project is not located in an area that is subject to inundation by seiche or tsunami. As indicated earlier, there are no rivers located in the vicinity that would result in a seiche. In addition, the project site is located approximately 22 miles inland from the Pacific Ocean and the project site would not be exposed to the effects of a tsunami.[64] Lastly, the proposed project will not result in any mudslides since the project site is generally level and is not located near any slopes. As a result, there will be no impacts.

E. *Would the project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan? ● Less than Significant Impact*

The proposed project involves the construction and operation of up to seven groundwater extraction wells at four well sites to pump groundwater to the treatment plant via below-grade conveyance pipelines, along with an outfall to be constructed located approximately at river station 866+00. The groundwater containment facility will extract groundwater (via pumping) that contains contamination from past industrial practices in the region for treatment.

[62] Federal Emergency Management Agency. *Flood Zones*. http://www.fema.gov/flood-zones.

[63] Los Angeles County Department of Public Works. *Flood Zone Determination Website*. http://dpw.lacounty.gov/wmd/floodzone/. Website accessed February 15,2022.

[64] Google Earth. Website accessed February 15,2022.

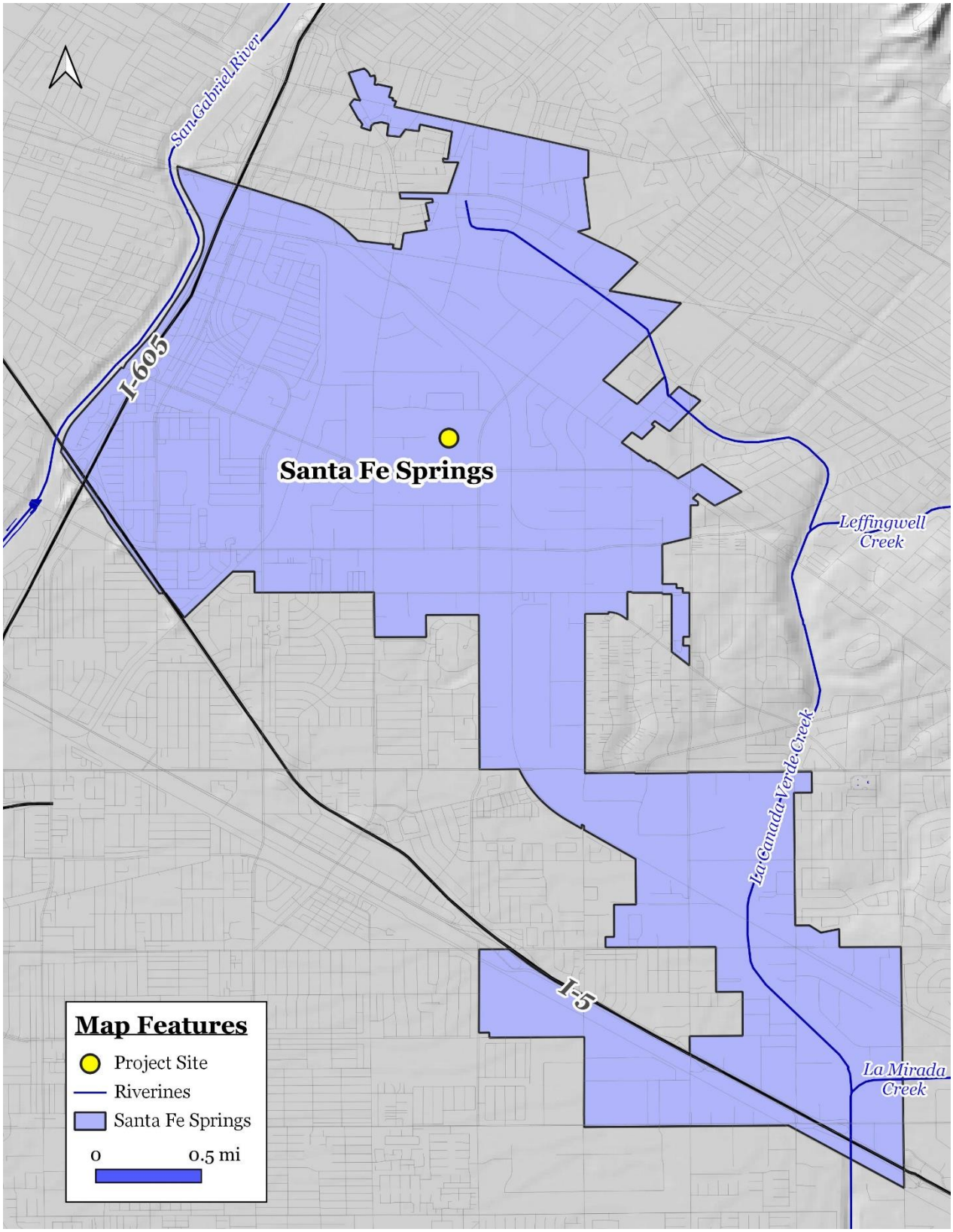

EXHIBIT 3-6
WATER RESOURCES MAP
SOURCE: LOS ANGELES COUNTY DEPARTMENT OF PUBLIC WORKS

The extracted groundwater will be treated to meet NPDES standards, then infiltrated into unlined portions of the San Gabriel River, which will recharge back into the basin. The proposed project will be in compliance with Title 5 –Chapter 52– Stormwater Management and Discharge Control of the City of Santa Fe Springs Municipal Code. The City of Santa Fe Springs is a co-permittee under the "Waste Discharge Requirements for Municipal Separate Storm Sewer System ("MS4")" discharges within the Coastal Watersheds of Los Angeles County, except those discharges originating from the City of Long Beach MS4, which also serves as a NPDES permit under the federal Clean Water Act (NPDES No. CAS614001), as well as waste discharge requirements under California law (the "municipal NPDES permit") and, as a co-permittee under the municipal NPDES permit, the City is required to adopt ordinances and implement procedures with respect to the entry of non-stormwater discharges into the municipal stormwater system.[65] As a result, the potential impacts will be less than significant.

CUMULATIVE IMPACTS

The potential impacts related to hydrology and storm water runoff are typically site-specific. Furthermore, the analysis determined that the implementation of the proposed project would not result in any significant adverse impacts with the adoption of the appropriate mitigation measures. As a result, no cumulative impacts are anticipated.

MITIGATION MEASURES

The analysis of potential impacts related to hydrology and water quality indicated that no significant adverse impacts would result from the proposed project's approval and subsequent implementation if it remains in compliance with Santa Fe Springs Code of Ordinances. As a result, no mitigation measures are required.

[65] Santa Fe Springs Code of Ordinances. Title V: Public Works, § Chapter 52.02: Stormwater Management and Discharge Control Findings https://codelibrary.amlegal.com/codes/santafesprings/latest/santafesprings_ca/0-0-0--1073663282

3.11 LAND USE AND PLANNING

Environmental Issue Areas Examined	Potentially Significant Impact	Less Than Significant Impact With Mitigation	Less Than Significant Impact	No Impact
A. Would the project physically divide an established community?				✖
B. Would the project cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?			✖	

ANALYSIS OF ENVIRONMENTAL IMPACTS

A. *Would the project physically divide an established community? ● No Impact.*

The proposed project involves the construction and operation of a new groundwater treatment facility within a 3.23-acre (140,791 square feet) project site that was previously part of a larger 27-acre property that was utilized as an oil extraction operation. The site's legal address is 10051 Santa Fe Springs Road within the City of Santa Fe Springs with a corresponding Assessor Parcel Number (APN) of 8005-015-050. The total building area for the proposed groundwater treatment plant would equal 48,649 square feet. The proposed project site has a land use and zoning designation for M-2 Heavy Manufacturing and will require a Conditional Use Permit (CUP) for Water Pumping and Treatment Plants. None of the nine remaining oil wells located within the larger 27-acre property would affect the redevelopment of Parcel 4 for the use as a groundwater treatment facility. In other words, the development of the proposed groundwater treatment facility will not interfere with any ongoing oil extraction activities within the adjacent parcels.

The groundwater treatment project will consist of the construction of seven groundwater extraction wells, as well as a greensand filtration system, an AOP package system, LPGAC adsorption vessels, a reverse osmosis treatment system, and backwash and permeate storage tanks within a treatment system building. The treatment system will be fully enclosed within a new concrete tilt-up building that will be constructed within the project site. The project also includes the construction and operation of up to seven groundwater extraction wells at four well sites to pump groundwater to the treatment plant via below-grade conveyance pipelines. The groundwater pipelines (untreated) will be double contained constructed of HDPE. The treated water will be conveyed via below-grade pipelines from the treatment plant to unlined portions of the San Gabriel River for infiltration back into the aquifer. The treated water pipeline will also be constructed of HDPE.

The 3.23-acre (140,791 square feet) site is surrounded by industrial uses. Exhibit 2-4 shows an aerial photograph of the project site and the adjacent development. Surrounding land uses in the vicinity of the project site are listed below:

- *North of the Project Site*. A mix of smaller industrial and commercial uses are located north of the project site. These industrial uses have frontage the north and south sides of McCann Drive, which is located approximately 190 feet to the north of the project site.

- *South of the Project Site*. Vacant undeveloped land extends along the project site's southerly side. Further south, approximately 1,200 feet, Telegraph Road extends in an east-west orientation The Villages at Heritage Springs residential development is located approximately 1,200 feet south of the project site along the south side of Telegraph Road.

- *East of the Project Site.* Santa Fe Springs Road extends along the east side of the project site in a north-south orientation General industrial uses are located along the east side of Santa Fe Springs Road.

- *West of the Project Site*. Vacant, undeveloped land abuts the project site on the west side. A mix of industrial uses abuts the undeveloped land to the west. In addition, Hawkins Street extends in an east-west direction and terminates at the undeveloped adjacent property's western property line.[66]

B. *Would the project cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect? ● Less than Significant Impact.*

The proposed project will require the following discretional approvals with respect to land use:

- *An Industrial Wastewater Discharge Permit* to allow the discharge of Los Angeles County Sanitation District (LACSD) for reverse osmosis brine.
- *A Conditional Use Permit* to allow "water-pumping and treatment plants" as a conditional use in the Heavy Manufacturing zone with approval of a Conditional Use Permit;

- Other discretionary and ministerial permits and approvals that may be deemed necessary, including but not limited to temporary street closure permits, grading permits, excavation permits, foundation permits, and building permits; and The Approval of this Mitigated Negative Declaration (MND) and the Mitigation Monitoring and Reporting Program (MMRP).

As indicated in the preceding analysis, the project will not deviate from the goals and policies outlined in the City's General Plan. Therefore, with approval of the required discretionary approvals, the project's land use impacts will be less than significant.

CUMULATIVE IMPACTS

The potential cumulative impacts with respect to land use are site-specific. Furthermore, the analysis determined that the proposed project will not result in any impacts. As a result, no cumulative land use impacts will occur as part of the proposed project's implementation.

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[66] Google Maps. Website Accessed February 15,2022.

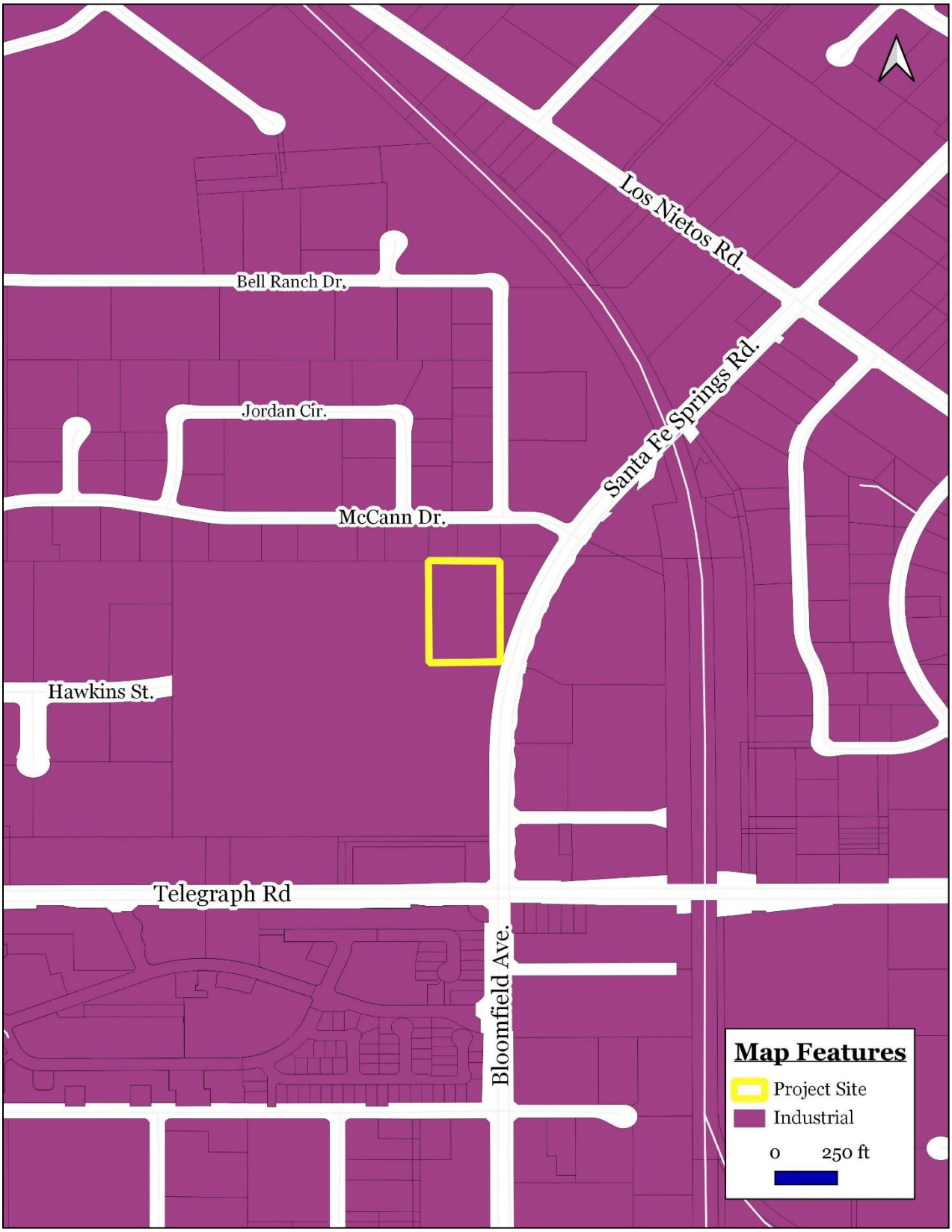

EXHIBIT 3-7
LAND USE MAP
SOURCE: CITY OF SANTA FE SPRINGS

MITIGATION MEASURES

The proposed project will require the approval of a Conditional Use Permit (CUP) to allow "water-pumping and treatment plants" as a conditional use in the Heavy Manufacturing (M2) zone. This will not lead to any off-site land use impacts. As a result, no mitigation is required.

3.12 MINERAL RESOURCES

Environmental Issue Areas Examined	Potentially Significant Impact	Less Than Significant Impact With Mitigation	Less Than Significant Impact	No Impact
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?				✖

ANALYSIS OF ENVIRONMENTAL IMPACTS

A. *Would the project result in the loss of availability of a known mineral resource that would be of value* is *to the region and the residents of the state? ● No Impact.*

The proposed project involves the construction and operation of a new groundwater treatment facility within a 3.23-acre (140,791 square feet) project site that was previously part of a larger 27-acre property that was utilized as an oil extraction operation. The site's legal address is 10051 Santa Fe Springs Road within the City of Santa Fe Springs with a corresponding Assessor Parcel Number (APN) of 8005-015-050. The total building area for the proposed groundwater treatment plant would equal 48,649 square feet. The proposed project site has a land use and zoning designation for M-2 Heavy Manufacturing and will require a Conditional Use Permit (CUP) for Water Pumping and Treatment Plants. None of the nine remaining oil wells located within the larger 27-acre property would affect the redevelopment of Parcel 4 for the use as a groundwater treatment facility. In other words, the development of the proposed groundwater treatment facility will not interfere with any ongoing oil extraction activities within the adjacent parcels.

The groundwater treatment project will consist of the construction of seven groundwater extraction wells, as well as a greensand filtration system, an AOP package system, LPGAC adsorption vessels, a reverse osmosis treatment system, and backwash and permeate storage tanks within a treatment system building. The treatment system will be fully enclosed within a new concrete tilt-up building that will be constructed within the project site. The project also includes the construction and operation of up to seven groundwater extraction wells at four well sites to pump groundwater to the treatment plant via below-grade conveyance pipelines. The treated water will be conveyed via below-grade pipelines from the treatment plant to unlined portions of the San Gabriel River for infiltration back into the aquifer.[67]

There are two discharge locations at the river: a new to-be constructed outfall approximately located at river station 866+00 (primary discharge) and an existing storm drain located near the intersection of Whiteland Street and Pioneer Boulevard in Santa Fe Springs (referred to as the secondary discharge location). The primary discharge location will be the main location for discharge, however during San Gabriel River operations and maintenance there will be times when the primary location cannot be used. When the primary discharge location is unavailable the secondary discharge location will be used. As a result, the potential impacts are considered to be less than significant. In addition, according to SMARA study area

maps prepared by the California Geological Survey, the City of Santa Fe Springs is located within the larger San Gabriel Valley SMARA (identified as the Portland cement concrete-grade aggregate).[68] However, as indicated in the San Gabriel Valley P-C region MRZ-2 map, the project site is not located in an area where there are significant aggregate resources present.[69] In addition, the project site is not located in an area with active mineral extraction activities. As a result, no impacts to mineral resources will occur.

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? ● No Impact.*

A review of the San Gabriel Valley P-C region MRZ-2 map indicated that the project site is not located in an area that contains aggregate resources.[70] Therefore, the project's implementation will not contribute to a loss of availability to locally important mineral resources. Furthermore, the resources and materials that will be utilized for the construction of the proposed project will not include any materials that are considered rare or unique. As a result, no impacts will occur with the project's implementation.

CUMULATIVE IMPACTS

The potential impacts on mineral resources are site-specific. Furthermore, the analysis determined that the proposed project would not result in any impacts on mineral resources. As a result, no cumulative impacts will occur.

MITIGATION MEASURES

The analysis of potential impacts related to mineral resources indicated that no impacts would result from the proposed project's implementation. As a result, no mitigation measures are required.

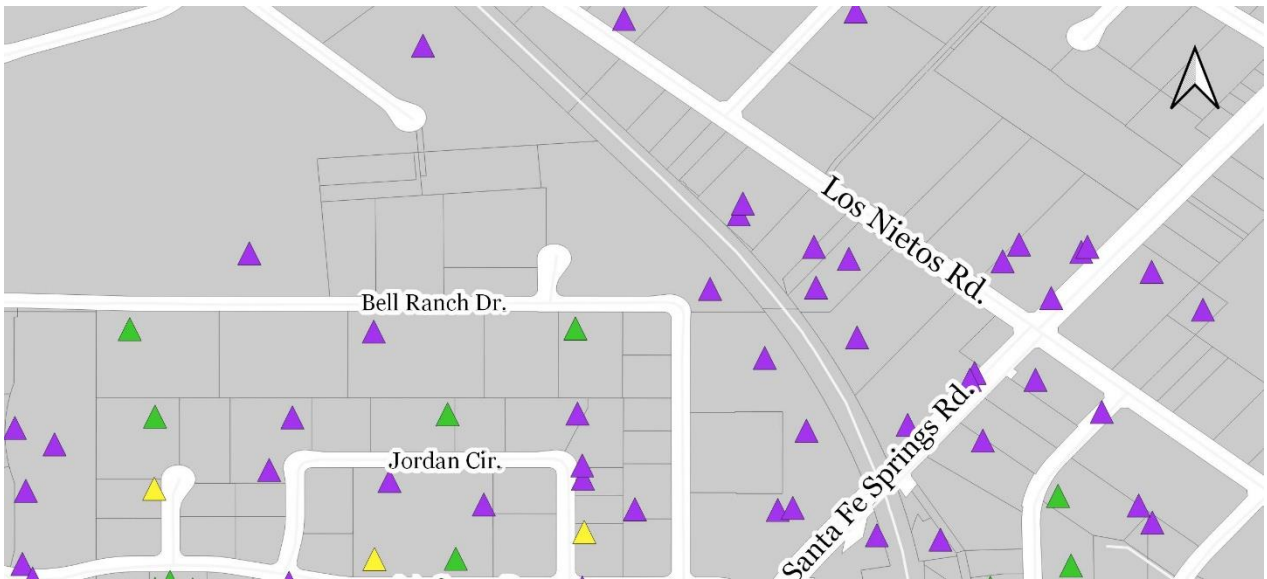

EXHIBIT 3-8
MINERAL RESOURCES MAP
SOURCE: WELL FINDER

3.13 NOISE

Environmental Issue Areas Examined	Potentially Significant Impact	Less Than Significant Impact With Mitigation	Less Than Significant Impact	No Impact
A. Would the project result in generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?		✖		
B. Would the project result in generation of excessive ground borne vibration or ground borne noise levels?			✖	
C. For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people reside or working in the project area to excessive noise levels?				✖

ANALYSIS OF ENVIRONMENTAL IMPACTS

A. *Would the project result in generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies? ● Less Than Significant Impact with Mitigation.*

The proposed project involves the construction and operation of a new groundwater treatment facility within a 3.23-acre (140,791 square feet) project site that was previously part of a larger 27-acre property that was utilized as an oil extraction operation. The site's legal address is 10051 Santa Fe Springs Road within the City of Santa Fe Springs with a corresponding Assessor Parcel Number (APN) of 8005-015-050. The total building area for the proposed groundwater treatment plant would equal 48,649 square feet. The proposed project site has a land use and zoning designation for M-2 Heavy Manufacturing and will require a Conditional Use Permit (CUP) for Water Pumping and Treatment Plants. None of the nine remaining oil wells located within the larger 27-acre property would affect the redevelopment of Parcel 4 for the use as a groundwater treatment facility. In other words, the development of the proposed groundwater treatment facility will not interfere with any ongoing oil extraction activities within the adjacent parcels.

The groundwater treatment project will consist of the construction of seven groundwater extraction wells, as well as a greensand filtration system, an AOP package system, LPGAC adsorption vessels, a reverse osmosis treatment system, and backwash and permeate storage tanks within a treatment system building. The treatment system will be fully enclosed within a new concrete tilt-up building that will be constructed within the project site. The project also includes the construction and operation of up to seven groundwater extraction wells at four well sites to pump groundwater to the treatment plant via below-grade conveyance pipelines. The groundwater pipelines (untreated) will be double contained constructed of HDPE. The treated water will be conveyed via below-grade pipelines from the treatment plant to unlined portions of

the San Gabriel River for infiltration back into the aquifer. The treated water pipeline will also be constructed of HDPE. [71]

Noise levels may be described using a number of methods designed to evaluate the "loudness" of a particular noise. The most commonly used unit for measuring the level of sound is the decibel (dB). Zero on the decibel scale represents the lowest limit of sound that can be heard by humans. The eardrum may rupture at 140 dB. In general, an increase of between 3.0 dB and 5.0 dB in the ambient noise level is considered to represent the threshold for human sensitivity. In other words, increases in ambient noise levels of 3.0 dB or less are not generally perceptible to persons with average hearing abilities.[72] Noise levels that are associated with common, everyday activities are illustrated in Exhibit 3-8. Noise levels may be described using a number of methods designed to evaluate the "loudness" of a particular noise

The ambient noise environment within the project area is dominated by traffic noise emanating from Telegraph Road. An Extec was used to conduct the noise measurements. The meter was performed using a slow response setting, with an "A" weighting. The noise meter's height above the ground surface was five feet. A series of 100 discrete noise measurements were recorded in one single location. These measurements were taken along the south side of Telegraph Road approximately 1,200 feet south of the project site's southerly property line. The duration of each measurement period was 15 minutes. The measurements were taken on a Friday morning at 11:00 AM. The results of the survey are summarized in Table 3-6. The median ambient exterior noise level (L_{50}) was 60.6 dBA at the measurement location. The L_{50} represents the noise level that is exceeded 50% of the time (half the time the noise level exceeds this level and half the time the noise level is less than this level). As shown in Table 3-6, the average ambient noise levels were 62.0 dBA within the measurement locations.

Table 3-6
Noise Measurement Results

Noise Metric	Noise Level (dBA) Telegraph Rd
L^{50} (Noise levels <50% of time)	60.6 dBA
L^{75} (Noise levels <75% of time)	67.0 dBA
L^{90} (Noise levels <90% of time)	72.7 dBA
L^{99} (Noise levels <99% of time)	76.9 dBA
L_{min} (Minimum Noise Level)	50.5 dBA
L_{max} (Maximum Noise Level)	78.6 dBA
Average Noise Level	62.0 dBA

Source: Blodgett Baylosis Environmental Planning.

As indicated in Table 3-6, the ambient noise environment within and around the project site is typical for a site located next to a major arterial roadway along an industrial corridor. In addition, the proposed use is not considered to be a noise sensitive land use. The existing noise levels within the measurement location are below the 70 dBA thresholds for certain industrial land uses. In order to further reduce construction

[71] DRA Architects. DRA Architects. Groundwater Containment Project. *Proposed Site Plan. Sheet A-1.1. June 30,2021.*
[72] Bugliarello, et. al. *The Impact of Noise Pollution,* Chapter 127, 1975.

noise levels, the following goal listed in the Noise Element of the City's General Plan is reiterated as a standard condition:

- Minimize construction-related noise and vibration by limiting construction activities within 500 feet of noise-sensitive uses from 7:00 PM to 7:00 AM, seven days a week.

The aforementioned provision related to construction will apply to the proposed project. In addition, the following mitigation measures are required which will further reduce construction noise:

- The Applicant must ensure that the contractors use construction equipment that includes working mufflers and other sound suppression equipment as a means to reduce machinery noise.

- The Applicant shall notify the nearby residents within 1,200 feet of the site along Telegraph Road as to the times and duration of construction activities at least 10 days before the commencement of construction activities. In addition to the notification of the individual residences, signage must be placed on the construction security fences that would be located along the project site. The individual signs must clearly identify a contact person (and the phone number) that local residents may call to complain about noise related to construction.

Adherence to the mitigation outlined above and the temporary nature of the construction noise will reduce potential construction noise impacts to a less than significant level. As indicated in the project description, operation of the treatment system will be fully enclosed within a new concrete tilt-up building. General access to the building will be provided on the southeastern corner of the building. Operational access to the building will be provided by roll-up doors for access to equipment on the west, north, and east sides of the building, limiting any potential environmental impact the treatment system operations. Finally, shrub and tree landscaping will be provided in the open space area between the new building and surrounding the project parcel. The line-of-sight between the building and the surrounding land uses will be obstructed by trees and plants. The design of the project and operational features will reduce the potential operational noise impacts to levels that are less than significant.

B. *Would the project result in generation of excessive groundborne vibration or groundborne noise levels? ● Less Than Significant Impact.*

The nearest land use that may potentially be impacted by ground-borne vibration and noise (primarily from the use of heavy construction equipment) are the Villages at Heritage Springs located approximately 1,200 feet south of the project site along Telegraph Road. The noisiest phases of construction are anticipated to be 89 dBA as measured at a distance of 50 feet from the construction activity. The construction noise levels will decline as one moves further away from the noise source. This effect is known as *spreading loss*. In general, the noise level adjustment that takes the spreading loss into account calls for a 6.0 dBA reduction for every doubling of the distance beginning with the initial 50-foot distance. Noise levels associated with various types of construction equipment are summarized in Exhibit 3-9.

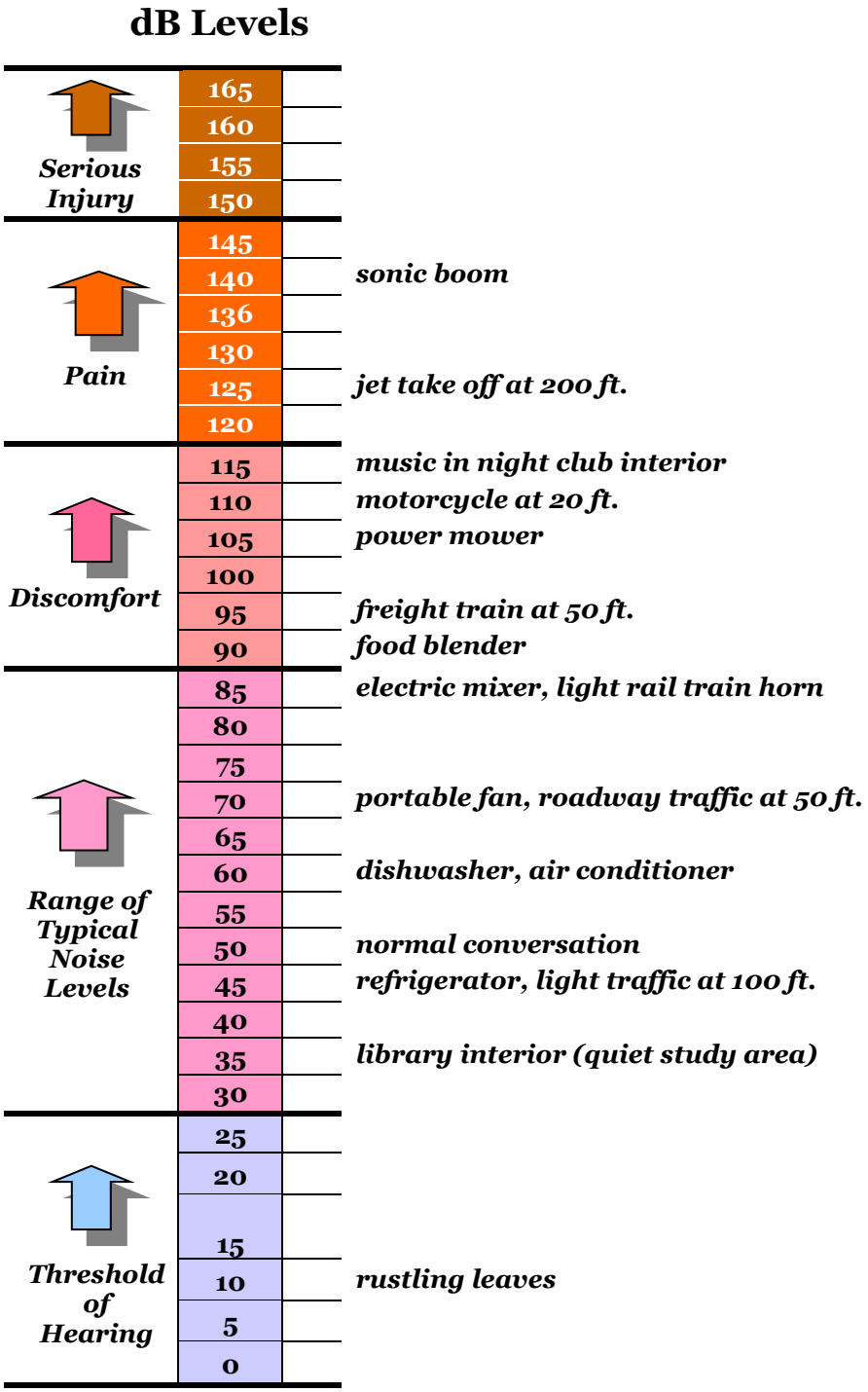

EXHIBIT 3-9
TYPICAL NOISE SOURCES AND LOUDNESS SCALE
Source: Blodgett Baylosis Environmental Planning

The noise levels are those that would be expected at a distance of 50 feet from the noise source. Composite construction noise is best characterized in a study prepared by the Bolt, Beranek, and Newman.[73] In the study, the noisiest phases of construction are anticipated to be 89 dBA as measured at a distance of 50 feet from the construction activity. In later phases during building erection, noise levels are typically reduced from these values and the physical structures further break up line-of-sight noise. Certain types of construction equipment will also potentially result in vibration. The background vibration velocity level in residential areas is usually around 50 vibration velocity level (VdB). The vibration velocity level threshold of perception for humans is approximately 65 VdB. A vibration velocity of 75 VdB is the approximately dividing line between barely perceptible and distinctly perceptible levels for many people. Sources within buildings such as operation of mechanical equipment, movement of people, or the slamming of doors causes most perceptible indoor vibration. Construction activities may result in varying degrees of ground vibration, depending on the types of equipment, the characteristics of the soil, and the age and construction of nearby buildings. The operation of construction equipment causes ground vibrations that spread through the ground and diminish in strength with distance.

Table 3-7 summarizes the levels of vibration and the usual effect on people and buildings. The U.S. Department of Transportation (U.S. DOT) has guidelines for vibration levels from construction related to their activities and recommends that the maximum peak-particle-velocity levels remain below 0.05 inches per second at the nearest structures. Vibration levels above 0.5 inches per second have the potential to cause architectural damage to normal dwellings. The U.S. DOT also states that vibration levels above 0.015 inches per second (in/sec) are sometimes perceptible to people, and the level at which vibration becomes an irritation to people is 0.64 inches per second. Typical levels from vibration generally do not have the potential for any structural damage. Some construction activities, such as pile driving and blasting, can produce vibration levels that may have the potential to damage some vibration sensitive structures if performed within 50 to 100 feet of the structure. In this instance, no pile driving will be used. The reason that normal construction vibration does not result in structural damage has to do with several issues, including the frequency vibration and magnitude of construction related vibration.

Unlike earthquakes, which produce vibration at very low frequencies and have a high potential for structural damage, most construction vibration is in the mid- to upper- frequency range, and therefore has a lower potential for structural damage. The operation of the project site's intended use of treating contaminated groundwater will be fully enclosed within a new concrete tilt-up building. As a result, the ground vibration impacts will be less than significant.

[73] Design Guide for Traffic Noise Prediction. Bolt Beranek and Newman Inc., Van Nuys, California 91406. 1970

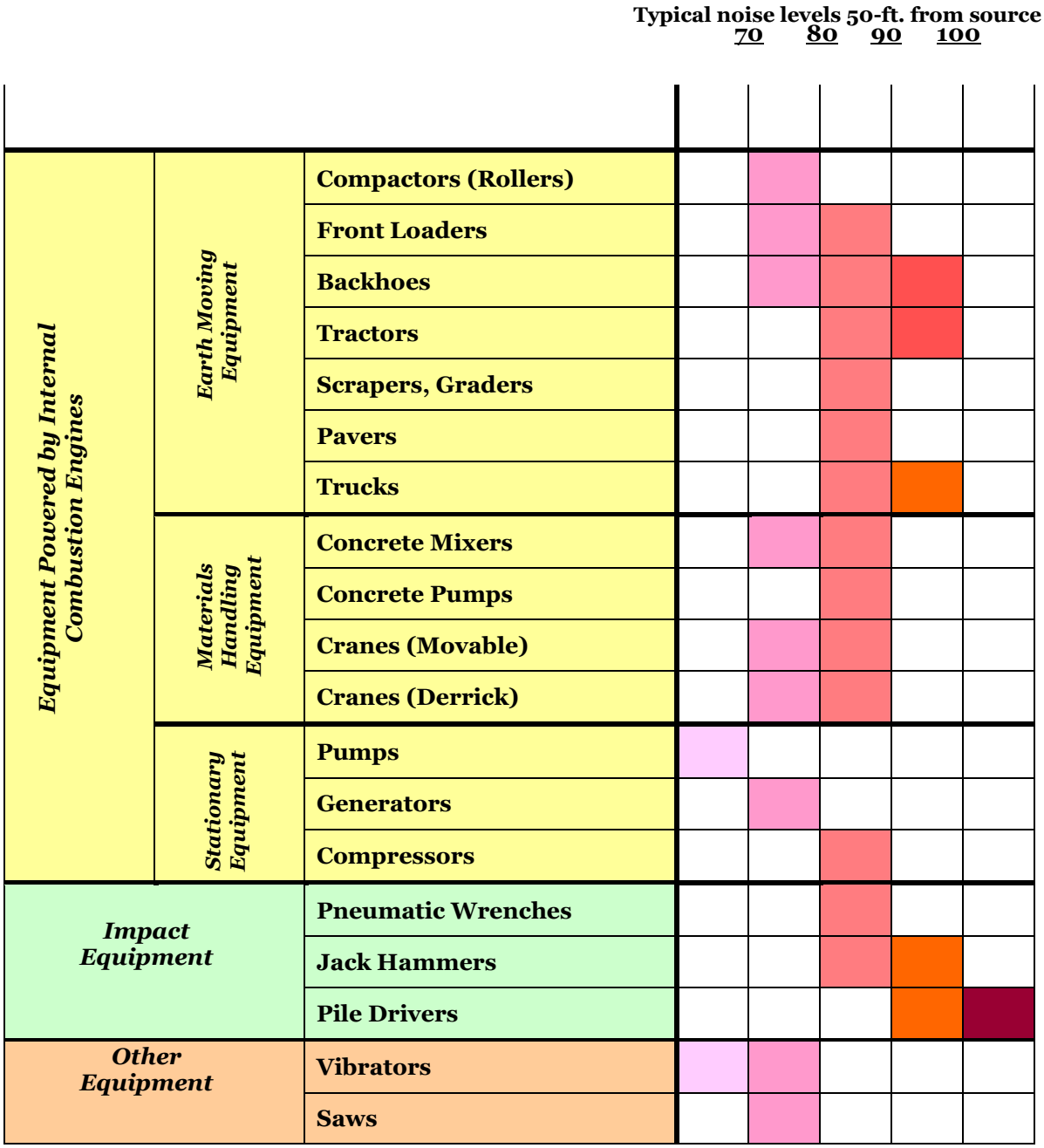

EXHIBIT 3-10
TYPICAL CONSTRUCTION NOISE LEVELS

Source: Blodgett Baylosis Environmental Planning

Table 3-7
Common Effects of Construction Vibration

Peak Particle Velocity (in/sec)	Effects on Humans	Effects on Buildings
<0.005	Imperceptible	No effect on buildings
0.005 to 0.015	Barely perceptible	No effect on buildings
0.02 to 0.05	Level at which continuous vibrations begin to annoy occupants of nearby buildings	No effect on buildings
0.1 to 0.5	Vibrations considered unacceptable for persons exposed to continuous or long-term vibration.	Minimal potential for damage to weak or sensitive structures
0.5 to 1.0	Vibrations considered bothersome by most people, however tolerable if short-term in length	Threshold at which there is a risk of architectural damage to buildings with plastered ceilings and walls.
>3.0	Vibration is unpleasant	Potential for architectural damage and possible minor structural damage

Source: U.S. Department of Transportation

C. *For a project located within the vicinity of an airport or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people reside or working in the project area to excessive noise levels? ● No Impact.*

The project site is not located within two miles of a public airport. The closest airport to the project site is the Fullerton Muir Airport is approximately 7 miles at 4011 Commonwealth Ave, Fullerton CA 92833 [74] The proposed project is not located within the Runway Protection Zone (RPZ) for the San Gabriel Valley Airport and the proposed project will not penetrate the airport's 20:1 slope.[75] As a result, the project will not expose people working in the project area to excessive noise levels and no impacts will occur.

CUMULATIVE IMPACTS

According to the City, there are four cumulative projects located within one and one-half mile from the project site. These four cumulative projects are as follows: 128 units located at 13300 Lakeland Road; a 134,552 square-foot self-storage facility located at 11212 Norwalk Boulevard; a 22,994 square-foot warehouse located at 10370 Slusher Drive; The number of trips that will be added to the adjacent roadways by the proposed project as well as by the cumulative projects will not result in a doubling of traffic volumes. In addition, the unrelated projects are not located in the immediate vicinity of the proposed project. The separation of the projects will eliminate the concentration of noise generating activities that would result in an increase in cumulative noise levels.

[74] Google Earth. Website accessed February 17,2022.

[75] Ibid. June 22, 2022.

MITIGATION MEASURES

The following mitigation measures are required which will further reduce construction noise:

Mitigation Measure No. 3 (Noise). The contractors must ensure that the construction equipment includes working mufflers and other sound suppression equipment as a means to reduce machinery noise.

Mitigation Measure No. 4 (Noise). The Applicant shall notify the nearby residents within 1,200 feet of the site along Telegraph Road as to the times and duration of construction activities at least 10 days before the commencement of construction activities. In addition to the notification of the individual residences, signage must be placed on the construction security fences that would be located along the project site. The individual signs must clearly identify a contact person (and the phone number) that local residents may call to complain about noise related to construction.

3.14 POPULATION AND HOUSING

Environmental Issue Areas Examined	Potentially Significant Impact	Less Than Significant Impact With Mitigation	Less Than Significant Impact	No Impact
A. Would the project induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?			✖	
B. Would the project displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?				✖

ANALYSIS OF ENVIRONMENTAL IMPACTS

A. *Would the project induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)? ● Less Than Significant Impact.*

The proposed project involves the construction and operation of a new groundwater treatment facility within a 3.23-acre (140,791 square feet) project site that was previously part of a larger 27-acre property that was utilized as an oil extraction operation. The site's legal address is 10051 Santa Fe Springs Road within the City of Santa Fe Springs with a corresponding Assessor Parcel Number (APN) of 8005-015-050. The total building area for the proposed groundwater treatment plant would equal 48,649 square feet. The proposed project site has a land use and zoning designation for M-2 Heavy Manufacturing and will require a Conditional Use Permit (CUP) for Water Pumping and Treatment Plants. None of the nine remaining oil wells are located on Parcel 4 and none would affect the redevelopment of Parcel 4 for the use as a groundwater treatment facility. In other words, the development of the proposed groundwater treatment facility will not interfere with any ongoing oil extraction activities within the adjacent parcels.

The groundwater treatment project will consist of the construction of seven groundwater extraction wells, as well as a greensand filtration system, an AOP package system, LPGAC adsorption vessels, a reverse osmosis treatment system, and backwash and permeate storage tanks within a treatment system building. The treatment system will be fully enclosed within a new concrete tilt-up building that will be constructed within the project site. The project also includes the construction and operation of up to seven groundwater extraction wells at four well sites to pump groundwater to the treatment plant via below-grade conveyance pipelines. The groundwater pipelines (untreated) will be double contained constructed of HDPE. The treated water will be conveyed via below-grade pipelines from the treatment plant to unlined portions of the San Gabriel River for infiltration back into the aquifer. The treated water pipeline will also be constructed of HDPE.

Growth-inducing impacts are generally associated with the provision of urban services to an undeveloped or rural area. The variables that typically contribute to growth-inducing impacts identified in Table 3-8. As indicated in Table 3-8 the proposed development would not result in any direct growth-inducing impacts related to potential population growth. Any potential population growth will be indirect and will result from permanent employment growth. The employment projection is very minimal (up to three employees at the

site) and is well within SCAG's employment projections for the City of Santa Fe Springs (refer to Section 3.3.2.A). As a result, the impacts would be less than significant.

B. *Would the project displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere? ● No Impact.*

As previously indicated, the project site is vacant. Thus, no impacts related to housing or population displacement will result from the proposed project's implementation.

CUMULATIVE IMPACTS

The analysis of potential population and housing impacts indicated that no impacts would result from the proposed project's implementation. As a result, no cumulative impacts will occur.

MITIGATION MEASURES

The analysis of potential population and housing impacts indicated that no impacts would result from the proposed project's approval and subsequent implementation and no mitigation measures are required.

3.15 PUBLIC SERVICES

Environmental Issue Areas Examined	Potentially Significant Impact	Less Than Significant Impact With Mitigation	Less Than Significant Impact	No Impact
A. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services: fire protection, police protection, schools, parks or other public facilities?				✖

ANALYSIS OF ENVIRONMENTAL IMPACTS

A. *Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services: fire protection, police protection, schools, parks or other public facilities? ●No impact.*

The proposed project involves the construction and operation of a new groundwater treatment facility within a 3.23-acre (140,791 square feet) project site that was previously part of a larger 27-acre property that was utilized as an oil extraction operation. The site's legal address is 10051 Santa Fe Springs Road within the City of Santa Fe Springs with a corresponding Assessor Parcel Number (APN) of 8005-015-050. The total building area for the proposed groundwater treatment plant would equal 48,649 square feet. The proposed project site has a land use and zoning designation for M-2 Heavy Manufacturing and will require a Conditional Use Permit (CUP) for Water Pumping and Treatment Plants. None of the nine remaining oil wells located within the larger 27-acre property would affect the redevelopment of Parcel 4 for the use as a groundwater treatment facility. In other words, the development of the proposed groundwater treatment facility will not interfere with any ongoing oil extraction activities within the adjacent parcels.

The groundwater treatment project will consist of the construction of seven groundwater extraction wells, as well as a greensand filtration system, an AOP package system, LPGAC adsorption vessels, a reverse osmosis treatment system, and backwash and permeate storage tanks within a treatment system building. The treatment system will be fully enclosed within a new concrete tilt-up building that will be constructed within the project site. The project also includes the construction and operation of up to seven groundwater extraction wells at four well sites to pump groundwater to the treatment plant via below-grade conveyance pipelines. The groundwater pipelines (untreated) will be double contained constructed of HDPE. The treated water will be conveyed via below-grade pipelines from the treatment plant to unlined portions of the San Gabriel River for infiltration back into the aquifer. The treated water pipeline will also be constructed of HDPE.

Fire Department

The Santa Fe Springs Fire -Rescue Department provides fire prevention and emergency medical services within the City. The department consists of three separate divisions: Operations, Fire Prevention, and Environmental Protection. The Operations Division provides fire suppression, emergency medical services (EMS), hazardous materials response, and urban search and rescue. The Fire Prevention Division provides plan check, inspections, and public education. Finally, the Environmental Protection Division is responsible for responding to emergencies involving hazardous materials. The Fire Department operates from four stations: Station No. 1 (11300 Greenstone Avenue), Station No. 2 (8634 Dice Road), Station No. 3 (15517 Carmenita Road), and Station No. 4 (11736 Telegraph Road). The first response station to the site is station No. 4, located 1.06 miles to the west of the project site. The Fire Department currently reviews all new development plans, and future development will be required to conform to all fire protection and prevention requirements, including, but not limited to, building setbacks and emergency access and the project will adhere to all pertinent building are fire codes. As a result, the potential impacts are considered to be less than significant.

The proposed project will be subject to review and approval by the Santa Fe Springs Fire-Rescue Department to ensure that safety and fire prevention measures are incorporated into the project. As part of the project review process, the Santa Fe Springs Fire-Rescue Department will review the project and make recommendations for fire protection services and fire flow rates. The Applicant and/or contractors must adhere to all of the recommendations of the Santa Fe Springs Fire-Rescue Department and the Department's review of the proposed project's site and development plans. These review requirements may include, but not be limited to, any required improvements to the water system (e.g., additional hydrants), building design, equipment turn-around areas, emergency setbacks, etc. All required improvements would be provided at the expense of the Applicant. In addition, the proposed project must comply with all applicable State and local codes and ordinances related to fire protection. In addition to the aforementioned standard condition, the proposed project will not negatively impact fire protection services because the project will be constructed in accordance with the most recent fire and building codes. As a result, the potential impacts are considered to be less than significant.

Police Protection

Law enforcement services are provided by the Whittier Police Department who provide services to Santa Fe Springs under contract. The Police Services Station is located at 11576 Telegraph Road With the exception of jailing and dispatch, this Department is responsible for management of all law enforcement services within the City. The Department is staffed by both City personnel and officers of the Whittier Police Department, who provide services to Santa Fe Springs under contract. The City of Santa Fe Springs is divided into three law enforcement public service areas. Each area has a dedicated sergeant and a team of officers and public safety officers. The three area policing teams constantly monitor crime trends, problem locations and quality-of-life issues in their respective areas.[76]

The final site plan, elevations, building floor plans, and site circulation must be reviewed by the Whittier Police Department to ensure it conforms to their operational requirements. In addition. The primary potential security issues will be related to vandalism and potential burglaries during off-business hours. The project Applicant must install security cameras throughout the storage facility. Adherence to the aforementioned standard conditions and regulatory compliance measures will ensure that potential

[76] City of Santa Fe Springs. *Police Services*. https://www.santafesprings.org/cityhall/police_services/default.asp

impacts remain less than significant.

Schools

Due to the nature of the proposed project, no direct enrollment impacts regarding school services will occur. The proposed project will not directly increase demand for school services. In addition, the project developer will be required to pay all required school development fees at the time of Building Permit issuance. As a result, less than significant school-related impacts are anticipated to occur.

Parks

The proposed project does not involve recreational facilities or the construction or expansion of recreational facilities. In addition, the proposed project would not result in any residential development that would potentially significantly increase the demand for recreational facilities and services. There are no park facilities that would be physically impacted by the proposed self-storage project. No parks are located adjacent to the proposed project site with the closest park being Heritage Park located 0.51 miles to the southwest. As a result, no impacts on parks or recreational services are anticipated.

Other Governmental Services

No new governmental services will be needed, and the proposed project is not expected to have any impact on existing governmental services. The proposed project will not directly increase demand for governmental services. As a result, the impact would be less than significant impacts.

CUMULATIVE IMPACTS

The future development contemplated as part of the proposed project's implementation will not result in a significant incremental increase in the demand for public services. As a result, no cumulative impacts are anticipated.

MITIGATION MEASURES

The analysis of potential public service impacts indicated that no impacts would result from the proposed project's approval and subsequent implementation and no mitigation measures are required.

3.16 RECREATION

Environmental Issue Areas Examined	Potentially Significant Impact	Less Than Significant Impact With Mitigation	Less Than Significant Impact	No Impact
A. Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?				✖
B. Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?				✖

ANALYSIS OF ENVIRONMENTAL 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? ● No Impact.*

The proposed project involves the construction and operation of a new groundwater treatment facility within a 3.23-acre (140,791 square feet) project site that was previously part of a larger 27-acre property that was utilized as an oil extraction operation. The site's legal address is 10051 Santa Fe Springs Road within the City of Santa Fe Springs with a corresponding Assessor Parcel Number (APN) of 8005-015-050. The total building area for the proposed groundwater treatment plant would equal 48,649 square feet. The proposed project site has a land use and zoning designation for M-2 Heavy Manufacturing and will require a Conditional Use Permit (CUP) for Water Pumping and Treatment Plants. None of the nine remaining oil wells are located on Parcel 4 and would not affect the redevelopment of Parcel 4 for the use as a groundwater treatment facility. In other words, the development of the proposed groundwater treatment facility will not interfere with any ongoing oil extraction activities within the adjacent parcels.

No parks or recreational facilities are located near the project site (refer to Exhibit 3-11). Due to the nature of the proposed project, no significant increase in the usage of city parks and recreational facilities is anticipated to occur. The proposed development would not result in any direct recreational services impacts related to potential population growth since this new employment may be drawn from the local labor pool. In addition, the potential employment growth is very minimal and is well within SCAG's employment growth projections for the City of Santa Fe Springs up to 2045. As a result, there will be no impacts.

B. *Would the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment? ● No Impact.*

The proposed project does not involve recreational facilities or the construction or expansion of recreational facilities. In addition, the proposed project would not result in any development that would potentially significantly increase the demand for recreational facilities and services. As a result, there will be no impact.

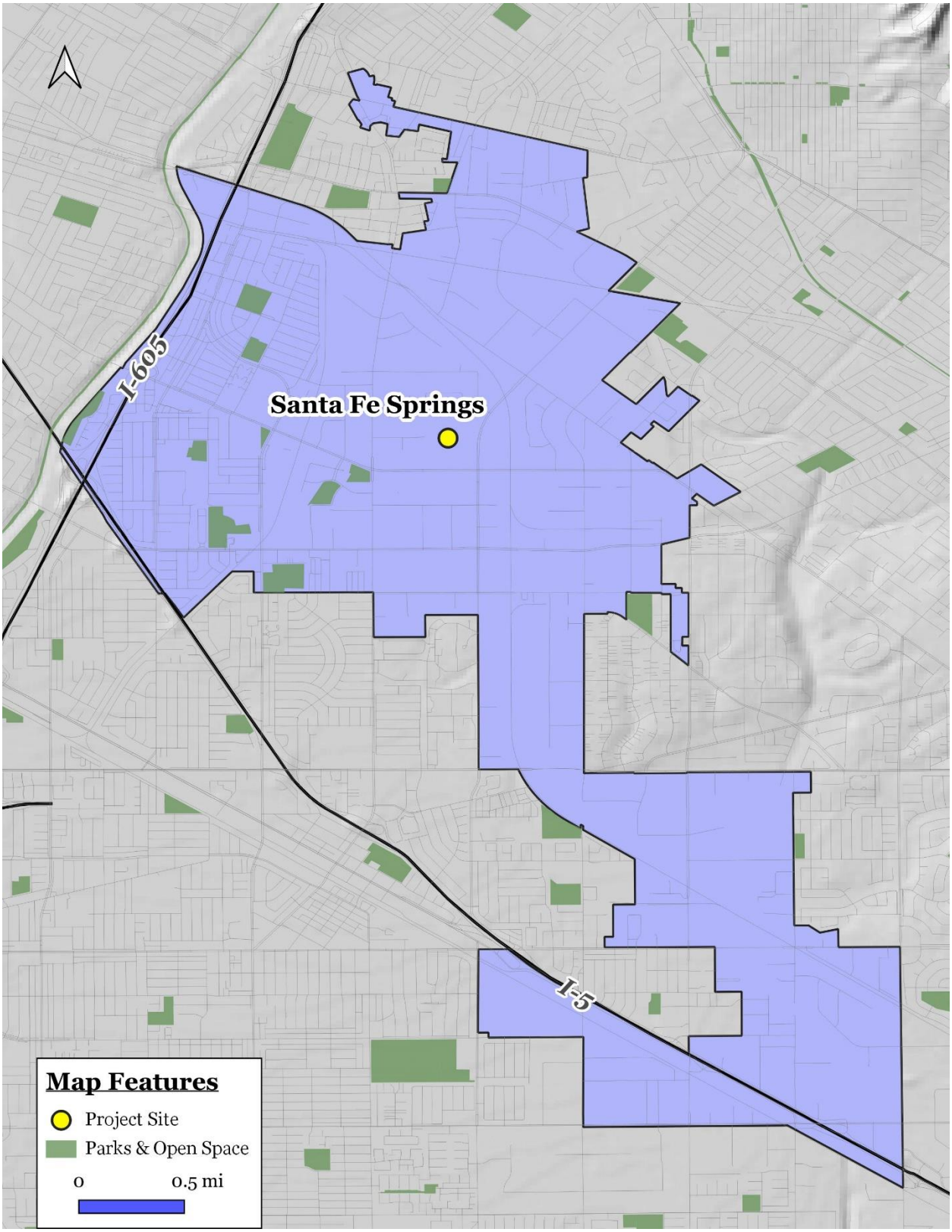

EXHIBIT 3-11
RECREATION MAP

Source: Parks and Recreation Department

CUMULATIVE IMPACTS

The analysis determined that the proposed project would not result in any significant impact on recreational facilities and services. As a result, no cumulative impacts on recreational facilities would result from the proposed project's implementation.

MITIGATION MEASURES

The analysis of potential impacts related to parks and recreation indicated that no adverse no impacts would result from the proposed project's approval and subsequent implementation. As a result, no mitigation measures are required.

3.17 TRANSPORTATION AND CIRCULATION

Environmental Issue Areas Examined	Potentially Significant Impact	Less Than Significant Impact With Mitigation	Less Than Significant Impact	No Impact
A. Would the project conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?			✖	
B. Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?			✖	
C. Would the project substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?			✖	
D. Would the project result in inadequate emergency access?				✖

ANALYSIS OF ENVIRONMENTAL IMPACTS

A. *Would the project conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities? ● Less Than Significant Impact.*

The proposed project involves the construction and operation of a new groundwater treatment facility within a 3.23-acre (140,791 square feet) project site that was previously part of a larger 27-acre property that was utilized as an oil extraction operation. The site's legal address is 10051 Santa Fe Springs Road within the City of Santa Fe Springs with a corresponding Assessor Parcel Number (APN) of 8005-015-050. The total building area for the proposed groundwater treatment plant would equal 48,649 square feet. The proposed project site has a land use and zoning designation for M-2 Heavy Manufacturing and will require a Conditional Use Permit (CUP) for Water Pumping and Treatment Plants. None of the nine remaining oil wells are located on Parcel 4 and would not affect the redevelopment of Parcel 4 for the use as a groundwater treatment facility. In other words, the development of the proposed groundwater treatment facility will not interfere with any ongoing oil extraction activities within the adjacent parcels.

The groundwater treatment project will consist of the construction of seven groundwater extraction wells, as well as a greensand filtration system, an AOP package system, LPGAC adsorption vessels, a reverse osmosis treatment system, and backwash and permeate storage tanks within a treatment system building The treatment system will be fully enclosed within a new concrete tilt-up building that will be constructed within the project site. The project also includes the construction and operation of up to seven groundwater extraction wells at four well sites to pump groundwater to the treatment plant via below-grade conveyance pipelines. The groundwater pipelines (untreated) will be double contained constructed of HDPE. The treated water will be conveyed via below-grade pipelines from the treatment plant to unlined portions of the San Gabriel River for infiltration back into the aquifer. The treated water pipeline will also be constructed of HDPE.

Traffic generation is expressed in vehicle trip ends, defined as one-way vehicular movements, either entering or exiting the generating land use. Traffic volumes expected to be generated by the proposed project were estimated for the weekday commuter AM and PM peak hours, as well as over a 24-hour daily

period, using trip generation rates provided in the Institute of Transportation Engineers' (ITE) Trip Generation Manual. The ITE document contains trip rates for a variety of land uses which have been derived based on traffic counts conducted at existing sites throughout California and the United States. The trip generation rates and forecast of the vehicular trips anticipated to be generated by the proposed project are presented in Table 3-9.

Table 3-9
Project Trip Generation

ITE Land Use/Project	ITE Code & Unit	Unit	Daily	AM Peak Hour Total	PM Peak Hour Total
Utilities (Trip Rates)	170	KSF	2.27	0.15	0.26
Proposed Generation (48,649 sq. ft.)	48 K	**KSF**	**109**	**17**	**29**

KSF = 1,000 sq. ft.
Source: Institute of Transportation Engineers (ITE) 10th Edition

Traffic volumes expected to be generated by the proposed project were based upon rates per thousand square feet of gross floor area. ITE Land Use Code 170 (Utilities) trip generation average rates were used to forecast the traffic volumes expected to be generated by the proposed project.

The proposed project will require two to three employees will be onsite during each shift. As summarized in Table 3-9, the proposed project is expected to generate17 vehicle trips during the weekday AM peak hour. During the weekday PM peak hour, the proposed project is expected to generate 29 vehicle trips. Over a 24-hour period, the proposed project is forecast to generate 109 daily trip ends during a typical weekday. These trips include both employees and truck drivers that will deliver chemical supplies on a once-a-month basis. The traffic volumes would be far less than the potential traffic volumes for other types of commercial and industrial land uses and development that would otherwise be permitted under the City's Zoning Ordinance for the property. As a result, the potential impacts are anticipated to be less than significant.

B. *Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?*
● *Less Than Significant Impact.*

It is important to note that the project is an "infill" development, which is seen as an important strategy in combating the release of GHG emissions. Infill development provides a regional benefit in terms of a reduction in Vehicle Miles Traveled (VMT) since the project is consistent with the regional and State sustainable growth objectives identified in the State's Strategic Growth Council (SGC).[77] Infill development reduces VMT by recycling existing undeveloped or underutilized properties located in established urban areas. When development is located in a more rural setting, such as further east in the desert areas, employees, patrons, visitors, and residents may have to travel farther since rural development is often located a significant distance from employment, entertainment, and population centers. Consequently, this distance is reduced when development is located in urban areas since employment, entertainment, and population centers tend to be set in more established communities.

The State of California Governor's Office of Planning and Research (OPR) issued proposed updates to the CEQA guidelines in November 2017 and an accompanying technical advisory guidance was finalized in December 2018 (OPR Technical Advisory) that amends the Appendix G question for transportation impacts

[77] California Strategic Growth Council. https://sgc.ca.gov/

to delete reference to vehicle delay and level of service and instead refer to Section 15064.3, subdivision (b)(1) of the CEQA Guidelines asking if the project will result in a substantial increase in Vehicles Miles Traveled (VMT). For the purpose of environmental review under CEQA, the City of Santa Fe Springs has established criteria for transportation impacts based on Vehicles Miles Traveled (VMT) for land use projects and plans which is generally consistent with the recommendations provided by OPR in the Technical Advisory. Public agencies traditionally have set certain thresholds to determine whether a project requires detailed transportation analysis or if it could be assumed to have less than significant environmental impacts without additional study. Consistent with the OPR's Technical Advisory, the City of Santa Fe Springs has determined the following screening criteria for certain land development projects that may be presumed to result in a less than significant VMT impact:

- Projects that result in a net increase of 110 or less daily vehicle trips;
- Projects located in a High-Quality Transit Area (i.e., within half-mile distance of an existing rail transit station or located within half-mile of existing bus service with a frequency of service interval of 15 minutes or less during morning and evening peak hours);
- Project is locally serving retail (less than 50,000 square feet), including gas stations, banks, restaurants, shopping center;
- Local-serving community colleges, K-12 schools, local parks, daycare centers, etc.;
- Residential projects with 100 percent affordable housing;
- Community institutions project (public library, fire station, local government);
- Local-serving hotels (e.g., non-destination hotels);
- Local-serving assembly uses (places of worship, community organizations);
- Public parking garages and parking lots;
- Assisted living or senior housing projects; and,
- Affordable, supportive, or transitional housing projects.

Proposed projects are not required to satisfy all of the screening criteria in order to screen out of further VMT analysis; satisfaction of at least one criterion is sufficient for screening purposes. Therefore, the proposed project satisfies the criteria to be considered a local serving use and is screened out from further VMT analysis as it is presumed to cause less than significant transportation impacts. No further VMT analysis is required for the proposed project. Therefore, the potential impacts are considered to be less than significant.

C. *Would the project substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)? ● Less than Significant Impact.*

The project site is currently unoccupied. The project will provide a restricted right-turn only driveway along the west side of Santa Fe Springs Road. Over a 24-hour period, the proposed project is forecast to generate 110 or less daily trip ends during a typical weekday. These trips include both employees and truck drivers that will deliver chemical supplies on a once-a-month basis. The traffic volumes would be far less than the potential traffic volumes for other types of commercial land uses and development that would otherwise be permitted under the City's Zoning Ordinance for the property. There is sufficient line-of-sight and curb-to-curb width at each driveway to accommodate project trips. As a result, the potential

impacts are considered to be less than significant.

D. *Would the project result in inadequate emergency access? ● No Impact.*

The proposed project will not affect emergency access to the project site or to any adjacent parcels since no vehicular access is currently provided. The adjacent properties currently maintain their own fire access. At no time during construction or operation will any local streets, including Telegraph Road and Santa Fe Springs Road, be closed to traffic. As a result, no impacts will result upon the proposed project's implementation.

CUMULATIVE IMPACTS

The future development contemplated as part of the proposed project's implementation will not result in a significant increase in traffic generation in the area given the geographic separation of the four cumulative projects from the proposed project. As a result, no cumulative impacts are anticipated.

MITIGATION MEASURES

The analysis of potential impacts related to traffic and circulation indicated that no significant impacts would result from the proposed project's approval and subsequent implementation. As a result, no mitigation measures are required.

3.18 TRIBAL CULTURAL RESOURCES

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

ANALYSIS OF ENVIRONMENTAL IMPACTS

A. *Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k)? ● Less Than Significant Impact with Mitigation.*

The proposed project involves the construction and operation of a new groundwater treatment facility within a 3.23-acre (140,791 square feet) project site that was previously part of a larger 27-acre property that was utilized as an oil extraction operation. The site's legal address is 10051 Santa Fe Springs Road within the City of Santa Fe Springs with a corresponding Assessor Parcel Number (APN) of 8005-015-050. The total building area for the proposed groundwater treatment plant would equal 48,649 square feet. project also includes the construction and operation of up to seven groundwater extraction wells at four well sites to pump groundwater to the treatment plant via below-grade conveyance pipelines. The groundwater pipelines (untreated) will be double contained constructed of HDPE. The treated water will be conveyed via below-grade pipelines from the treatment plant to unlined portions of the San Gabriel River for infiltration back into the aquifer.

A Tribal Resource is defined in the State of California Public Resources Code Section 21074 and includes the following:

- Sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are either of the following: included or determined to be eligible for inclusion in the California Register of Historical Resources or included in a local register of historical resources as defined in subdivision (k) of Section 5020.1.

- 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 Section 5024.1. In applying the criteria set forth in subdivision (c) of Section 5024.1 for the purposes of this paragraph, the lead agency shall consider the significance of the resource to a California Native American tribe.

- A cultural landscape that meets the criteria of subdivision (a) is a tribal cultural resource to the extent that the landscape is geographically defined in terms of the size and scope of the landscape.

- A historical resource described in Section 21084.1, a unique archaeological resource as defined in subdivision (g) of Section 21083.2, or a "non-unique archaeological resource" as defined in subdivision (h) of Section 21083.2 may also be a tribal cultural resource if it conforms with the criteria of subdivision (a).

The project site is located within the cultural area that was formerly occupied by the Gabrielino-Kizh. The project site is located within an urbanized area of the city that has been disturbed due to past development and there is a limited likelihood that artifacts will be encountered during the site's development. In addition, the project area is not located within an area that is typically associated with habitation sites, foraging areas, ceremonial sites, or burials. The following mitigation is required due to the potential for disturbance of tribal cultural resources:

- The project Applicant will be required to obtain the services of a qualified Native American Monitor(s) during construction-related ground disturbance activities. Ground disturbance is defined by the Tribal Representatives from the Gabrieleño Band of Mission Indians, Kizh Nation as activities that include, but are not limited to, pavement removal, pot- holing or auguring, boring, grading, excavation, and trenching, within the project area. The monitor(s) must be approved by the tribal representatives and will be present on-site during the construction phases that involve any ground-disturbing activities.

B. *Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is a resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1? In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe. ● Less Than Significant Impact.*

As previously mentioned, the project site is located within the cultural area that was formally occupied by the Gabrielino-Kizh and it was determined that the site may be situated in an area of high archaeological

significance. However, the project site is located within an urbanized area of the city that has been disturbed due to past development and there is a limited likelihood that artifacts will be encountered. The grading and excavation will involve the installation of the new building footings and utility connections. In addition, the project area is not located within an area that is typically associated with habitation sites, foraging areas, ceremonial sites, or burials. Nevertheless, the previous mitigation provided in Section 3.18.2.A above, the tribal cultural impacts will be reduced to levels that are considered to be less than significant.

CUMULATIVE IMPACTS

The analysis determined that the potential impacts related to tribal cultural resources are considered to be less than significant with mitigation. However, the potential impacts are considered to be site specific. As a result, no significant cumulative impacts will occur as part of the implementation of the proposed project.

MITIGATION MEASURES

The analysis of tribal cultural resources indicated that no significant impacts would result with the implementation of the following mitigation measure

Mitigation Measure No. 5 (Tribal/Cultural Resources). The project Applicant will be required to obtain the services of a qualified Native American Monitor(s) during construction-related ground disturbance activities. Ground disturbance is defined by the Tribal Representatives from the Gabrieleño Band of Mission Indians, Kizh Nation as activities that include, but are not limited to, pavement removal, pot- holing or auguring, boring, grading, excavation, and trenching, within the project area. The monitor(s) must be approved by the tribal representatives and will be present on-site during the construction phases that involve any ground-disturbing activities.

3.19 UTILITIES AND SERVICE SYSTEMS

Environmental Issue Areas Examined	Potentially Significant Impact	Less Than Significant Impact With Mitigation	Less Than Significant Impact	No Impact
A. Would the project require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?			✖	
B. Would the project have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?			✖	
C. Would the project result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?			✖	
D. Would the project generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?				✖
E. Would the project comply with federal, state, and local management and reduction statutes and regulations related to solid waste?			✖	

ANALYSIS OF ENVIRONMENTAL IMPACTS

A. *Would the project require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects? ● Less than Significant Impact.*

The proposed project involves the construction and operation of a new groundwater treatment facility within a 3.23-acre (140,791 square feet) project site that was previously part of a larger 27-acre property that portions were utilized as an oil extraction operation. The site's legal address is 10051 Santa Fe Springs Road within the City of Santa Fe Springs with a corresponding Assessor Parcel Number (APN) of 8005-015-050. The total building area for the proposed groundwater treatment plant would equal 48,649 square feet. The groundwater treatment project will consist of the construction of seven groundwater extraction wells, as well as a greensand filtration system, an AOP package system, LPGAC adsorption vessels, a reverse osmosis treatment system, and backwash and permeate storage tanks within a treatment system building. The treatment system will be fully enclosed within a new concrete tilt-up building that will be constructed within the project site. The project also includes the construction and operation of up to seven groundwater extraction wells at four well sites to pump groundwater to the treatment plant via below-grade conveyance pipelines. The groundwater pipelines (untreated) will be double contained constructed of HDPE.

The treated water will be conveyed via below-grade pipelines from the treatment plant to unlined portions of the San Gabriel River for infiltration back into the aquifer. The treated water pipeline will also be constructed of HDPE. There are two discharge locations at the river: a new to-be constructed outfall

approximately located at river station 866+00 (primary discharge) and an existing storm drain located near the intersection of Whiteland Street and Pioneer Boulevard in Santa Fe Springs (referred to as the secondary discharge location). The primary discharge location will be the main location for discharge, however during San Gabriel River operations and maintenance there will be times when the primary location cannot be used. When the primary discharge location is unavailable the secondary discharge location will be used. [78] In order to implement the construction, the project applicant must receive approval of a Conditional Use Permit for water-pumping and treatment plants as a conditional use in the Heavy Manufacturing zone (M-2). With approval of the Conditional Use Permit application and subsequent monitoring through the Central Basin Water Quality Protection Program, impacts will remain less than significant.

B. *Would the project have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years? ● Less Than Significant Impact.*

As previously mentioned, water in the local area is supplied by the Santa Fe Springs Water Utility Authority (SFSWUA). Water is derived from two sources: groundwater and surface water. The proposed project use intends to extract contaminated groundwater through seven groundwater extraction wells at four wells sites to pump groundwater to the treatment plant via below-grade conveyance pipelines which will then be conveyed to unlined portions of the San Gabriel River for infiltration back into the aquifer. SFSWUA also obtains treated and disinfected groundwater through the City of Whittier from eight active deep wells located in the Whittier Narrows area. SFSWUA currently receives treated groundwater from the Central Basin Water Quality Protection Program facility located in the Central Basin, through the City of Whittier. Lastly, the SFSWUA also receives Metropolitan Water District of Southern California's (MWD) filtered and disinfected surface water, which is a blend of water from both the Colorado River and the State Water Project in Northern California.

According to the City's 2020 Urban Water Management Plan, the City of Santa Fe Springs Water System has approximately 14,830 service connections servicing an area of approximately 8.9 square miles. Over the past five years, the city has not produced groundwater from the central basin, during a five consecutive year drought (2011 to 2016) the city met between 0 and 20 percent of its total demands with supplies from the central basin. However, the City purchased treated central basin water, meeting between 31 and 44 percent of its total demands with purchased groundwater supplies from the central basin. In addition to the proposed project, the city has a diverse water supply portfolio where water supplies may be re-apportioned during a five consecutive year drought to meet the city's water demands.[79] As indicated in Table 3-10, the proposed project is projected to consume approximately 14,595 gallons of wastewater on a daily basis. The project will connect to an existing 15 inch-water line located along Santa Fe Springs Road. The existing water supply facilities and infrastructure will be able accommodate this additional demand. In addition, the tilt-up concrete building will be equipped with water efficient fixtures and drought tolerant plants will be planted throughout the property. As a result, the impacts are considered to be less than significant.

[78] DRA Architects. DRA Architects. Groundwater Containment Project. *Proposed Site Plan. Sheet A-1.1. June 30,2021.*

[79] City of Santa Fe Springs, 2020 Urban Water Management Plan. Department of Public Works, Utilities Services Division. July 2021.

Table 3-10
Water Consumption (gals/day)

Use	Unit	Factor	Consumption
Manufacturing	48,649 sq. ft.	0.30 gals/day/sq. ft	14,595 gals/day
Total Consumption			14,595 gals/day

Source: Blodgett Baylosis Environmental Planning.

C. *Would the project result in a determination by the wastewater treatment provider that serves or may serve the project that it has inadequate capacity to serve the project's projected demand in addition to the provider's existing commitments? ● Less Than Significant Impact.*

As previously mentioned, the project site's intended use involves construction of seven groundwater extraction wells, as well as a package system, adsorption vessels, a reverse osmosis treatment system, and a backwash and permeate storage tanks within a treatment system building. The project also includes the construction and operation of up to seven groundwater extraction wells at four well sites to pump groundwater to the treatment plant via below-grade conveyance pipelines. The treated water will then be conveyed via below-grade pipelines from the treatment plant to unlined portions of the San Gabriel River for infiltration back into the aquifer.

The City of Santa Fe Springs is located within District 18 in the Los Angeles County Sanitation District (LACSD). The LACSD enacted the Los Angeles County Wastewater Ordinance was enacted pursuant to authority contained in the County Sanitation District Act, California Health and Safety Code Sections 4700 through 4859, and exercises authority conferred by law including but not limited to Health and Safety Code Sections 5400 through 5474, and California Government Code Sections 54725 through 54740. The provisions of the Ordinance apply to all direct or indirect discharges, including the discharge of all wastewaters, to any part of the sewerage systems of the LACSDs, or to other sewerage systems tributary to the LACSDs' sewerage system. The provisions of the Ordinance also apply to wastewater originating outside the territorial boundaries of the LACSDs or outside the boundaries of Los Angeles County if such wastewater eventually enters the LACSDs' sewerage system. The Ordinance, among other things, regulates sewer construction and provides for the approval of plans for sewer construction and implements federal and state pollution control regulations. The Ordinance provides for the issuance of permits, including Permits for Industrial Wastewater Discharge, prohibits the discharge of certain wastes, and regulates the quantity and quality of other waste discharges while also imposing wastewater pretreatment requirements upon waste dischargers and provides for the regulation of the degree of such pretreatment. Lastly, the Ordinance provides for the filing of Wastewater Treatment Surcharge Statements, imposes fees and charges, and provides for the distribution of revenue. Violations of this Ordinance are subject to criminal fines and penalties, civil liabilities and other penalties in accordance with law. [80]

Table 3-11 indicates the future wastewater generation in gallons per day. The wastewater generation will be limited. The system is anticipated to be operational 24-hours per day, between 328 and 365 days per year (i.e., assuming a 90% run-time goal allowing for process interruptions, repairs, or routine maintenance that requires a shut-down). The system is expected to operate for at least 30 years. It is anticipated that two full-time trained O&M personnel will be on site 40 hours per week, throughout the year. Quarterly maintenance

[80] California Health and Safety Code. Division 5. Sanitation. Part 3. Chapter 3. County Sanitation Districts Article 1 https://leginfo.legislature.ca.gov/faces/codes_displayText.xhtml?lawCode=HSC&division=5.&title=&part=3.&chapter=3.&article=1

and monitoring events are expected to increase the onsite personnel from two to 10 trained O&M personnel, 40 hours per week for two weeks. Annual maintenance and monitoring events are expected to increase the onsite personnel from two to six trained O&M personnel, 40 hours per week for one week.[81] According to Table 3-11, the proposed project is expected to generate approximately 9,730 gallons of sewage per day, well within the daily average totals for the Los Coyotes WRP.

Table 3-11
Wastewater (Effluent) Generation (gals/day)

Use	Unit	Factor	Generation
Manufacturing	48,649 sq. ft.	0.20 gals/day/sq. ft	9,730 gals/day
Total Consumption			9,730 gals/day

Source: Blodgett Baylosis Environmental Planning.

The project will connect to an existing 15-inch sewer line located along in Santa Fe Springs Road. The existing sewer lines have sufficient capacity to accommodate the projected flows and adequate sewage collection and treatment are currently available. As a result, the impacts are expected to be less than significant.

D. *Would the project generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals? ● No Impact.*

The Sanitation Districts operate a comprehensive solid waste management system serving the needs of a large portion of Los Angeles County. Trash collection is provided by CR&R Inc. for disposal into area landfills. Waste is then transferred to either the Mesquite Regional Landfill in Imperial County or to the nearby Puente Hills Transfer Station/Materials Recovery Facility (MRF). The Los Angeles County Sanitation District selected the Mesquite Regional Landfill in Imperial County as the new target destination for the County's waste (as an alternative to the closed Puente Hills landfill). The Mesquite Regional Landfill in Imperial County has a 100-year capacity at 8,000 tons per day. The Puente Hills Transfer Station and MRF is able to accept 4,440 tons per day of solid waste. Due to the nature of the proposed project, the only generated solid waste produced on the site will be limited to the effluent related to the use of the restroom facilities by the employees of the treatment facility as the proposed purpose of the site includes the treatment of contaminated groundwater. The system is expected to operate for at least 30 years. It is anticipated that two full-time trained O&M personnel will be on site 40 hours per week, throughout the year. Quarterly maintenance and monitoring events are expected to increase the onsite personnel from two to 10 trained O&M personnel, 40 hours per week for two weeks. Annual maintenance and monitoring events are expected to increase the onsite personnel from two to six trained O&M personnel, 40 hours per week for one week. As indicated in Table 3-12, the proposed project is estimated to generate 435.9 pounds of solid waste per day. This amount is not significant and will be accommodated by the aforementioned landfill. As a result, no potential impacts expected.

[81] OU2 Groundwater Containment Project Description Draft.

Table 3-12
Solid Waste Generation (pounds/day)

Use	Unit	Factor	Generation
Manufacturing	48,649 sq. ft.	8.93 lbs./day/1,000 sq. ft.	435.9 lbs./day
Total Generation			435.9 lbs./day

Source: Blodgett Baylosis Environmental Planning.

E. *Would the project comply with federal, state, and local statutes and regulations related to solid waste?*
● *Less than Significant Impact.*

The proposed use of the project site is intended to remove solid waste from untreated groundwater which will then be discharged into via below-grade pipelines from the treatment plant to unlined portions of the San Gabriel River for infiltration back into the aquifer through two discharge locations. Two full-time trained O&M personnel will be on site, 40 hours per week, throughout the year. Quarterly maintenance and monitoring events are expected to increase the number of onsite personnel periodically. In addition, the proposed use, like all other developments in the city, will be required to adhere to all pertinent ordinances and State and federal statues related to waste reduction and recycling. As a result, due to low number of personnel on the site and the site's intended use will result in less than significant impact.

CUMULATIVE IMPACTS

The analysis herein determined that the proposed project would not result in any significant adverse impacts on local utilities. The ability of the existing sewer lines, water lines, and other utilities to accommodate the projected demand from future related projects will require evaluation on a case-by-case basis. As a result, no cumulative impacts on utilities will occur.

MITIGATION MEASURES

The analysis of utilities impacts indicated that no significant adverse impacts would result from the proposed project's approval and subsequent implementation. As a result, no mitigation is required.

3.20 WILDFIRE

Environmental Issue Areas Examined	Potentially Significant Impact	Less Than Significant Impact With Mitigation	Less Than Significant Impact	No Impact
A. If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project substantially impair an adopted emergency response plan or emergency evacuation plan?				✖
B. If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?				✖
C. If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?				✖
D. If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?				✖

ANALYSIS OF ENVIRONMENTAL IMPACTS

A. *If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project substantially impair an adopted emergency response plan or emergency evacuation plan? ● No Impact.*

The proposed project involves the construction and operation of a new groundwater treatment facility within a 3.23-acre (140,791 square feet) project site that was previously part of a larger 27-acre property that was utilized as an oil extraction operation. The site's legal address is 10051 Santa Fe Springs Road within the City of Santa Fe Springs with a corresponding Assessor Parcel Number (APN) of 8005-015-050. The total building area for the proposed groundwater treatment plant would equal 48,649 square feet. The proposed project site has a land use and zoning designation for M-2 Heavy Manufacturing and will require a Conditional Use Permit (CUP) for Water Pumping and Treatment Plants. None of the nine remaining oil wells are located on Parcel 4 and would not affect the redevelopment of Parcel 4 for the use as a groundwater treatment facility. In other words, the development of the proposed groundwater treatment facility will not interfere with any ongoing oil extraction activities within the adjacent parcels.

The groundwater treatment project will consist of the construction of seven groundwater extraction wells, as well as a greensand filtration system, an AOP package system, LPGAC adsorption vessels, a reverse osmosis treatment system, and backwash and permeate storage tanks within a treatment system building. The treatment system will be fully enclosed within a new concrete tilt-up building that will be constructed

within the project site. The project also includes the construction and operation of up to seven groundwater extraction wells at four well sites to pump groundwater to the treatment plant via below-grade conveyance pipelines. The groundwater pipelines (untreated) will be double contained constructed of HDPE. The treated water will be conveyed via below-grade pipelines from the treatment plant to unlined portions of the San Gabriel River for infiltration back into the aquifer. The treated water pipeline will also be constructed of HDPE.

The project site and surrounding areas is located in an urbanized area. The proposed project would not result in a closure or alteration of any existing emergency response and evacuation routes that would be important in the event of a wildfire. As a result, no impacts will occur.

B. *If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire? ● No Impact.*

The project site and surrounding areas are relatively flat land. Furthermore, the project site and the adjacent properties are urbanized and there are no native or natural vegetation found within the project area. The project site is not located in any fire hazard severity zone (refer to Exhibit 3-12). The proposed project will not be exposed to certain criteria pollutant emissions generated by wildland fires given the project site's distance, more than 3 miles, to the nearest fire hazard severity zones. The potential impacts would not be exclusive to the project site since criteria pollutant emissions from wildland fires may affect the entire city as well as the surrounding cities and unincorporated county areas. As a result, no impacts will occur.

C. *If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment? ● No Impact.*

The project site is not located in any fire hazard severity zone. There is no risk of wildlife within the project site or surrounding area given the project site's distance from any area that may be subject to a wildfire event. The project will be constructed in compliance with the current Building Code and the Fire Department's recommendations and will not exacerbate wildfire risks. As a result, no impacts will occur.

D. *If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes? ● No Impact.*

The project site is not located in any fire hazard severity zone. Therefore, the project will not expose future employees to flooding or landslides facilitated by runoff flowing down barren and charred slopes. As a result, no impacts will occur.

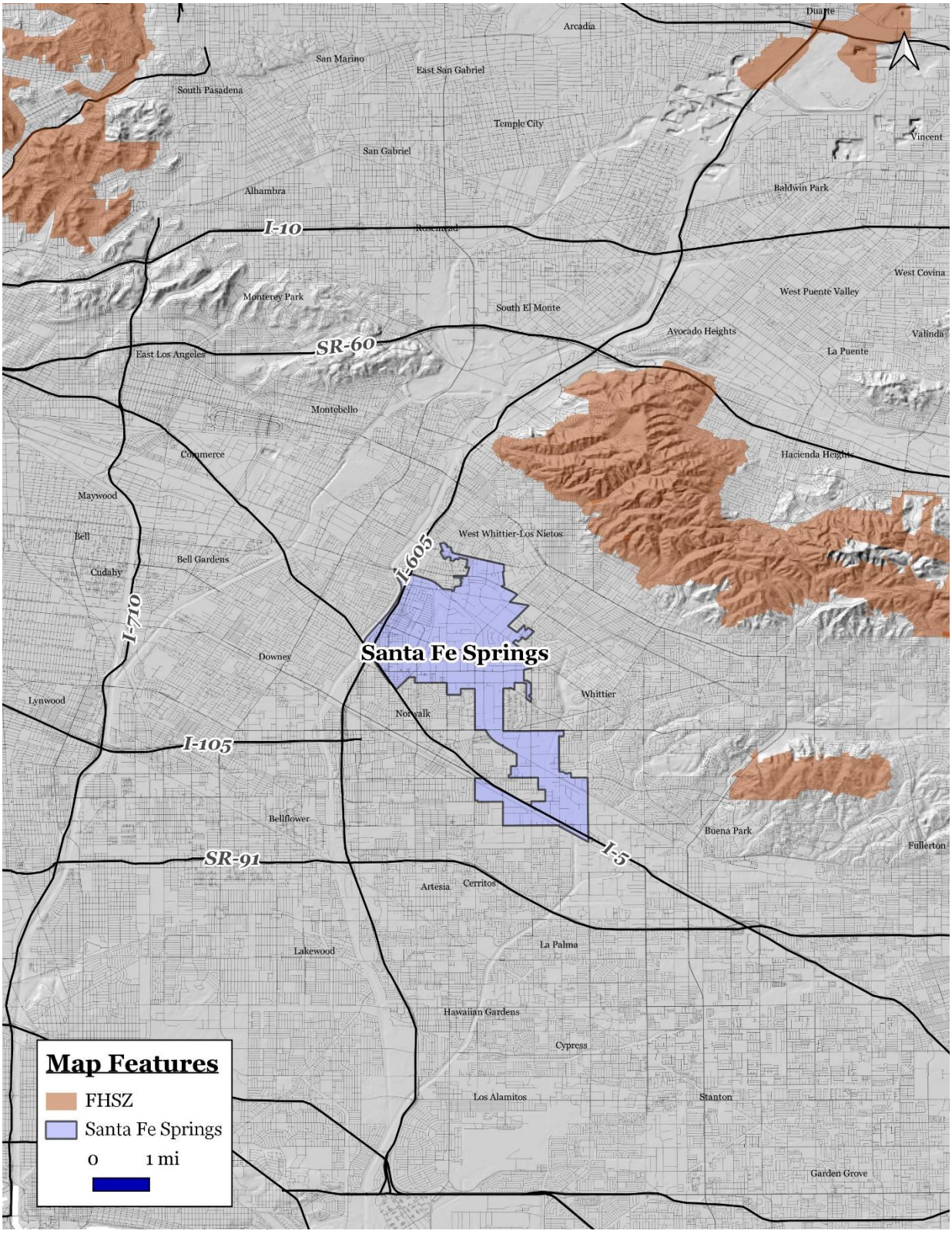

EXHIBIT 3-12
FIRE HAZARD SAFETY ZONE

Source: CALFire

CUMULATIVE IMPACTS

The analysis herein determined that the proposed project would not result in any significant adverse impacts with respect to potential wildfire. As a result, no cumulative impacts related to wildfire will occur.

MITIGATION MEASURES

The analysis of utilities impacts indicated that no significant adverse impacts with respect to wildfire risk would result from the proposed project's approval and subsequent implementation. As a result, no mitigation is required.

3.21 MANDATORY FINDINGS OF SIGNIFICANCE

The following findings can be made regarding the Mandatory Findings of Significance set forth in Section 15065 of the CEQA Guidelines based on the results of this environmental assessment:

- The proposed project *will not* have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of an endangered, rare or threatened species or eliminate important examples of the major periods of California history or prehistory.
- The proposed project *will not* have impacts that are individually limited, but cumulatively considerable.
- The proposed project *will not* have environmental effects which will cause substantially adverse effects on human beings, either directly or indirectly.

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SECTION 4 - CONCLUSIONS

4.1 FINDINGS

The Initial Study determined that the proposed project is not expected to have any significant adverse environmental impacts. Pursuant to Section 21081(a) of the Public Resources Code, findings must be adopted by the decision-maker coincidental to the approval of a Mitigated Negative Declaration, which relates to the Mitigation Monitoring Program. These findings shall be incorporated as part of the decision-maker's findings of fact, in response to AB-3180 and in compliance with the requirements of the Public Resources Code. In accordance with the requirements of Section 21081(a) and 21081.6 of the Public Resources Code, the City of Santa Fe Springs can make the following findings:

- A mitigation reporting or monitoring program will be required; and,
- An accountable enforcement agency or monitoring agency shall be identified for the mitigation measures adopted as part of the decision-maker's final determination.

A number of mitigation measures have been recommended as a means to reduce or eliminate potential adverse environmental impacts to insignificant levels. AB-3180 requires that a monitoring and reporting program be adopted for the recommended mitigation measures.

4.2 MITIGATION MEASURES

The following mitigation is required due to the potential for disturbance of aesthetic resources:

Mitigation Measure No. 1 (Aesthetic Impacts). The contractors must ensure that appropriate light shielding is provided for the lighting equipment in the parking area, buildings, and security as a means to limit glare and light trespass. An interior parking and street lighting plan and an exterior photometric plan indicating the location, size, and type of existing and proposed lighting shall also be prepared by the Applicant. The plan for the lighting must be submitted to the Planning Department, Police Services Department, and the Chief Building Official for review and approval prior to the issuance of any building permits.

The following mitigation is required due to the potential for disturbance of archaeological resources:

Mitigation Measure No. 2 (Cultural Resources). The project Applicant will be required to obtain the services of a qualified Native American Monitor(s) during construction-related ground disturbance activities. Ground disturbance is defined by the Tribal Representatives from the Gabrieleño Band of Mission Indians, Kizh Nation as activities that include, but are not limited to, pavement removal, pot- holing or auguring, boring, grading, excavation, and trenching, within the project area. The monitor(s) must be approved by the tribal representatives and will be present on-site during the construction phases that involve any ground-disturbing activities.

The following mitigation measures are required which will further reduce construction noise:

Mitigation Measure No. 3 (Noise). The Applicant must ensure that the contractors use construction equipment that includes working mufflers and other sound suppression equipment as a means to reduce machinery noise.

Mitigation Measure No. 4 (Noise). The Applicant shall notify the nearby residents within 1,200 feet of the project site along Telegraph Road as to the times and duration of construction activities at least 10 days before the commencement of construction activities. In addition to the notification of the individual residences, signage must be placed on the construction security fences that would be located along the project site. The individual signs must clearly identify a contact person (and the phone number) that local residents may call to complain about noise related to construction.

The following mitigation measures are required due to the potential for disturbance of tribal cultural resources:

Mitigation Measure No. 5 (Tribal Cultural Resources). The project Applicant will be required to obtain the services of a qualified Native American Monitor(s) during construction-related ground disturbance activities. Ground disturbance is defined by the Tribal Representatives from the Gabrieleño Band of Mission Indians, Kizh Nation as activities that include, but are not limited to, pavement removal, pot- holing or auguring, boring, grading, excavation, and trenching, within the project area. The monitor(s) must be approved by the tribal representatives and will be present on-site during the construction phases that involve any ground-disturbing activities.

SECTION 5 - REFERENCES

5.1 PREPARERS

Blodgett Baylosis Environmental Planning
2211 S. Hacienda Boulevard, Suite 107
Hacienda Heights, California A 91745

Karla Nayakarathne, Project Manager
Marc Blodgett, Project Principal
Echanna Porter, Administrator

5.2 REFERENCES

References are noted using footnotes.

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APPENDICES

APPENDIX A – AIR QUALITY WORKSHEETS
APPENDIX B – UTILITIES WORKSHEETS

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APPENDIX A - AIR QUALITY WORKSHEETS

OU2 Groundwater Containment - South Coast Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

OU2 Groundwater Containment

South Coast Air Basin, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Manufacturing	140.79	1000sqft	3.23	140,791.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	9			**Operational Year**	2024
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	390.98	**CH4 Intensity (lb/MWhr)**	0.033	**N2O Intensity (lb/MWhr)**	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - construction characteristics

Off-road Equipment - no demolition

Grading - 3.23 acre site

Trips and VMT - no demolition

On-road Fugitive Dust - no demolition

Area Mitigation -

Table Name	Column Name	Default Value	New Value
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblConstructionPhase	NumDays	18.00	30.00

OU2 Groundwater Containment - South Coast Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblConstructionPhase	NumDays	230.00	150.00
tblConstructionPhase	NumDays	20.00	0.00
tblConstructionPhase	NumDays	8.00	60.00
tblConstructionPhase	NumDays	18.00	30.00
tblConstructionPhase	NumDays	5.00	30.00
tblConstructionPhase	PhaseEndDate	2/22/2024	3/11/2024
tblConstructionPhase	PhaseEndDate	1/3/2024	9/13/2023
tblConstructionPhase	PhaseEndDate	1/27/2023	12/30/2022
tblConstructionPhase	PhaseEndDate	2/15/2023	4/28/2023
tblConstructionPhase	PhaseEndDate	1/29/2024	2/14/2024
tblConstructionPhase	PhaseEndDate	2/3/2023	3/10/2023
tblGrading	AcresOfGrading	60.00	3.23
tblGrading	AcresOfGrading	45.00	3.23
tblOffRoadEquipment	HorsePower	81.00	0.00
tblOffRoadEquipment	HorsePower	158.00	0.00
tblOffRoadEquipment	HorsePower	247.00	0.00
tblOffRoadEquipment	LoadFactor	0.73	0.00
tblOffRoadEquipment	LoadFactor	0.38	0.00
tblOffRoadEquipment	LoadFactor	0.40	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOnRoadDust	AverageVehicleWeight	2.40	0.00
tblOnRoadDust	HaulingPercentPave	100.00	0.00
tblOnRoadDust	MaterialMoistureContent	0.50	0.00
tblOnRoadDust	MaterialSiltContent	8.50	0.00

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblOnRoadDust	MeanVehicleSpeed	40.00	0.00
tblOnRoadDust	RoadSiltLoading	0.10	0.00
tblOnRoadDust	VendorPercentPave	100.00	0.00
tblOnRoadDust	WorkerPercentPave	100.00	0.00
tblTripsAndVMT	HaulingTripLength	20.00	0.00
tblTripsAndVMT	VendorTripLength	6.90	0.00
tblTripsAndVMT	WorkerTripLength	14.70	0.00

2.0 Emissions Summary

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

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					
2023	6.2587	60.8826	52.7699	0.1079	25.4352	2.7511	28.1863	13.5745	2.5459	16.1204	0.0000	10,476.5348	10,476.5348	2.7683	0.0863	10,571.4587
2024	44.6612	9.5527	15.0698	0.0250	0.3577	0.4615	0.8192	0.0949	0.4312	0.5260	0.0000	2,394.0550	2,394.0550	0.5901	6.7100e-003	2,410.8080
Maximum	**44.6612**	**60.8826**	**52.7699**	**0.1079**	**25.4352**	**2.7511**	**28.1863**	**13.5745**	**2.5459**	**16.1204**	**0.0000**	**10,476.5348**	**10,476.5348**	**2.7683**	**0.0863**	**10,571.4587**

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					
2023	6.2587	60.8826	52.7699	0.1079	25.4352	2.7511	28.1863	13.5745	2.5459	16.1204	0.0000	10,476.5348	10,476.5348	2.7683	0.0863	10,571.4587
2024	44.6612	9.5527	15.0698	0.0250	0.3577	0.4615	0.8192	0.0949	0.4312	0.5260	0.0000	2,394.0550	2,394.0550	0.5901	6.7100e-003	2,410.8080
Maximum	**44.6612**	**60.8826**	**52.7699**	**0.1079**	**25.4352**	**2.7511**	**28.1863**	**13.5745**	**2.5459**	**16.1204**	**0.0000**	**10,476.5348**	**10,476.5348**	**2.7683**	**0.0863**	**10,571.4587**

OU2 Groundwater Containment - South Coast Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

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

OU2 Groundwater Containment - South Coast Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

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	3.1466	1.3000e-004	0.0144	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005		0.0308	0.0308	8.0000e-005		0.0328
Energy	0.0747	0.6792	0.5705	4.0800e-003		0.0516	0.0516		0.0516	0.0516		815.0222	815.0222	0.0156	0.0149	819.8655
Mobile	3.0670	3.4967	33.8265	0.0798	8.4328	0.0551	8.4879	2.2471	0.0513	2.2983		8,130.9583	8,130.9583	0.4706	0.3165	8,237.0354
Total	**6.2882**	**4.1761**	**34.4114**	**0.0839**	**8.4328**	**0.1068**	**8.5395**	**2.2471**	**0.1029**	**2.3500**		**8,946.0113**	**8,946.0113**	**0.4863**	**0.3314**	**9,056.9337**

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	3.1466	1.3000e-004	0.0144	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005		0.0308	0.0308	8.0000e-005		0.0328
Energy	0.0747	0.6792	0.5705	4.0800e-003		0.0516	0.0516		0.0516	0.0516		815.0222	815.0222	0.0156	0.0149	819.8655
Mobile	3.0670	3.4967	33.8265	0.0798	8.4328	0.0551	8.4879	2.2471	0.0513	2.2983		8,130.9583	8,130.9583	0.4706	0.3165	8,237.0354
Total	**6.2882**	**4.1761**	**34.4114**	**0.0839**	**8.4328**	**0.1068**	**8.5395**	**2.2471**	**0.1029**	**2.3500**		**8,946.0113**	**8,946.0113**	**0.4863**	**0.3314**	**9,056.9337**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

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

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2023	12/30/2022	5	0	
2	Site Preparation	Site Preparation	1/28/2023	3/10/2023	5	30	
3	Grading	Grading	2/4/2023	4/28/2023	5	60	
4	Building Construction	Building Construction	2/16/2023	9/13/2023	5	150	
5	Paving	Paving	1/4/2024	2/14/2024	5	30	
6	Architectural Coating	Architectural Coating	1/30/2024	3/11/2024	5	30	

Acres of Grading (Site Preparation Phase): 3.23

Acres of Grading (Grading Phase): 3.23

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 211,187; Non-Residential Outdoor: 70,396; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	2	6.00	9	0.56
Demolition	Concrete/Industrial Saws	0	0.00	0	0.00
Building Construction	Cranes	1	7.00	231	0.29
Demolition	Excavators	0	0.00	0	0.00

OU2 Groundwater Containment - South Coast Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Grading	Excavators	1	8.00	158	0.38
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Grading	Graders	1	8.00	187	0.41
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	2	6.00	132	0.36
Paving	Rollers	2	6.00	80	0.38
Demolition	Rubber Tired Dozers	0	0.00	0	0.00
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45

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	0	0.00	0.00	0.00	0.00	0.00	0.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	59.00	23.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	8	20.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	12.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

OU2 Groundwater Containment - South Coast Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.3 Site Preparation - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.1804	0.0000	18.1804	9.9430	0.0000	9.9430			0.0000			0.0000
Off-Road	2.6595	27.5242	18.2443	0.0381		1.2660	1.2660		1.1647	1.1647		3,687.3081	3,687.3081	1.1926		3,717.1219
Total	**2.6595**	**27.5242**	**18.2443**	**0.0381**	**18.1804**	**1.2660**	**19.4465**	**9.9430**	**1.1647**	**11.1078**		**3,687.3081**	**3,687.3081**	**1.1926**		**3,717.1219**

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	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
Worker	0.0569	0.0384	0.6276	1.7600e-003	0.2012	1.1300e-003	0.2023	0.0534	1.0400e-003	0.0544		177.8853	177.8853	4.3200e-003	4.0500e-003	179.2014
Total	**0.0569**	**0.0384**	**0.6276**	**1.7600e-003**	**0.2012**	**1.1300e-003**	**0.2023**	**0.0534**	**1.0400e-003**	**0.0544**		**177.8853**	**177.8853**	**4.3200e-003**	**4.0500e-003**	**179.2014**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.3 Site Preparation - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.1804	0.0000	18.1804	9.9430	0.0000	9.9430			0.0000			0.0000
Off-Road	2.6595	27.5242	18.2443	0.0381		1.2660	1.2660		1.1647	1.1647	0.0000	3,687.3081	3,687.3081	1.1926		3,717.1219
Total	**2.6595**	**27.5242**	**18.2443**	**0.0381**	**18.1804**	**1.2660**	**19.4465**	**9.9430**	**1.1647**	**11.1078**	**0.0000**	**3,687.3081**	**3,687.3081**	**1.1926**		**3,717.1219**

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	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
Worker	0.0569	0.0384	0.6276	1.7600e-003	0.2012	1.1300e-003	0.2023	0.0534	1.0400e-003	0.0544		177.8853	177.8853	4.3200e-003	4.0500e-003	179.2014
Total	**0.0569**	**0.0384**	**0.6276**	**1.7600e-003**	**0.2012**	**1.1300e-003**	**0.2023**	**0.0534**	**1.0400e-003**	**0.0544**		**177.8853**	**177.8853**	**4.3200e-003**	**4.0500e-003**	**179.2014**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 Grading - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.0792	0.0000	6.0792	3.3164	0.0000	3.3164			0.0000			0.0000
Off-Road	1.7109	17.9359	14.7507	0.0297		0.7749	0.7749		0.7129	0.7129		2,872.6910	2,872.6910	0.9291		2,895.9182
Total	**1.7109**	**17.9359**	**14.7507**	**0.0297**	**6.0792**	**0.7749**	**6.8541**	**3.3164**	**0.7129**	**4.0293**		**2,872.6910**	**2,872.6910**	**0.9291**		**2,895.9182**

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	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
Worker	0.0474	0.0320	0.5230	1.4700e-003	0.1677	9.4000e-004	0.1686	0.0445	8.7000e-004	0.0453		148.2377	148.2377	3.6000e-003	3.3800e-003	149.3345
Total	**0.0474**	**0.0320**	**0.5230**	**1.4700e-003**	**0.1677**	**9.4000e-004**	**0.1686**	**0.0445**	**8.7000e-004**	**0.0453**		**148.2377**	**148.2377**	**3.6000e-003**	**3.3800e-003**	**149.3345**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 Grading - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.0792	0.0000	6.0792	3.3164	0.0000	3.3164			0.0000			0.0000
Off-Road	1.7109	17.9359	14.7507	0.0297		0.7749	0.7749		0.7129	0.7129	0.0000	2,872.6910	2,872.6910	0.9291		2,895.9182
Total	**1.7109**	**17.9359**	**14.7507**	**0.0297**	**6.0792**	**0.7749**	**6.8541**	**3.3164**	**0.7129**	**4.0293**	**0.0000**	**2,872.6910**	**2,872.6910**	**0.9291**		**2,895.9182**

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	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
Worker	0.0474	0.0320	0.5230	1.4700e-003	0.1677	9.4000e-004	0.1686	0.0445	8.7000e-004	0.0453		148.2377	148.2377	3.6000e-003	3.3800e-003	149.3345
Total	**0.0474**	**0.0320**	**0.5230**	**1.4700e-003**	**0.1677**	**9.4000e-004**	**0.1686**	**0.0445**	**8.7000e-004**	**0.0453**		**148.2377**	**148.2377**	**3.6000e-003**	**3.3800e-003**	**149.3345**

OU2 Groundwater Containment - South Coast Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.5 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.2099	2,555.2099	0.6079		2,570.4061
Total	**1.5728**	**14.3849**	**16.2440**	**0.0269**		**0.6997**	**0.6997**		**0.6584**	**0.6584**		**2,555.2099**	**2,555.2099**	**0.6079**		**2,570.4061**

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	0.0000
Vendor	0.0247	0.8417	0.3230	4.1900e-003	0.1473	4.6500e-003	0.1519	0.0424	4.4500e-003	0.0468		452.1344	452.1344	0.0167	0.0656	472.0943
Worker	0.1866	0.1257	2.0572	5.7700e-003	0.6595	3.7200e-003	0.6632	0.1749	3.4200e-003	0.1783		583.0684	583.0684	0.0142	0.0133	587.3824
Total	**0.2113**	**0.9674**	**2.3802**	**9.9600e-003**	**0.8067**	**8.3700e-003**	**0.8151**	**0.2173**	**7.8700e-003**	**0.2252**		**1,035.2028**	**1,035.2028**	**0.0309**	**0.0789**	**1,059.4767**

OU2 Groundwater Containment - South Coast Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.5 Building Construction - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.2099	2,555.2099	0.6079		2,570.4061
Total	**1.5728**	**14.3849**	**16.2440**	**0.0269**		**0.6997**	**0.6997**		**0.6584**	**0.6584**	**0.0000**	**2,555.2099**	**2,555.2099**	**0.6079**		**2,570.4061**

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	0.0000
Vendor	0.0247	0.8417	0.3230	4.1900e-003	0.1473	4.6500e-003	0.1519	0.0424	4.4500e-003	0.0468		452.1344	452.1344	0.0167	0.0656	472.0943
Worker	0.1866	0.1257	2.0572	5.7700e-003	0.6595	3.7200e-003	0.6632	0.1749	3.4200e-003	0.1783		583.0684	583.0684	0.0142	0.0133	587.3824
Total	**0.2113**	**0.9674**	**2.3802**	**9.9600e-003**	**0.8067**	**8.3700e-003**	**0.8151**	**0.2173**	**7.8700e-003**	**0.2252**		**1,035.2028**	**1,035.2028**	**0.0309**	**0.0789**	**1,059.4767**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.6 Paving - 2024

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	0.8814	8.2730	12.2210	0.0189		0.3987	0.3987		0.3685	0.3685		1,805.6205	1,805.6205	0.5673		1,819.8039
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.8814**	**8.2730**	**12.2210**	**0.0189**		**0.3987**	**0.3987**		**0.3685**	**0.3685**		**1,805.6205**	**1,805.6205**	**0.5673**		**1,819.8039**

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	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
Worker	0.0590	0.0381	0.6492	1.9000e-003	0.2236	1.2000e-003	0.2248	0.0593	1.1100e-003	0.0604		191.8665	191.8665	4.3400e-003	4.1900e-003	193.2249
Total	**0.0590**	**0.0381**	**0.6492**	**1.9000e-003**	**0.2236**	**1.2000e-003**	**0.2248**	**0.0593**	**1.1100e-003**	**0.0604**		**191.8665**	**191.8665**	**4.3400e-003**	**4.1900e-003**	**193.2249**

OU2 Groundwater Containment - South Coast Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.6 Paving - 2024

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	0.8814	8.2730	12.2210	0.0189		0.3987	0.3987		0.3685	0.3685	0.0000	1,805.6205	1,805.6205	0.5673		1,819.8039
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.8814**	**8.2730**	**12.2210**	**0.0189**		**0.3987**	**0.3987**		**0.3685**	**0.3685**	**0.0000**	**1,805.6205**	**1,805.6205**	**0.5673**		**1,819.8039**

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	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
Worker	0.0590	0.0381	0.6492	1.9000e-003	0.2236	1.2000e-003	0.2248	0.0593	1.1100e-003	0.0604		191.8665	191.8665	4.3400e-003	4.1900e-003	193.2249
Total	**0.0590**	**0.0381**	**0.6492**	**1.9000e-003**	**0.2236**	**1.2000e-003**	**0.2248**	**0.0593**	**1.1100e-003**	**0.0604**		**191.8665**	**191.8665**	**4.3400e-003**	**4.1900e-003**	**193.2249**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.7 Architectural Coating - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	43.5046					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443
Total	**43.6853**	**1.2188**	**1.8101**	**2.9700e-003**		**0.0609**	**0.0609**		**0.0609**	**0.0609**		**281.4481**	**281.4481**	**0.0159**		**281.8443**

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	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
Worker	0.0354	0.0228	0.3895	1.1400e-003	0.1341	7.2000e-004	0.1349	0.0356	6.7000e-004	0.0362		115.1199	115.1199	2.6100e-003	2.5200e-003	115.9349
Total	**0.0354**	**0.0228**	**0.3895**	**1.1400e-003**	**0.1341**	**7.2000e-004**	**0.1349**	**0.0356**	**6.7000e-004**	**0.0362**		**115.1199**	**115.1199**	**2.6100e-003**	**2.5200e-003**	**115.9349**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.7 Architectural Coating - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	43.5046					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443
Total	**43.6853**	**1.2188**	**1.8101**	**2.9700e-003**		**0.0609**	**0.0609**		**0.0609**	**0.0609**	**0.0000**	**281.4481**	**281.4481**	**0.0159**		**281.8443**

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	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
Worker	0.0354	0.0228	0.3895	1.1400e-003	0.1341	7.2000e-004	0.1349	0.0356	6.7000e-004	0.0362		115.1199	115.1199	2.6100e-003	2.5200e-003	115.9349
Total	**0.0354**	**0.0228**	**0.3895**	**1.1400e-003**	**0.1341**	**7.2000e-004**	**0.1349**	**0.0356**	**6.7000e-004**	**0.0362**		**115.1199**	**115.1199**	**2.6100e-003**	**2.5200e-003**	**115.9349**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	3.0670	3.4967	33.8265	0.0798	8.4328	0.0551	8.4879	2.2471	0.0513	2.2983		8,130.9583	8,130.9583	0.4706	0.3165	8,237.0354
Unmitigated	3.0670	3.4967	33.8265	0.0798	8.4328	0.0551	8.4879	2.2471	0.0513	2.2983		8,130.9583	8,130.9583	0.4706	0.3165	8,237.0354

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Manufacturing	553.31	903.88	716.63	2,775,295	2,775,295
Total	553.31	903.88	716.63	2,775,295	2,775,295

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Manufacturing	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
Manufacturing	0.543401	0.061496	0.184986	0.128935	0.023820	0.006437	0.011961	0.008652	0.000812	0.000508	0.024540	0.000745	0.003706

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0747	0.6792	0.5705	4.0800e-003		0.0516	0.0516		0.0516	0.0516		815.0222	815.0222	0.0156	0.0149	819.8655
NaturalGas Unmitigated	0.0747	0.6792	0.5705	4.0800e-003		0.0516	0.0516		0.0516	0.0516		815.0222	815.0222	0.0156	0.0149	819.8655

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					
Manufacturing	6927.69	0.0747	0.6792	0.5705	4.0800e-003		0.0516	0.0516		0.0516	0.0516		815.0222	815.0222	0.0156	0.0149	819.8655
Total		**0.0747**	**0.6792**	**0.5705**	**4.0800e-003**		**0.0516**	**0.0516**		**0.0516**	**0.0516**		**815.0222**	**815.0222**	**0.0156**	**0.0149**	**819.8655**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Manufacturing	6.92769	0.0747	0.6792	0.5705	4.0800e-003		0.0516	0.0516		0.0516	0.0516		815.0222	815.0222	0.0156	0.0149	819.8655
Total		**0.0747**	**0.6792**	**0.5705**	**4.0800e-003**		**0.0516**	**0.0516**		**0.0516**	**0.0516**		**815.0222**	**815.0222**	**0.0156**	**0.0149**	**819.8655**

6.0 Area Detail

6.1 Mitigation Measures Area

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	ROG	NOx	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	3.1466	1.3000e-004	0.0144	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005		0.0308	0.0308	8.0000e-005		0.0328
Unmitigated	3.1466	1.3000e-004	0.0144	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005		0.0308	0.0308	8.0000e-005		0.0328

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.3576					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.7877					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.3300e-003	1.3000e-004	0.0144	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005		0.0308	0.0308	8.0000e-005		0.0328
Total	**3.1466**	**1.3000e-004**	**0.0144**	**0.0000**		**5.0000e-005**	**5.0000e-005**		**5.0000e-005**	**5.0000e-005**		**0.0308**	**0.0308**	**8.0000e-005**		**0.0328**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.3576					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.7877					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.3300e-003	1.3000e-004	0.0144	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005		0.0308	0.0308	8.0000e-005		0.0328
Total	**3.1466**	**1.3000e-004**	**0.0144**	**0.0000**		**5.0000e-005**	**5.0000e-005**		**5.0000e-005**	**5.0000e-005**		**0.0308**	**0.0308**	**8.0000e-005**		**0.0328**

7.0 Water Detail

7.1 Mitigation Measures Water

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

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 – UTILITIES WORKSHEETS

INTRODUCTION TO UTILITY SCREENING TABLES

The following worksheets are used to evaluated the potential impacts of a project.

Table 1 Definition of Project
This Table is used to establish the proposed development parameters that are used the calculation of utilities usage. The independent variable to be entered is identified by shading. For residential development, the number of housing units should be entered in the shaded area. For non-residential development, the total floor area of development should be entered in the shaded area.

Tables 2 Summary of Project Impacts
Consumption/Generation Rates. This table indicates the development's projected electrical consumption, natural gas consumption, water consumption, effluent generation, and solid waste generation. No modifications should be made to this table.

Tables 3 through 7 Calculation of Project Impacts
Tables 3 through 7 indicate the results of the analysis.
Table 3 Electrical Consumption - This Table calculates the projected electrical consumption for new development. Default generation rates provided in the shaded areas may be changed.
Table 4 Natural Gas Consumption - This Table calculates the projected natural gas useagefor new development. Default generation rates provided in the shaded areas may be changed.
Table 5 Water Consumption - This Table calculates the projected water consumption ratesfor new development. Default generation rates provided in the shaded areas may be changed.
Table 6 Sewage Generation - This Table calculates the projected effluent generation rates for new development. Default generation rates provided in the shaded areas may be changed.
Table 7 Solid Waste Generation - This Table calculates the projected waste generation for new development. Default generation rates provided in the shaded areas may be changed.

Table 1 Project Name: SFSP 076- OU2 Groundwater Containment

Definition of Project Parameters - Enter independent variable (no. of units or floor area) in the shaded area. The independent variable to be entered is the number of units (for residential development) or the gross floor area (for non-residential development).

Land Use	Independent	Factor
Residential Uses	**Variable**	**Total Units**
Single-Family Residential	No. of Units	0
Medium Density Residential	No. of Units	0
Multiple-Family Residential	No. of Units	0
Mobile Home	No. of Units	0
Office Uses	**Variable**	**Total Floor Area**
Office	Sq. Ft.	0
Medical Office Building	Sq. Ft.	0
Office Park	Sq. Ft.	0
Bank/Financial Services	Sq. Ft.	0
Commercial Uses	**Variable**	**Floor Area/Rooms**
Specialty Retail Commercial	Sq. Ft.	0
Convenience Store	Sq. Ft.	0
Movie Theater	Sq. Ft.	0
Shopping Center	Sq. Ft.	0
Sit-Down Restaurant	Sq. Ft.	0
Fast-Food Restaurant	Sq. Ft.	0
Hotel	Rooms	0
Manufacturing Uses	**Variable**	**Total Floor Area**
Industrial Park	Sq. Ft.	0
Manufacturing	Sq. Ft.	48,515
General Light Industry	Sq. Ft.	0
Warehouse	Sq. Ft.	0
Public/Institutional	**Variable**	**Total Floor Area**
Public/Institutional	Sq. Ft.	0
Open Space	Sq. Ft.	0

Table 2: Projected Utility Consumption and Generation

Summary of Project Impacts **- Results of analysis identified below. No modifications should be made to this Table.**

Utilities Consumption and Generation	Factor	Rates
Electrical Consumption	kWh/day	638
Natural Gas Consumption	cubic feet/day	625
Water Consumption	gallons/day	14,555
Sewage Generation	gallons/day	9,703
Solid Waste Generation	pounds/day	433

Table 3: Electrical Consumption

Project Component	Units of Measure	Consumption Factor		Projected Consumption
Residential Uses	**No. of Units**	**kWh**	**Variable**	**kWh/Unit/Day**
Single-Family Residential	0	5,625.00	kWh/Unit/Year	0.0
Medium Density Residential	0	5,625.00	kWh/Unit/Year	0.0
Multiple-Family Residential	0	5,625.00	kWh/Unit/Year	0.0
Mobile Home	0	4,644.00	kWh/Unit/Year	0.0
Office Uses	**Sq. Ft.**	**kWh**	**Variable**	**kWh/Sq. Ft./Day**
Office	0	20.80	kWh/Sq. Ft./Year	0.0
Medical Office Building	0	14.20	kWh/Sq. Ft./Year	0.0
Office Park	0	20.80	kWh/Sq. Ft./Year	0.0
Bank/Financial Services	0	20.80	kWh/Sq. Ft./Year	0.0
Commercial Uses	**Sq. Ft./Rooms**	**kWh**	**Variable**	**kWh/Sq. Ft./Day**
Specialty Retail Commercial	0	16.00	kWh/Sq. Ft./Year	0.0
Convenience Store	0	16.00	kWh/Sq. Ft./Year	0.0
Movie Theater	0	16.00	kWh/Sq. Ft./Year	0.0
Shopping Center	0	35.90	kWh/Sq. Ft./Year	0
Sit-Down Restaurant	0	49.10	kWh/Sq. Ft./Year	0.0
Fast-Food Restaurant	0	40.20	kWh/Sq. Ft./Year	0.0
Hotel	0	8,955.00	kWh/Sq. Ft./Year	0.0
Manufacturing Uses	**Sq. Ft.**	**kWh**	**Variable**	**kWh/Sq. Ft./Day**
Industrial Park	0	4.80	kWh/Sq. Ft./Year	0.0
Manufacturing	48,515	4.80	kWh/Sq. Ft./Year	638.0
General Light Industry	0	4.80	kWh/Sq. Ft./Year	0.0
Warehouse	0	4.80	kWh/Sq. Ft./Year	0.0
Public/Institutional	**Sq. Ft.**	**kWh**	**Variable**	**kWh/Sq. Ft./Day**
Public/Institutional	0	4.80	kWh/Sq. Ft./Year	0.0
Open Space	0	0.00	kWh/Sq. Ft./Year	0.0
Total Daily Electrical Consumption (kWh/day)				638.0

Sources:
Residential rates were derived from the SCAQMD's CEQA Air Quality Handbook (April 1993).
All other rates are from Common Forecasting Methodology VII Demand Forms, 1989

Table 4: Natural Gas Consumption

Project Component	Units of Measure	Consumption Factor		Projected Consumption
Residential Uses	**No. of Units**	**Cu. Ft. of Nat. Gas**	**Variable**	**Cu. Ft,/Day**
Single-Family Residential	0	6,665.00	Cu. Ft./Mo./Unit	0.0
Medium Density Residential	0	4,011.50	Cu. Ft./Mo./Unit	0.0
Multiple-Family Residential	0	4,011.50	Cu. Ft./Mo./Unit	0.0
Mobile Home	0	4,011.50	Cu. Ft./Mo./Unit	0.0
Office Uses	**Sq. Ft.**	**Cu. Ft. of Nat. Gas**	**Variable**	**Cu. Ft,/Day**
Office	0	2.00	Cu. Ft./Mo./Sq. Ft.	0.0
Medical Office Building	0	2.00	Cu. Ft./Mo./Sq. Ft.	0.0
Office Park	0	2.00	Cu. Ft./Mo./Sq. Ft.	0.0
Bank/Financial Services	0	2.00	Cu. Ft./Mo./Sq. Ft.	0.0
Commercial Uses	**Sq. Ft./Rooms**	**Cu. Ft. of Nat. Gas**	**Variable**	**Cu. Ft,/Day**
Specialty Retail Commercial	0	2.90	Cu. Ft./Mo./Sq. Ft.	0.0
Convenience Store	0	2.90	Cu. Ft./Mo./Sq. Ft.	0.0
Movie Theater	0	2.90	Cu. Ft./Mo./Sq. Ft.	0.0
Shopping Center	0	2.90	Cu. Ft./Mo./Sq. Ft.	0.0
Sit-Down Restaurant	0	2.90	Cu. Ft./Mo./Sq. Ft.	0.0
Fast-Food Restaurant	0	209.99	kBtu/Sq. Ft./year	0.0
Hotel	0	2.90	Cu. Ft./Mo./Room	0.0
Manufacturing Uses	**Sq. Ft.**	**Cu. Ft. of Nat. Gas**	**Variable**	**Cu. Ft,/Day**
Industrial Park	0	4.70	Cu. Ft./Mo./Sq. Ft.	0.0
Manufacturing	48,515	4.70	Cu. Ft./Mo./Sq. Ft.	624.7
General Light Industry	0	4.70	Cu. Ft./Mo./Sq. Ft.	0.0
Warehouse	0	4.70	Cu. Ft./Mo./Sq. Ft.	0.0
Public/Institutional Use	**Sq. Ft.**	**Cu. Ft. of Nat. Gas**	**Variable**	**Cu. Ft,/Day**
Public/Institutional	0	2.90	Cu. Ft./Mo./Sq. Ft.	0.0
Open Space	0	2.90	Cu. Ft./Mo./Sq. Ft.	0.0
Total Daily Natural Gas Consumption (cubic feet/day)				624.7

Sources:
South Coast Air Quality Management District, CEQA Air Quality Handbook. April 1993

Table 5: Water Consumption

Project Component	Units of Measure	Consumption Factor		Projected Consumption
Residential Uses	No. of Units	Gals. of Water	Variable	Gals./Day
Single-Family Residential	0	390.00	Gals./Day/Unit	0.0
Medium Density Residential	0	300.00	Gals./Day/Unit	0.0
Multiple-Family Residential	0	234.00	Gals./Day/Unit	0.0
Mobile Home	0	234.00	Gals./Day/Unit	0.0
Office Uses	Sq. Ft.	Gals. of Water	Variable	Gals./Day
Office	0	0.30	Gals./Day/Sq. Ft.	0.0
Medical Office Building	0	0.30	Gals./Day/Sq. Ft.	0.0
Office Park	0	0.30	Gals./Day/Sq. Ft.	0.0
Bank/Financial Services	0	0.15	Gals./Day/Sq. Ft.	0.0
Commercial Uses	Sq. Ft./Room	Gals. of Water	Variable	Gals./Day
Specialty Retail Commercial	0	0.15	Gals./Day/Sq. Ft.	0.0
Convenience Store	0	0.15	Gals./Day/Sq. Ft.	0.0
Movie Theater	0	0.20	Gals./Day/Sq. Ft.	0.0
Shopping Center	0	0.50	Gals./Day/Sq. Ft.	0.0
Sit-Down Restaurant	0	1.50	Gals./Day/Sq. Ft.	0.0
Fast-Food Restaurant	0	0.12	Gals./Day/Sq. Ft.	0.0
Hotel	0	187.50	Gals./Day/Room.	0.0
Manufacturing Uses	Sq. Ft.	Gals. of Water	Variable	Gals./Day
Industrial Park	0	0.30	Gals./Day/Sq. Ft.	0.0
Manufacturing	48,515	0.30	Gals./Day/Sq. Ft.	14,554.5
General Light Industry	0	0.30	Gals./Day/Sq. Ft.	0.0
Warehouse	0	0.05	Gals./Day/Sq. Ft.	0.0
Public/Institutional Use	Sq. Ft.	Gals. of Water	Variable	Gals./Day
Public/Institutional	0	0.12	Gals./Day/Sq. Ft.	0.0
Open Space	0	0.12	Gals./Day/Sq. Ft.	0.0
Total Daily Water Consumption (gallons/day)				14,554.5

Sources:

Source: Derived from Los Angeles County Sanitation District rates (150% of effluent generation).

Table 6: Sewage Generation

Project Component	Units of Measure	Generation Factor		Projected Consumption
Residential Uses	No. of Units	Gals. of Effluent	Variable	Gals./Day
Single-Family Residential	0	260.00	Gals./Day/Unit	0.0
Medium Density Residential	0	200.00	Gals./Day/Unit	0.0
Multiple-Family Residential	0	156.00	Gals./Day/Unit	0.0
Mobile Home	0	156.00	Gals./Day/Unit	0.0
Office Uses	Sq. Ft.	Gals. of Effluent	Variable	Gals./Day
Office	0	0.20	Gals./Day/Sq. Ft.	0.0
Medical Office Building	0	0.20	Gals./Day/Sq. Ft.	0.0
Office Park	0	0.20	Gals./Day/Sq. Ft.	0.0
Bank/Financial Services	0	0.10	Gals./Day/Sq. Ft.	0.0
Commercial Uses	Sq. Ft./Rooms	Gals. of Effluent	Variable	Gals./Day
Specialty Retail Commercial	0	0.10	Gals./Day/Sq. Ft.	0.0
Convenience Store	0	0.10	Gals./Day/Sq. Ft.	0.0
Movie Theater	0	0.13	Gals./Day/Sq. Ft.	0.0
Shopping Center	0	0.33	Gals./Day/Sq. Ft.	0.0
Sit-Down Restaurant	0	1.00	Gals./Day/Sq. Ft.	0.0
Fast-Food Restaurant	0	0.08	Gals./Day/Sq. Ft.	0.0
Hotel	0	125	Gals./Day/Room.	0.0
Manufacturing Uses	Sq. Ft.	Gals. of Effluent	Variable	Gals./Day
Industrial Park	0	0.20	Gals./Day/Sq. Ft.	0.0
Manufacturing	48,515	0.20	Gals./Day/Sq. Ft.	9,703.0
General Light Industry	0	0.20	Gals./Day/Sq. Ft.	0.0
Warehouse	0	0.03	Gals./Day/Sq. Ft.	0.0
Public/Institutional Use	Sq. Ft.	Gals. of Effluent	Variable	Gals./Day
Public/Institutional	0	0.10	Gals./Day/Sq. Ft.	0.0
Open Space	0	0.10	Gals./Day/Sq. Ft.	0.0
Total Daily Sewage Generation (gallons/day)				9,703.0

Source: Los Angeles County Sanitation Districts.

Table 7: Solid Waste Generation

Project Component	Units of Measure	Generation Factor		Projected Generation
Residential Uses	**No. of Units**	**Lbs.of Waste**	**Variable**	**Lbs./Day**
Single-Family Residential	0	12.23	Lbs./Day/Unit	0.0
Medium Density Residential	0	12.23	Lbs./Day/Unit	0.0
Multiple-Family Residential	0	12.23	Lbs./Day/Unit	0.0
Mobile Home	0	12.23	Lbs./Day/Unit	0.0
Office Uses	**Sq. Ft.**	**Lbs.of Waste**	**Variable**	**Lbs./Day**
Office	0	6.00	Lbs./Day/1,000 Sq. Ft.	0.0
Medical Office Building	0	6.00	Lbs./Day/1,000 Sq. Ft.	0.0
Office Park	0	6.00	Lbs./Day/1,000 Sq. Ft.	0.0
Bank/Financial Services	0	6.00	Lbs./Day/1,000 Sq. Ft.	0.0
Commercial Uses	**Sq. Ft./Rooms**	**Lbs.of Waste**	**Variable**	**Lbs./Day**
Specialty Retail Commercial	0	42.00	Lbs./Day/1,000 Sq. Ft.	0.0
Convenience Store	0	42.00	Lbs./Day/1,000 Sq. Ft.	0.0
Movie Theater	0	6.00	Lbs./Day/1,000 Sq. Ft.	0.0
Shopping Center	0	6.00	Lbs./Day/1,000 Sq. Ft.	0.0
Sit-Down Restaurant	0	6.00	Lbs./Day/1,000 Sq. Ft.	0.0
Fast-Food Restaurant	0	42.00	Lbs./Day/1,000 Sq. Ft.	0.0
Hotel	0	6.00	Lbs./Day/Room	0.0
Manufacturing Uses	**Sq. Ft.**	**Lbs.of Waste**	**Variable**	**Lbs./Day**
Industrial Park	0	8.93	Lbs./Day/1,000 Sq. Ft.	0.0
Manufacturing	48,515	8.93	Lbs./Day/1,000 Sq. Ft.	433.2
General Light Industry	0	8.93	Lbs./Day/1,000 Sq. Ft.	0.0
Warehouse	0	8.93	Lbs./Day/1,000 Sq. Ft.	0.0
Public/Institutional Use	**Sq. Ft.**	**Lbs.of Waste**	**Variable**	**Lbs./Day**
Public/Institutional	0	4.00	Lbs./Day/1,000 Sq. Ft.	0.0
Open Space	0	3.00	Lbs./Day/1,000 Sq. Ft.	0.0
Total Daily Solid Waste Generation				433.2

Source: City of Los Angeles CEQA Thresholds Guide, 2006, and
City of Los Angeles Average Solid Waste Generation Rates, April 1981

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